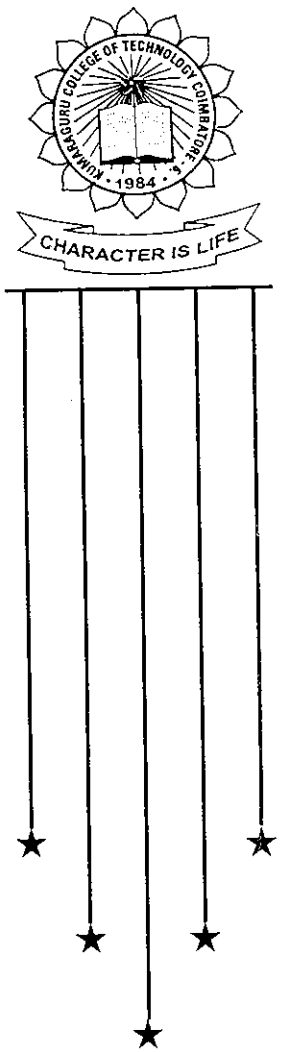
CYBER MALL

AN ONLINE SHOPPING SYSTEM



PROJECT REPORT

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE AWARD OF THE DEGREE OF

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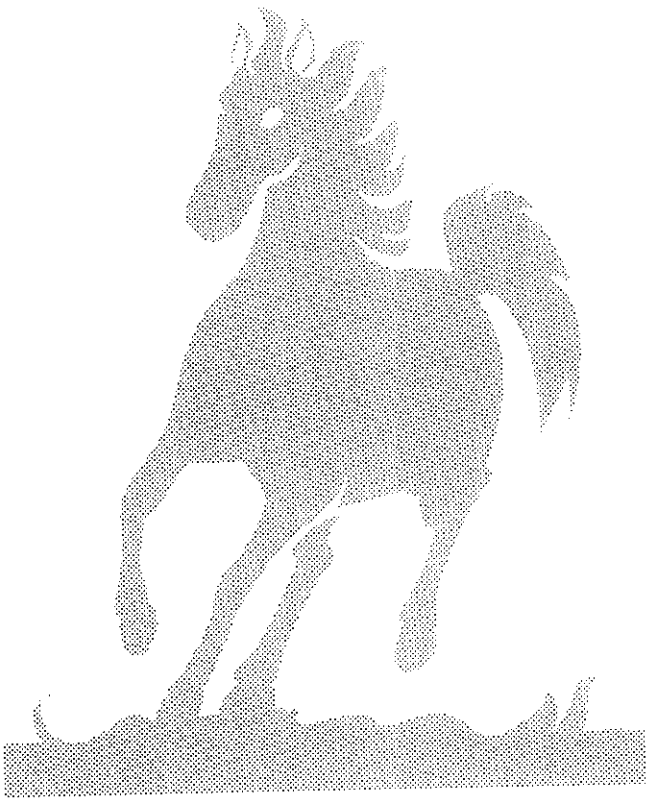
Department of Computer Science and Engineering

Kumaraguru College of Technology

Coimbatore – 641 006.



CERTIFICATE

Dedicated To Our Parents
Who Sacrificed Their
'TODAY' For Our Better
'TOMORROW' ...

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

We wish to express our sincere and heartfelt gratitude to **Dr.K.K.PADMANABHAN, B.Sc. (Engg).,M.Tech., Ph.D.,** our esteemed Principal, Kumaraguru College of Technology for giving us the needed encouragement in starting this project and carrying this out successfully.

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We would also like to thank our class advisor **Mr.Andrews. S M.Sc., PDGPM.,** for his constant support and guidance, without which we would not have been able to complete our project successfully.

We are deeply indebted to **Mr.PARTHASARATHY M.G**, managing director **SUPER SYSTEM** for enabling us to do the project, who is a benevolent and charismatic personality, for his able guidance and motivation ,in situations when our hearts were amongst our boots.

SYNOPSIS

SYNOPSIS

The goal of our project is to set a website to enable the customer to buy the PC hardware components online. The customer can browse through the site to collect the information of the hardware, quote a reasonable price to new hardware entering the market.

THE PROCESS

- The user enter into the Homepage by specifying the URL right at the browser, where he is given links to HARDWARE, SHOPPING.
- The user is not allowed to enjoy all the benefits provided unless he is a registered to our site.
- The user selects either of the links he wishes and enters into the respective main page.
- In all the pages he will be provided with the links for Home page and the main page of the stream he has entered into.
- Entering into the hardware shopping, he is enabled to select the product, he wish to buy, at any quantity and also provided with the facility of dropping out the selected item at any stage.

CONTENTS

CONTENTS

INTRODUCTION

Authentication of credit card has been implemented using servlets.

JAVA-THE WEB MASTER

Java is a blend of the best elements of its rich heritage combined with the innovative concepts required by its unique environment. Java derives its syntax from C and most of its object-oriented features from C++. Although Java has become inseparably linked with the online environment it is first and foremost it is a programming language.

The creation of Java was driven by the two elements

- To adapt to changing environments and uses.
- To implement refinements and improvements in the art of programming.

The Internet helped catapult Java to the forefront of programming, and java, in turn has had a profound effect on the Internet.The reason for this is quite simple: Java expands the universe of objects that can move about freely in the cyberspace. In a Network, two very broad categories of objects are transmitted between the server and user's personal computer: passive information and dynamic, active programs. Passive information does not change during the course of time period (e.g., e-mail), while active information is a dynamic, self-executing program that changes in accord to the user's input.

The key that allows Java to solve both the security and the portability problems just described is that the output of a Java compiler is not executable code. Rather, it is *Bytecode*. Bytecode is a highly optimized set of instruction designed to be to be executed by Java run-time system, which is called *Java Virtual Machine (JVM)*. Java Virtual Machine is an interpreter for bytecode that makes bytecode much easier to run a program in a variety of environments.

Although the fundamental forces that necessitated the invention of Java are portability and security, other factors that are a part of the language are

- Simplicity
- Security
- Portability
- Object-oriented approach
- Robustness
- Multithreading
- Architecture-neutral
- Interpretable
- High performance
- Distributed

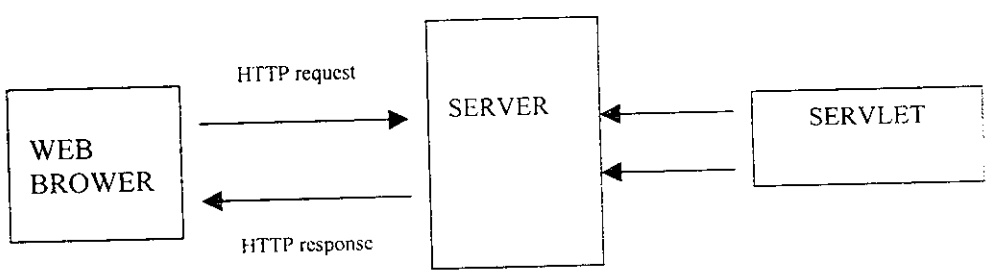
THE NEED FOR SERVLETS

THE NEED FOR SERVLETS

A servlet can be thought of as a server side applet. Servlets are loaded and executed by a web server in the same manner that applet are loaded and executed by a web server.

The following list describes the basics flow when using servlets.

- The client (most likely a web browser) makes a request via HTTP.
- The web server receives the request and forwards it to the servlet. If the servlet has not yet been loaded, the web server will load it into the java virtual machine and executed it.
- The servlet will receive the HTTP request and perform server type of process.
- The servlet will return a response back to web server.
- The web server will perform the response to the client.



In the early days of the web, a server could dynamically construct a page by creating a separate process to handle each client request. The process would open connections to one or more database in order to obtain the necessary information. It communicated with the web server via the interface known as the *Common Gateway Interface* (CGI). CGI allowed the separate process to read from the HTTP request and write data to the HTTP response. A verity of different language were used to build CGI programs, includes c, c++, and perl.

However CGI suffered serious performance problem. Creating a separate process for each client request was expensive, in terms of processor and memory resources. It was also expensive to open and close database connection for each client request. In the addition, the CGI programs were not platform-independent. Therefore, other techniques were introduced, including servlets.

Because the servlet is execution on the server, the security issues usually associated with applets do not apply. The web browser does not communicate directly with a servlet is loaded and executed by the web server. This means that if the web server in secure behind a firewall, then the servlet is secure as well.

Servlets have distinct features :

- Servlets are persistent. Servlets are loaded only once by the web server and maintain services (such as database connection) between requests.
- Servlets are fast. Since servlets only need to be loaded once, they offer much better performance.
- Servlets are platform independent since they are written in Java.
- Servlets are extensible since servlets are written in java, this brings all of the other benefits of java to the servlets.
- Servlets are secure. The only way to invoke a servlet from the outside world is through a web server. This brings a high level security, especially if the web server is protected behind a firewall.
- Servlets can be used with a variety of clients.

WEB SERVER ARCHITECTURE

WEB SERVER

The Java Web server is an implementation of the Java –Server architecture , which defines a generic server and service framework.

THE JAVASERVER ARCHITECTURE

Since the summer of 1996, JavaSoft has been busy defining a framework for extending Java into the world of the server.This frramework, known as the JavaServer architecture, defines,the server process, and the servlet API.The Java Web server was the first to implement these frameworks almost complely in Java.

THE SERVICE FRAMEWORK

The service framework defines a set of interfaces for implementing services that interact with clients using multiple handlerr threads.A service is defined as an implementation of an individual protocol,such as HTTP or FTP.The core service classes provided by the JavaServer architecture include administration, thread management, connection management , session management and security.

THE SERVLET FRAMEWORK

A servlet is a Java object that conforms to a specific interface. Servlets are loaded and invoked by serices, and a service can utilise multiple servlets, either with internal servlets, which are provided with the server, or with user-written servlets, which fuction as add-ons.

MS ACCESS AT A GLANCE

MS ACCESS AT A GLANCE

In other database-management programs, the term database is used to refer to tables that hold data. Access uses the term more broadly. An access database consists of the tables that hold the data and all the related objects, such as queries, forms and reports that are used to manage data.

When you open a database, Access displays the database window, sometimes, called the database container, because it contains all the objects that contain the database.

We can create tables in the design view or the typical wizard. We also have the capability to create forms. Forms let us control how data is displayed on the screen. We also have an option for printing data using the Reports option.

The salient features of Access are:

- Macros that let you automate and speed up your work; they are also used when you develop applications. A macro is a list of actions. Access performs all the actions in the list when you run the macro. Macros save time for access users.
- We have a lot of utilities and special techniques present in Access, viz.

- Creating windows shortcuts.
- Using Access utilities to manage database and their objects.
- Using hyperlink data type.
- Creating web pages.
- Creating indexes based on single or multiple fields.
- Working on both embedded and linked OLE objects in Access, tables and queries.
- Working with bound and unbound OLE objects in forms and reports.
- Attaching a table from another database application so that Access and the other applications can use it simultaneously.
- Customizing the Access working environment using the options dialogue box.

To sum up, Access begins with database utilities that let you compact, convert, encrypt, and repair databases, and object utilities that let you rename, delete, cut, copy and paste.

SOFTWARE REQUIREMENT SPECIFICATION

SOFTWARE REQUIREMENT SPECIFICATION

1.Introduction

1.1 Purpose

To provide proper documentation of

- Specific Software requirements
- Overall Description of the software
- Performance requirements
- Constraints

to ensure easy design, maintenance and future expansion of the software

1.2 Scope

The software is supposed to

- Enable users to tap the potential of the internet in online shopping
- Concentrating on individual customer
- Provide a safe transaction environment
- Manage the real time database

1.3 Acronyms, Abbreviations and Terms

SSMP - Shopping Section Main Page.

BSMP – Bidding Section Main Page.

1.4 Developers' Responsibilities' Overview

The developers are responsible for designing, developing and installing the software system satisfying the client's requirements.

Any change made to the requirement in the future will have to go through a formal change approval process. The developer may not make any alteration without the permission of the Client.

2. Overall Description

2.1 Product Function Overview

The software is an online shopping system.

This web site should enable the users to make online transactions.

This software should display all the products available for sales and it should provide interface for accepting orders from the customers. It should also provide a safe payment facility.

The user enters the URL of the web site and is taken to the web page. The home page offers option for him to perform shopping or to perform bidding on some special products.

When user selects shopping, he is presented with the information about all the products. The user selects all the products he needed and conform is order, he is asked for his credit card number and authentication information, on verification order is taken.

If the user selects bidding, he is presented with the list of products for bidding. The user selects any item, then the rates which were quoted by other users for that product is displayed and the user is provided with interface to quote is own rate, which is stored into the database. After certain period, the user who quoted the maximum amount receives the product.

2.2 User Characteristics

This site is for users who are familiar with browsing through the Internet and who wish to shop online using credit cards payment.

2.3 Assumptions and Dependencies

- Only users with credit card can perform transaction with the system.
- The amount entered for bidding is valid only for 10 days.
- The user who has bided the maximum amount will receive the product.
- Unregistered users are not allowed to perform any transactions with the system.

3. SPECIFIC REQUIREMENTS

3.1 External Interface Requirements

3.1.1 User Interfaces

The users are provided with screens to make shopping and bidding, he is also provided with listing of all the available products in the company. When the user want to perform any shopping transaction, he can select the product from the listing, he can place order for the same. Software also provides a facility for online payment.

3.1.2 Hardware Interface

A database server which will host the web site, an application server that processes requests from the user and directs the requests to the respective database modem and telephone line.

3.1.3 Software Requirements

Any OS with a web browser.

3.2 Class/Object

3.2.1.Product

Attributes

ProductId

ProductName

Discription

Category

Specification

Cost

4 Performance Constraints

Depends on the speed of the internet connection, network traffic and modem capability.

5 Design Constraints

5.1 Software constraints:

Components and tools needed for development:

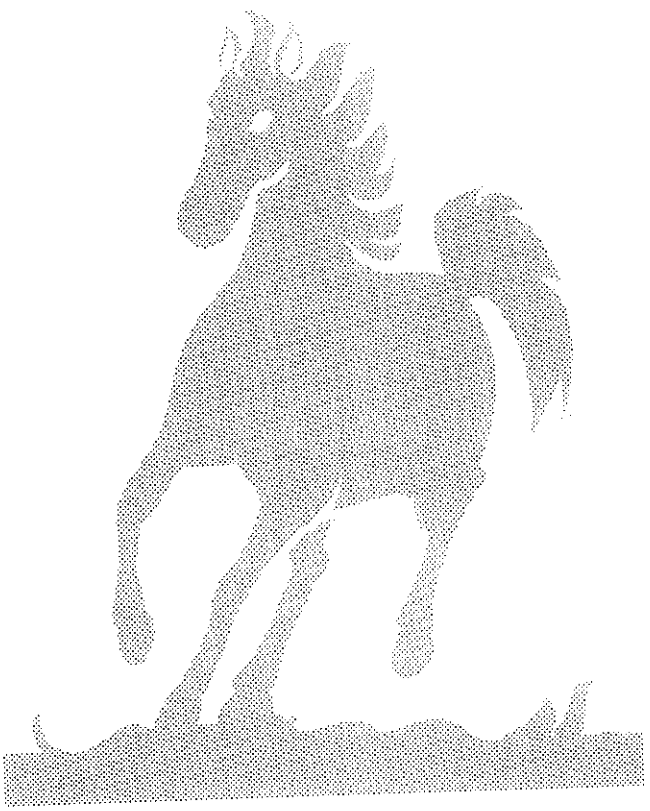
- JDK 1.2.
- JSDK 2.1.
- Netscape Navigator 4.7.
- MS Access
- Java Web Server3.1

For users:

- Internet connection.
- A web browser – Netscape Navigator 4.7 is recommended.

6 Acceptance Criteria

The developers are required to take the client on a comprehensive tour of the online system and ensure that all agreed specifications are met.



USE CASE

USE CASE

SCENARIO FOR ONLINE SHOPPING SYSTEM

The user enters URL in the web browser and enters the Home Page of the online shopping system.

1. The user should login into website or should register himself as authorized user to avail all facilities in the website.
2. The user has the option to either enter the Shopping Stream or Bidding Stream. The user selects the section he wants to enter and the appropriate web page is displayed.

SHOPPING

SHOPPING SCENARIO:

1. The user selects a category from the list of options displayed.
2. The various company products at different configuration under the category are displayed for the user.
3. The user can select the item he wishes to buy, along with the quantity he needs and add the selected item to the shopping cart.
4. While shopping he is allowed to go back to category listing and select the item and add the to the cart along with quantity.

5. Once the shopping is over the shopping cart is displayed to the customer with the facility to drop any item.
6. If the user confirms final display of products he is requested to enter the credit card details.
7. The order is processed after the payment is confirmed.

AT ALL STAGES:

The user can go to the Home Page.

BIDDING

BIDDING SCENARIO

1. The list of items for which bidding is allowed is displayed to the user.
2. The user selects the item he wishes to bid.
3. The detailed description of the selected item is displayed to the user along with the details of other user who has already quoted the price for the item.
4. The user can quote the amount he wish, in the column provided.
5. A thanking message is displayed and user exits out of the scenario.

AT ALL STAGES:

The user can go to the Home Page.

EXCEPTIONAL CIRCUMSTANCES:

1. The User Id and password entered by the user while login is incorrect.

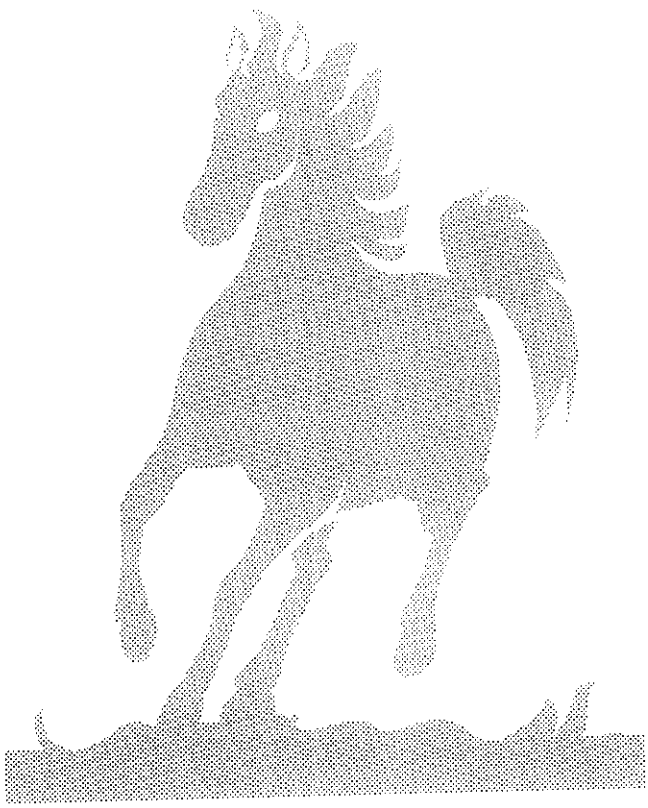
   Remedy: The user is asked to reenter a valid User id and Password.

2. The details provided by the user while registration is incomplete.

   Remedy: The user is asked to reenter the registration form.

3. The user's credit card is not validated

   Remedy: The user is informed that his credit card has been rejected and that the ticket has not been booked



OBJECT MODELLING TECHNIQUE

OBJECT MODELLING TECHNIQUE

Object Modeling Technique (OMT) is a method of object-oriented analysis of a problem. The objective of object-oriented analysis is tc develop a series of models that describe computer software as it works to satisfy a set of customer-defined requirements. OMT was developed by Rambaugh and his colleagues for analysis, system design and object-level design.

The analysis activity creates three models: the object model, the dynamic model and the functional model. A brief outline of the OOA process is as follows

- Develop a statement of scope for the problem.
- Build an object model.
  - ➢ Identify classes that are relevant for the problem.
  - ➢ Define attributes and associations.
  - ➢ Define object links.
  - ➢ Organize object classes using inheritance.
- Develop a dynamic model.
  - ➢ Prepare scenarios.
  - ➢ Define events and develop an event trace for each scenario.
  - ➢ Construct an event trace diagram.

- Conduct object design
  - Select operations from the analysis model.
  - Define algorithms for each operation.
  - Select data structures that are appropriate for algorithms.
  - Define any internal classes.
  - Revise class organization to optimize access to data and improve computational efficiency.
  - Design class attributes.
- Implement control mechanisms defined in system design.
- Adjust class structure to strengthen inheritance.
- Design messaging to implement the object relationships (associations).
- Package classes and associations into modules.

PROBLEM STATEMENT

PROBLEM STATEMENT

Design a software to enable online shopping of PC hardware components and online bidding of products. The software must allow the user to make a choice of the company and configuration for any component he wishes to buy.

The accustomed user should register himself previously, to our website and the new user should register his details, to avail all features of the website. When the user chooses to perform shopping, the user must be provided with the list of hardware component and under each category of hardware should be provided with the details about various companies supplying that product and different configurations available. He is allowed to select the hardware he wish to purchase and specify the quantity he needs. This information should be added to the shopping cart for every selected item. After the user finishes shopping he should be presented with items in the shopping cart along with the total cost for confirmation. He should also provided with option to drop any selected item. After the user confirms the order he should be asked for his credit card number, and it should be validated. On validation the order must be placed.

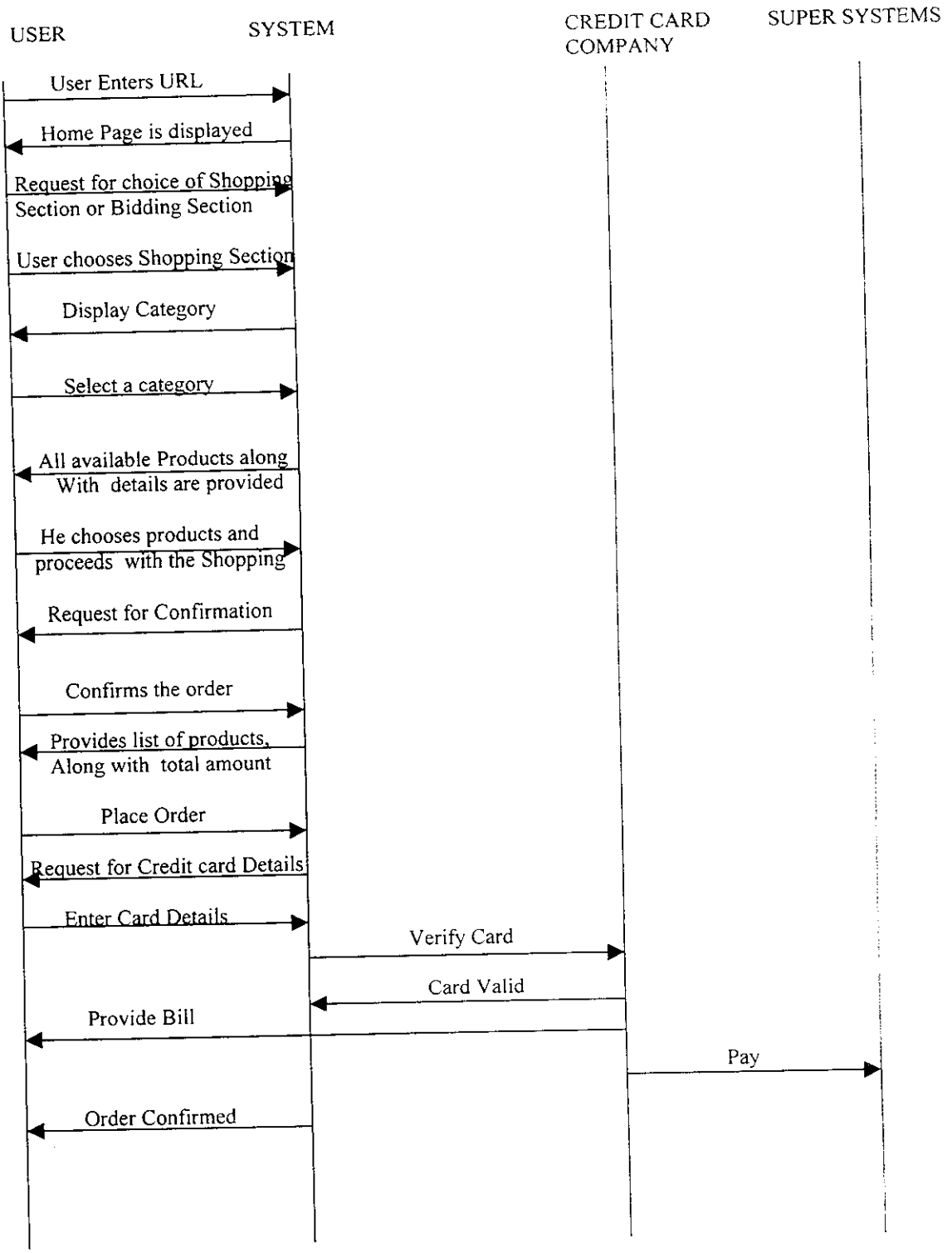
If the user chooses to perform bidding, He must be provided with the list of products available for bidding. The user must be allowed to select any one of the listed products. On selection he should be presented with the details of other customers who have already bided for that specified product. Then the user must be allowed to enter his rate for that product.

When a new user visits the web site he must be presented with the details of all the products available in the firm. He should also presented with the terms and conditions and other general information about the company.

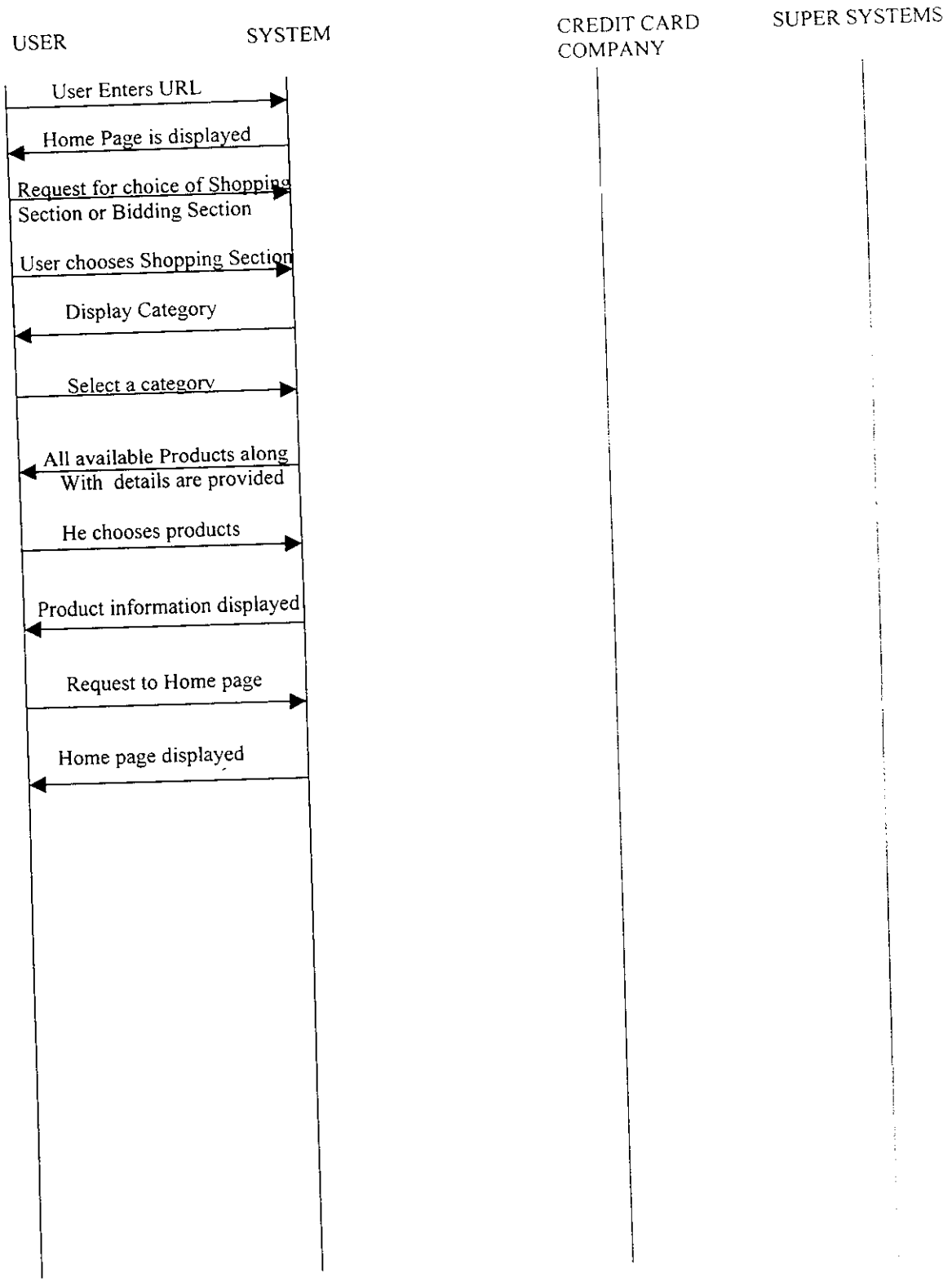
OBJECT CLASS DIAGRAM

EVENT TRACE DIAGRAM

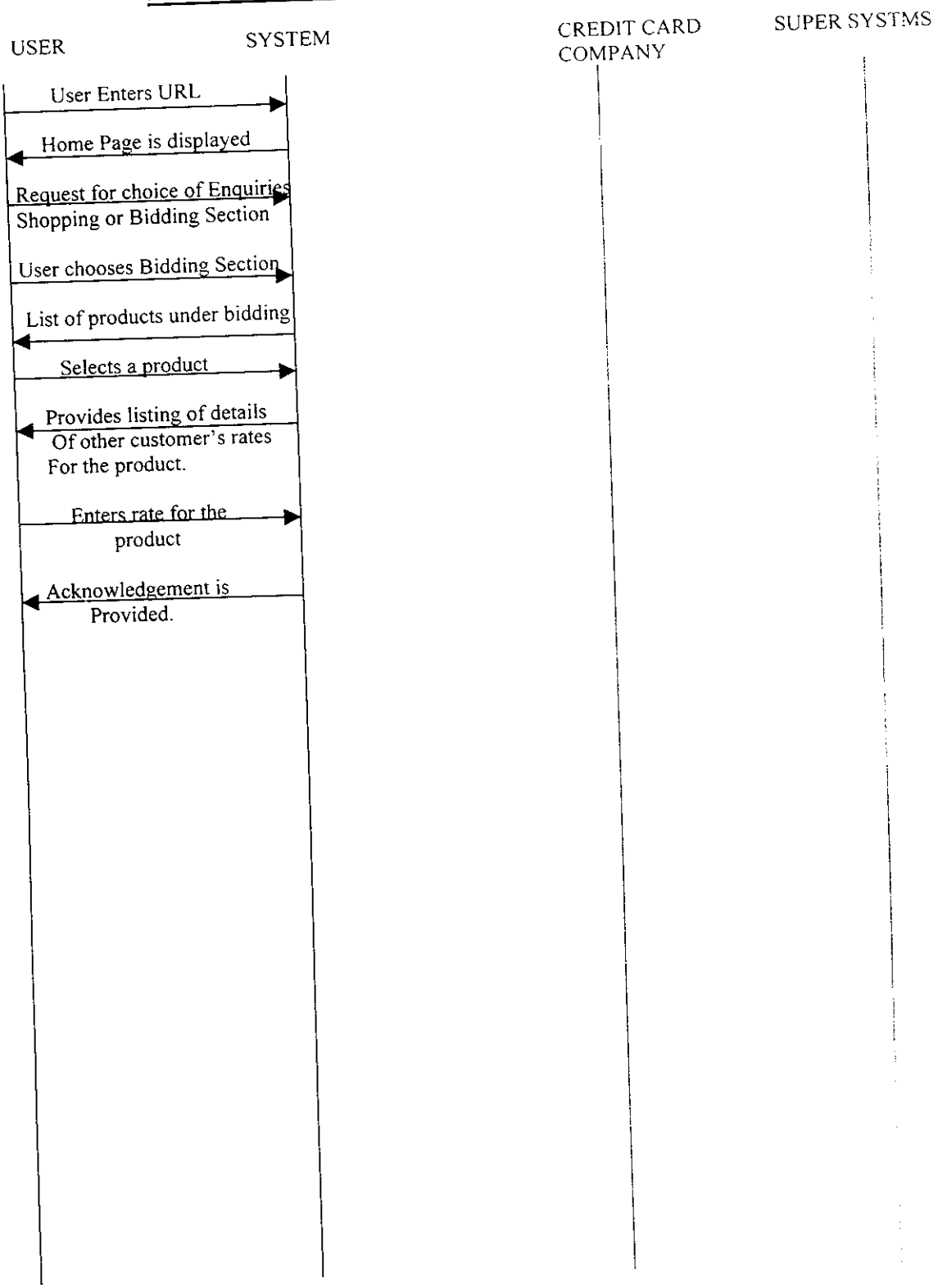
SHOPPING SECTION FOR REGISTERED USERS



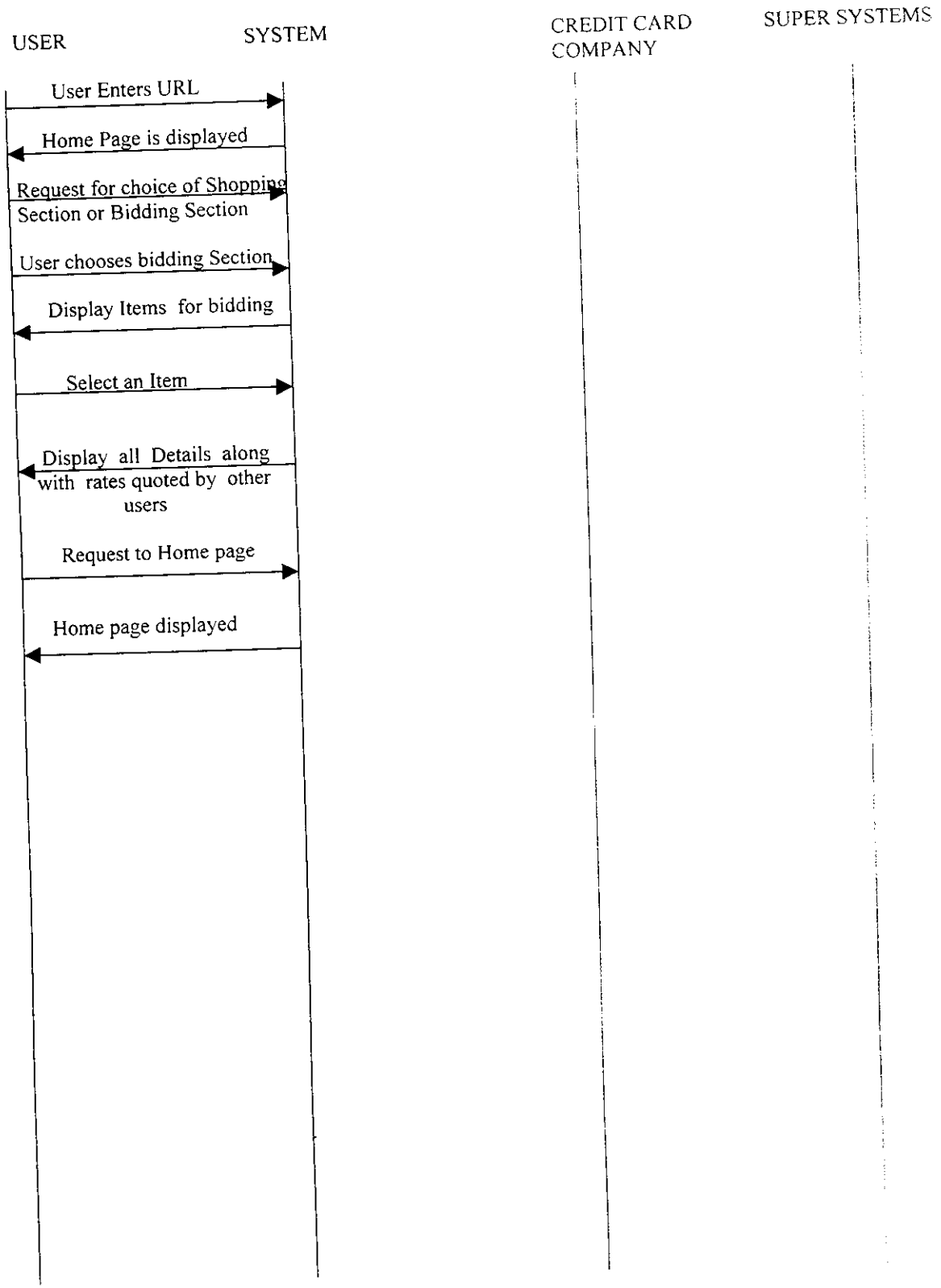
SHOPPING SECTION FOR GUESTS



BIDDING SECTION FOR REGISTERED USERS



BIDDING SECTION FOR GUESTS



STATE TRANSITION DIAGRAM

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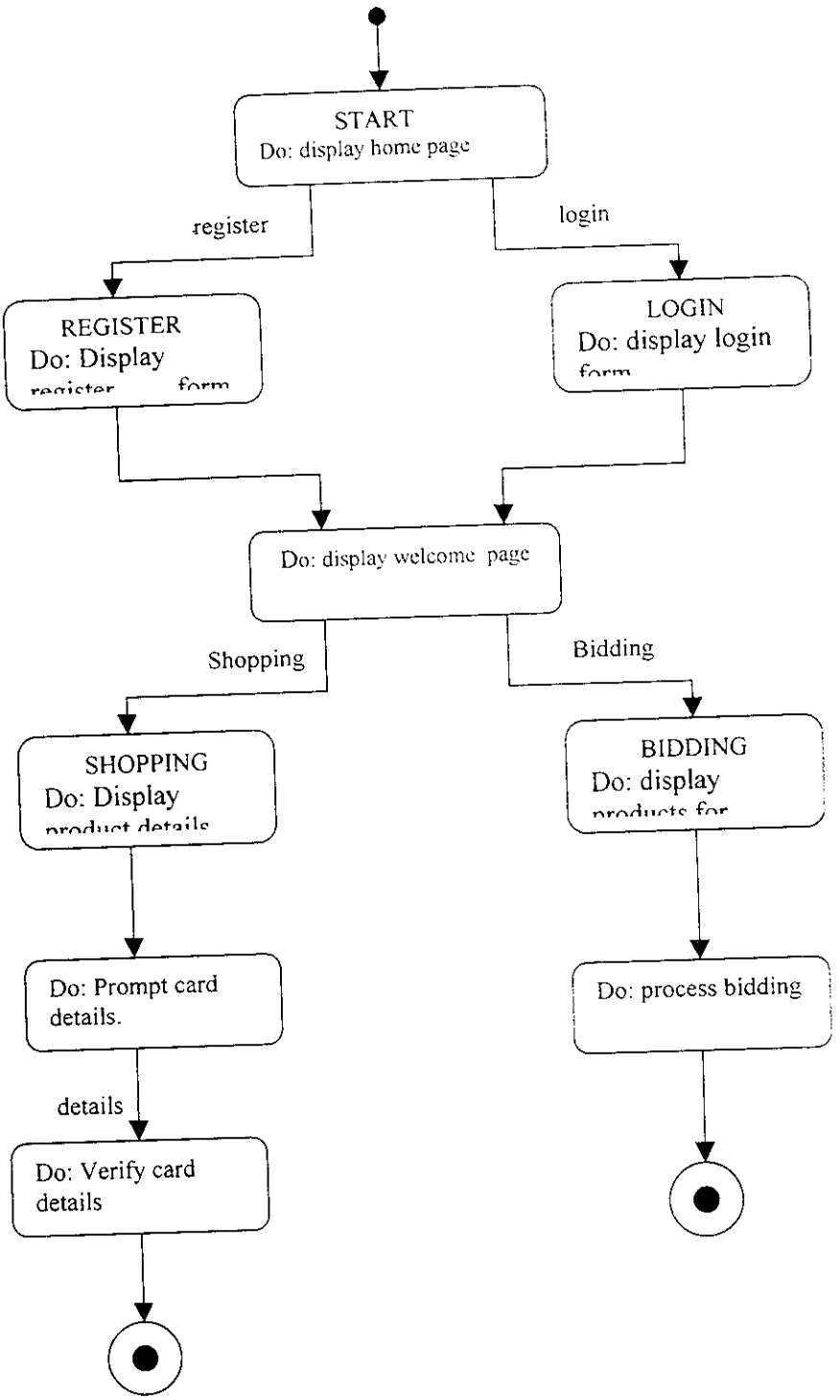

DATA FLOW DIAGRAM

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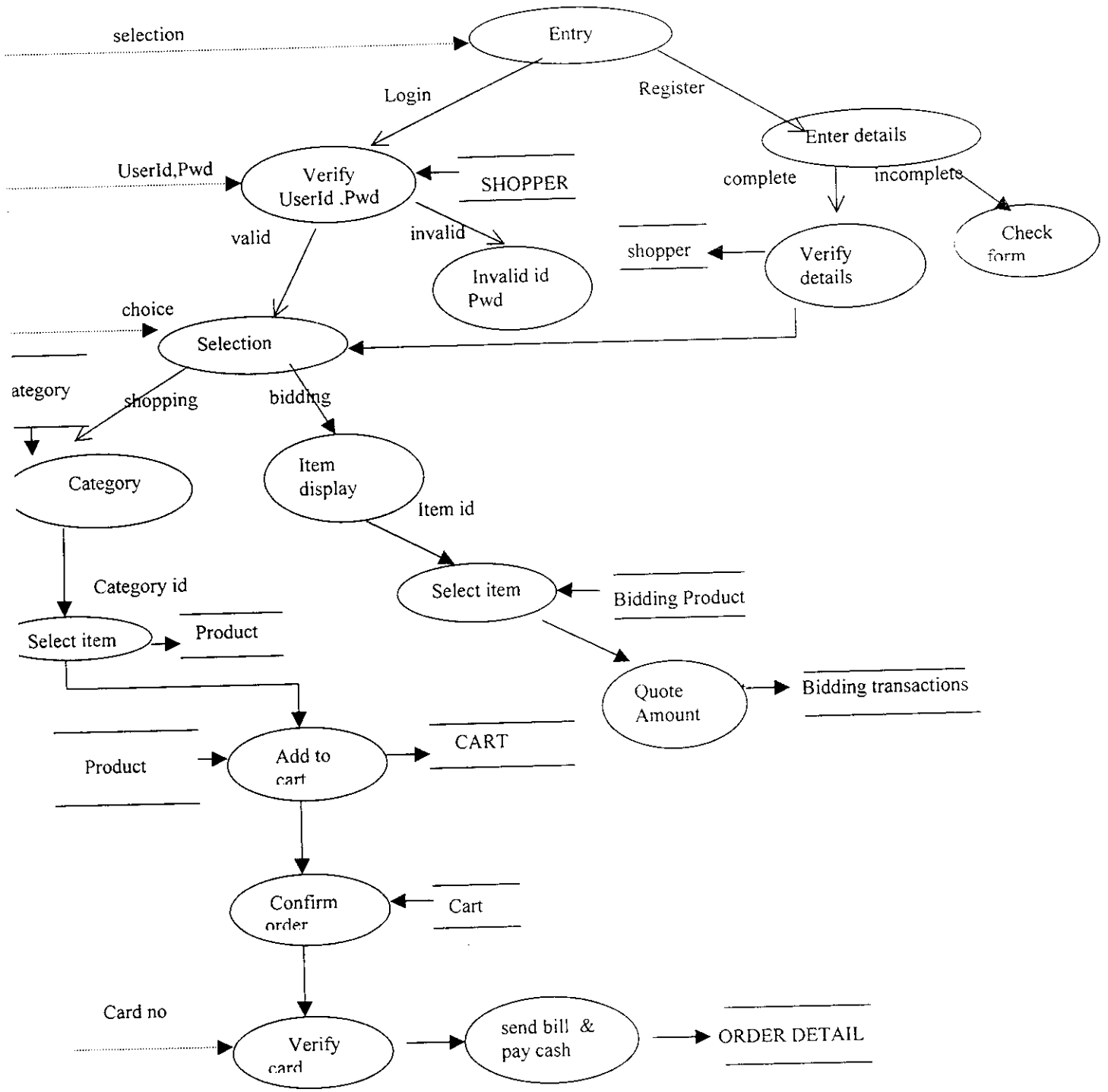
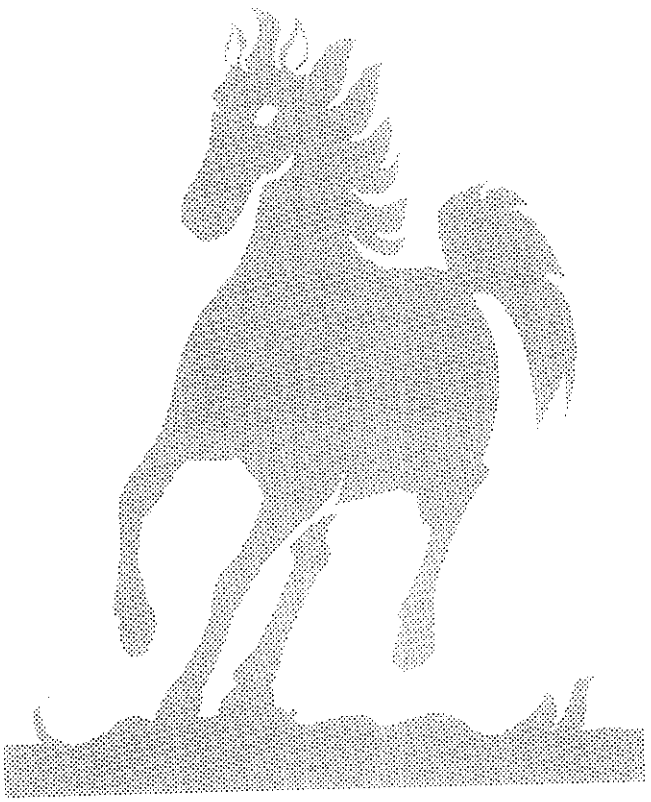
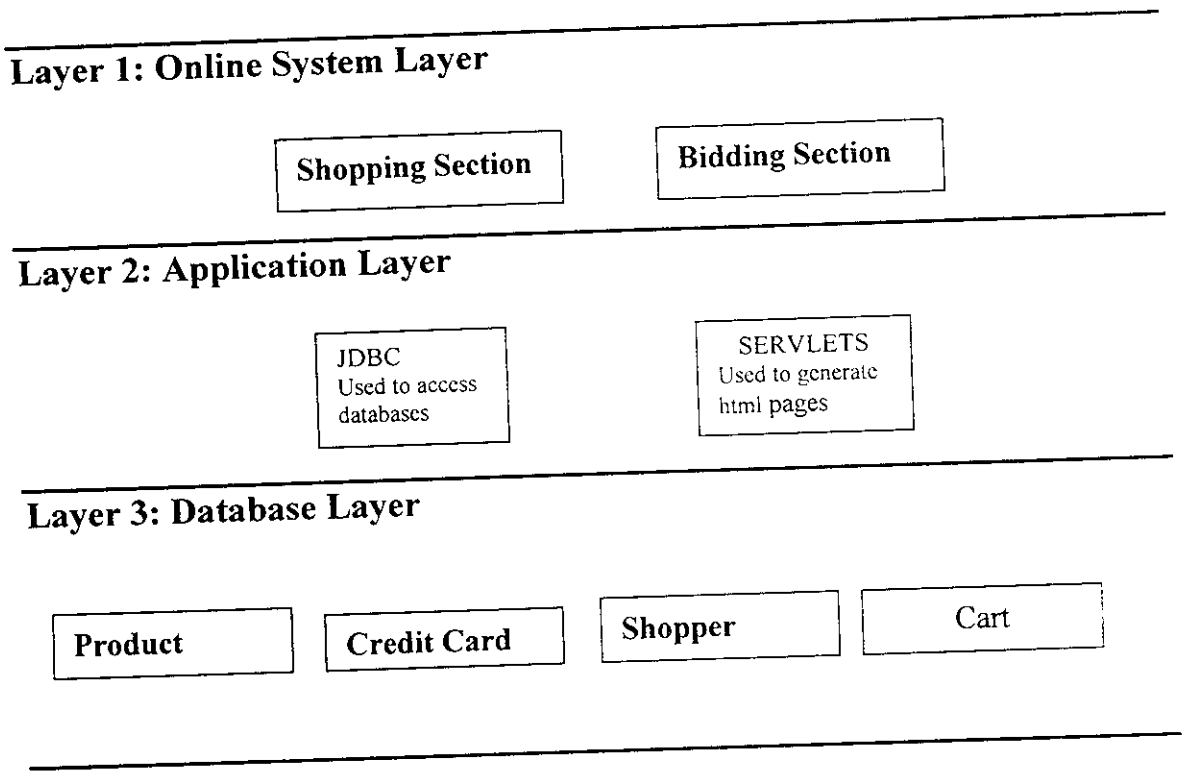


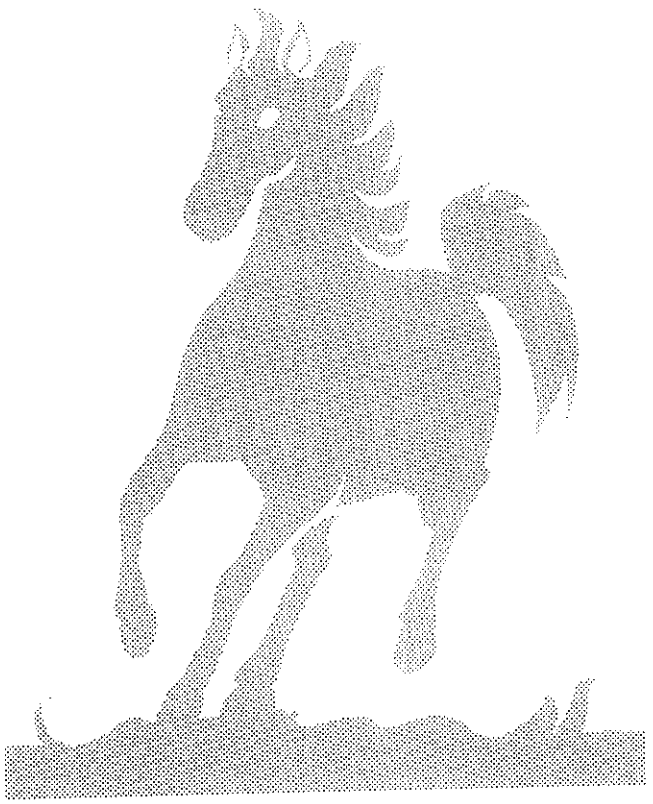


SYSTEM DESIGN

SYSTEM DESIGN

Three Layered Diagram





DATA BASE DESIGN

DATABASE DESIGN

TABLE DESCRIPTION

BIDDINGPRODUCT

Field Name	Field Type	Comments
cBProductId	Text	Bidding Product ID
cBProductName	Text	Bidding Product Name
vBDiscription	Text	Bidding ProductDescription
cBSpecification	Text	Bidding Product Specification

BIDDINGTRANSACTION

Field Name	Field Type	Comments
cBShopperId	Text	ID of the Customer
cBProductId	Text	ID of the Product
mCostQuoted	Currency	Cost that he has Quoted

BILL

Field Name	Field Type	Comments
nBillno	AutoNumber	Bill Number
cShopperId	Text	Shopper ID for whom the bill is
nGrandTotal	Currency	The amount of the bill

CART

Field Name	Field Type	Comments
CcartId	AutoNumber	ID of the Cart
CShopperID	Text	Shopper ID for whom the Cart belongs.
cProductID	Text	Product ID of the produuct he selected
iQty	Number	Quantity of product that he selected

CATEGORY

Field Name	Field Type	Comments
CCategoryId	AutoNumber	Category ID
CCategory	Text	Category

CREDITCARD

Field Name	Field Type	Comments
CardNo	Text	Authentication number
Expiry Date	Date	Expiry date of card
Date of issue	Date	Issue date of card
Name	Text	Name of card holder
Address	Text	Address of card holder

ORDERDETAIL

Field Name	Field Type	Comments
cOrderNo	AutoNumber	Order Number
cShopperId	Text	Shopper Id of the shopper whoSelected the product
cProductId	Text	Product Id of the selected Product
siQty	Number	Quantity of the selected Item
MTotal	Currency	The amount for which the Product was bought.

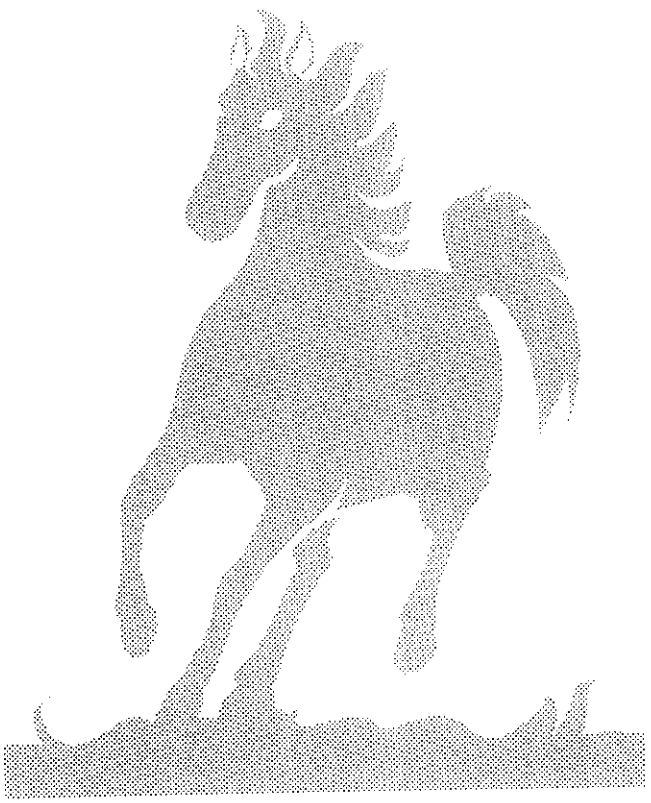
PRODUCT

Field Name	Field Type	Comments
cProductId	Text	Product ID
cProductName	Text	Product Name
vDiscription	Text	Discription of the product
cCategory	Text	Category of the Product
cSpecification	Text	Specification of the product
mCost	Currency	Unit price of the Product

SHOPPER

Field Name	Field Type	Comments
cShopperId	Text	Shopper Id
cPassword	Text	Password of the customer
cSex	Text	Sex of the customer
vFirstName	Text	First Name of the customer
vLastName	Text	Last Name of the customer
vEmailId	Text	E-mail Id of the customer
vAddress	Text	Address of the customer
cCity	Text	City at which customer resides
cState	Text	State at which customer resides
cCountry	Text	Country to which customer belongs
cZipcode	Text	Zip code of the postal zone at which the customer resides
cPhone	Text	Phone number of the customer

APPENDIX



SAMPLE CODDING

CODE FOR HTML

Code for Home page

```
<html>
<head>
<title>Super systems - home page</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<style type="text/css">
.logo {
 position: absolute;
 visibility: hidden;
 width: 89px;
 height: 36px;
}
</style>

<script language="JavaScript" src="dhtmllib.js"></script>

<script language="JavaScript">
<!--
var logo;
var xOff = 20;
var yOff =  5;

function init() {

  logo = getLayer("logo");
  showLayer(logo);
  setInterval('updateLogo()', 20);
 }

 function updateLogo() {

  var x, y;

  // Resposition logo.

  x = getPageScrollX() + getWindowWidth()  - getWidth(logo)  - xOff;
  y = getPageScrollY() + getWindowHeight() - getHeight(logo) - yOff;
  moveLayerTo(logo, x, y);
 }

 function MM_openBrWindow(theURL,winName,features) { //v2.0
  window.open(theURL,winName,features);
```

```
}

//-->
</script>
</head>

<! body bgcolor="#eeeeff" text="#000000" link="#6CD900" vlink="#68D800"
alink="#FFFFFF" onload="init();";>
<!-- logo -->
<body bgcolor="#eeeeff" text = "#000000" link="#6cd900" vlink="#68d800"
topmargin="0" leftmargin="0" onload="init();";>
<div id="logo" class="logo" style="width: 127px; height: 167px; z-index: 31; visibility:
hidden"><a href="aboutus.htm"><img src="../merlininfinity.gif" width="127"
height="67" border="0" onMouseDown="javascript :
MM_openBrWindow('.\superhomepage.htm','Super homepage','width=374,height=300')"
alt="Super systems"></a></div>
<table border="0" cellpadding="0" cellspacing="0" width="100%"
bgcolor="#000000">
  <tr>
    <td><img src=..\sslogo2black.jpg width = 100%></td>
  </tr>
</table>

<table border="0" cellpadding="0" cellspacing="0" width="100%"
bgcolor="#FFCC00" height="2">
  <tr height = 2>
    <td align="right"></td>
  </tr>
</table>

<table border="0" cellpadding="4" cellspacing="0" bgcolor="#eeeeff">
      <tr>
          <td valign="top" width = 100% background=".\images\pwsnav.gif"
bgcolor="#000000" height="100%">
              <table>
                  <a href="file:///c:\my
documents\java\servlet\project\aboutus.htm">about us</a><br><br>
                  <a href="http://localhost:8080/servlet/Hardware">Hard
ware</a><br><br>
                  <a
href="http://localhost:8080/servlet/BiddingListingHome">Bidding</a><br><br>
                  <a href="file:///c:\my
documents\java\servlet\project\Termsandconditions.htm">Terms &
conditions</a><br><br>
              </table>
              </td>
```

```
        <td><img src=".\images\SSTITLE1.GIF" width="481" useMap="#na_login"
height="148">
                        <table border="0" cellpadding="5">
                                <tr>
                                  <td><font face="Verdana, Arial,
Helvetica"><br></font></td>
                                  <td><font size="4" face="Verdana, Arial, Helvetica">
                                        <strong>Welcome to Super Systems&#174;
Home page.</strong>
                                        </font>

<p><font size="2" face="Verdana, Arial, Helvetica">This home page is hosted on Local
Host with port number 8080. The servlet runner running Windows&#174; 95 or
Windows 98 dos platform acts like a Web server and enables instant access to the
browsers. In this web site we have tried to simplify sharing of information on corporate
intranets or the Internet for all users.</font></p>

<p><font size="2" face="Verdana, Arial, Helvetica">You can visit any of the of the
Super Systems web pages from here. If you like to be the customer of Super Systems the
click on the <i><b>Register</b></i> or if you are already the customer click on the
<i><b>Login</b></i> option. </font></p>

<p><font size="2" face="Verdana, Arial, Helvetica">You can purchase any thing
regarding computers Hardware from us through NET. The payment is also made onLine
using Credit Cards.</font></p>

<br><br>
<center>
<p><font size="2" face="Verdana, Arial, Helvetica">If You like to register with us click
<a href=file:///c:\mydocu~1\java\servlet\shopper.htm> I like To Register
</a></font></p>

<p><font size="2" face="Verdana, Arial, Helvetica">To Login click <a
href=http://localhost:8080/servlet/Signin> Login </a></font></p>
</center>

<font size="4" face="Verdana, Arial, Helvetica"><br></font></h1>
<div align="center">
  <center>
    <table border="0" cellpadding="0" cellspacing="0" width="90%">
      <tr>
        <td align="center"> </td>
      </tr>
    </table>
  </center>
</div>
```

```
<div align="center">
<center>
  <table border="0" cellpadding="0" cellspacing="0" width="90%">
    <tr>
      <td align="center"><font size="2" face="Verdana, Arial, Helvetica"><!--
            Related sites info starts here--></font> </td>
    </tr>
  </table>
</center>
</div>

<div align="center">
  <center>
    <table border="0" cellpadding="0" cellspacing="5">
      <tr>
        <td align="right"><a
href="file:///c:\mydocu~1\java\servlet\project\projectby.htm"><img
src="\images\projectby.jpg" alt="Click to view the back stage" border="0" width="88"
height="31"></a></td>
        <td align="center"> </td>
      </tr>
    </table>
  </center>
</div>

<div align="center">
  <center>
    <table border="0" cellpadding="0" cellspacing="5">
      <tr>
        <td align="center" colspan="3">
          <font size="1" face="Verdana, Arial, Helvetica">&#169;1997 Super Systems
Company. </font>
        </td>
      </tr>
    </table>
  </center>
</div>

</td>
</tr>
</table>
<!/td>
</tr>
</table>
<MAP NAME="na_login">
```

```
 <AREA SHAPE=RECT COORDS="350,8,390,27"
HREF="http://localhost:8080/servlet/Signin" TARGET="new" ALT="Login">
 <AREA SHAPE=RECT COORDS="405,8,468,27"
HREF="file:///c:\mydocu~1\java\servlet\shopper.htm" TARGET="new" ALT="RegisterForm">
</MAP>
</body>

<! /body>
</html>
```

Code for Shopper Registration form

```
<html>
<head>
<title>Welcome to the customer</title>
</head>
<body bgcolor="#eeeeff" text=black>
<center><H1> SUPER SYSTEMS </H1></center>
<hr>
<blockquote>
<p>Please fill in the form below to register youself with Super Systems.
<br>All fields are mandatory to register yourself.</p>
</blockquote>
<form action="http://localhost:8080/servlet/RegisterForm" method=POST>

<table align=center border=0>
<caption>
<input type=radio name=Rsex value=male checked> Mr.     
<input type=radio name=Rsex value=femal> Ms.     
<input type=radio name=Rsex value=femal> Mrs.     
</caption>
<tr>
        <td>First name  :</td>
        <td><input name=RFName type="text" size=15></td>
</tr>
<tr>
        <td>Last name   : </td>
        <td><input name=RLName type="text" size=15></td>
</tr>
<tr>
        <td>Phone (ISD) : </td>
        <td><input name=RPhone type="text" size=15></td>
</tr>
<tr>
```

```
        <td>E-Mail     : </td>
        <td><input name=REmail type="text" size=25></td>
</tr>
<tr>
        <td>Address    : </td>
        <td><input name=RAddre type="text" size=25></td>
</tr>
<tr>
        <td>City         : </td>
        <td><input name=RCity type="text" size=15></td>
</tr>
<tr>
        <td>State      : </td>
        <td><input name=RState type="text" size=15></td>
</tr>
<tr>
        <td>Country    : </td>
        <td><input name=RCountry type="text" size=15></td>
</tr>
<tr>
        <td>Zip code   : </td>
        <td><input name=RZipcode type="text" size=7></td>
</tr>
</table>
<blockquote>
<p> This will be used as your default shipping address. <br>
You can provide a different address during the ordering process. </p>
</blockquote>
<table align=center border=0>
<tr>
        <td>User ID    : </td>
        <td><input name=RUserID type="text" size=15></td>
</tr>
<tr>
        <td>Password   : </td>
        <td><input name=RPassword type="password" size=15></td>
</tr>
<tr>
        <td>Retype Password  : </td>
        <td><input name=RRetypepassword type="password" size=15></td>
</tr>
</table><br>
<center><input type="submit"
value="Submit">       <input type="reset"
value="Clear"></center>
</form>
```

```
</body>
</html>
```

Code for Terms and Conditions

```
<html>
<head>
<title>Terms and conditions - Super Systems</title>
</head>
<body bgcolor = #eeeeff text = #000000>
<center><img src=file:///c:\myDocu~1\java\servlet\sslogo1.jpg width = 100%></center>
<table align = center width = 100%><tr>
<td align = left bgcolor = #228b22><b><h2>Terms and Conditions</h2></b>
</td>
</tr>
<tr><td align = left bgcolor = #e9967a><b><h3>Welcome, Guest</h3></b></td></tr>
</table><br>
<blockquote>
There are certain conditions that you have to satisfy in order to be the customer of Super
Systems.
<blockquote>
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
To have transactions with us you will have to <a
href=file:///c:\mydocu~1\java\servlet\project\shopper.htm>Register</a> with
          us.<br>
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
Every time to have transactions with us you have to enter the
          UserId and
password to <a href=http://localhost:8080/servlet/Signin>Login.</a><br>
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
You should provide your phone number.<br>
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
Every time you place order, only after conforming your orders
      
          through phone the
goods will be send to you.<br>
```

```
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
Credit facility is provided only for the regular customers.<br>
<img
src=file:///c:\mydocu~1\java\servlet\project\images\animbullet1w.gif>  &nb
sp; 
Reasonable discounts will be given on placement of <b>Bulk</b> orders.<br>
</blockquote>
</blockquote>
<hr width = 90%>
<font size = 2>
<center>
<a href =
http://localhost:8080/servlet/Hardware>Shopping</a>    
<a href = file:///c:\mydocu~1\java\servlet\project\superhomepagems.htm>
Home</a>      <br><br>
<a href =
http://localhost:8080/servlet/BiddingListingHome>Bidding</a>   &n
bsp;
<a href = file:///c:\mydocu~1\java\servlet\project\aboutus.htm>About
us</a>   
</center>
</font>
</body>
</html>
```

CODE FOR SERVLETS

Code for Bidding Select

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class BiddingShow extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet result;

        public void init(ServletConfig config)
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
                }
                catch(Exception e)
                {
                        System.out.println("In init of BiddingShow " + e.toString());
                }
        }

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
IOException , ServletException
        {
                int i = 0;


                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Bidding - Super Systems </title>");
```

```
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff text = black >");
                out.println("<center>");
                out.println("<h1><u></i>Products for Bidding</u></i></h1>");
                out.println("<form method = post action =
\"http://localhost:8080/servlet/BiddingServlet\">");
                out.println("<table bgcolor = #87cefa>");
                out.println("\t<tr>");
                out.println("\t\t<th>Select</th>");
                out.println("\t\t<th>Product Id</th>");
                out.println("\t\t<th>Details</th>");
                out.println("\t\t<th>Price you Quote</th>");
                out.println("\t</tr>");



                try
                {
                        stat = con.prepareStatement("select * from BiddingProduct");
                        result = stat.executeQuery();
                        while(result.next())
                        {
                                i++;
                                String productId = result.getString(1);
                                String productName = result.getString(2);
                                String description = result.getString(3);
                                String specification = result.getString(4);

                                out.println("\t<tr>");
                                out.println("\t\t<td> <input type = checkbox name =
product" + i + " value = " + productId + "> </td>");
                                out.println("\t\t<td> " + productId + "</td>");
                                out.println("\t\t<td> ");
                                out.println("\t\t\t" + productName + "<hr>");
                                out.println("\t\t\t" + description + "<hr>");
                                out.println("\t\t\t" + specification +"<hr>");
                                out.println("\t\t</td>");
                                out.println("<td>");
                                out.println("</td>");
                                out.println("\t</tr>");
                        }

                }
                catch(Exception e)
                {
                        System.out.println(e.toString());
```

```
                }
                out.println("</table>");
                out.println("<input type = submit value = \" finish \">");
                out.println("</center>");
                out.println("</form>");
                out.println("</body>");
                out.println("</html>");
        }
}
```

Code for Add To Cart

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class NewAddToCart extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet resultProduct;
        ResultSet resultCart;

        public void init(ServletConfig config) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
                }
                catch(Exception e)
                {
                        System.out.println(e.toString());
                }
        }

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
ServletException , IOException
        {
                String tempUserId = "Siva_ipk";
                String tempProdId = "";
                String tempProdName = "";
```

```
String tempCategory = "";
int tempQuantity = 0;
float tempUnitPrice = 0;
float grandTotal = 0;

res.setContentType("text/html");
PrintWriter out = res.getWriter();

int numberOfItems =
Integer.parseInt(req.getParameter("numberOfItems"));

out.println("<html>");
out.println("<head>");
out.println("<title> Add To cart - Super systems </title>");
out.println("</head>");
out.println("<body bgcolor = #eeeeff >");
out.println("<form method = POST action =
http://localhost:8080/servlet/SelectForm> ");

// Update the Cart Table for the products selected now

for(int i = 1; i <= numberOfItems ; i++)
{
        tempProdId = req.getParameter("product" + i );
        if(tempProdId != null)
        {
                tempQuantity =
Integer.parseInt(req.getParameter("Quantity" + i));
                try
                {
                        tempQuantity =
Integer.parseInt(req.getParameter("Quantity" + i));
                        stat = con.prepareStatement("insert into Cart(
cShopperId , cProductId , iQty) values( ? , ? , ?) " );
                        stat.setString(2,tempUserId);
                        stat.setString(3,tempProdId);
                        stat.setInt(4,tempQuantity);
                        stat.executeUpdate();

                }
                catch(Exception e)
                {
                        System.out.println(e.toString());
                }
        }
}
```

```
// Display the contents of the Cart table for this user ID

out.println("<table bgcolor = #87cefa align = center >");
out.println("\t<tr>");
out.println("\t\t<th>Product Id</th>");
out.println("\t\t<th>Product Name</th>");
out.println("\t\t<th>Category</th>");
out.println("\t\t<th>Quantity</th>");
out.println("\t\t<th>Unit Price</th>");
out.println("\t\t<th>Cost</th>");
out.println("\t</tr>");

try
{
        stat = con.prepareStatement("select * from Cart where cShopperId
= ?");
        stat.setString(1,tempUserId);
        resultCart = stat.executeQuery();
        while(resultCart.next())
        {
                tempProdId = resultCart.getString(3);
                tempQuantity = Integer.parseInt(resultCart.getString(4));

                stat = con.prepareStatement("select * from Product where
cProductId = ?");
                stat.setString(1,tempProdId);
                resultProduct = stat.executeQuery();

                while(resultProduct.next())
                {
                        tempUnitPrice =
Float.parseFloat(resultProduct.getString(6));
                        tempProdName = resultProduct.getString(2);
                        tempCategory = resultProduct.getString(4);
                }
                out.println("\t<tr>");
                out.println("\t\t<td> ");
                out.println("\t\t\t" + tempProdId );
                out.println("\t\t" + "</td><td>");
                out.println("\t\t\t"+tempProdName);
                out.println("\t\t</td><td>");
                out.println("\t\t\t" + tempCategory);
                out.println("\t\t</td><td>");
                out.println("\t\t\t" + tempQuantity + "</td>");
```

```
                        out.println("<td>"+tempUnitPrice +"</td><td>" + (
tempQuantity * tempUnitPrice ) + "</td>" );
                        grandTotal += ( tempQuantity * tempUnitPrice );
                        out.println("\t</tr>");
                    }
                    out.println("</table>");
                }
                catch(Exception e)
                {
                    System.out.println(e.toString());
                }

                out.println("<br><br>");
                out.println("<table align = center>");
                out.println("\t<tr>");
                out.println("\t\t<th> Grand Total : </th>");
                out.println("\t\t<th>" + grandTotal + "</th>");
                out.println("\t</tr>");
                out.println("</table>");

                out.println("<table align = center>");
                out.println("<tr>");
                out.println("<th>");
                out.println("<input type = submit value = \"select again\">");
                out.println("</form>");
                out.println("</th>");
                out.println("<th>");
                out.println("<form method = post action =
http://localhost:8080/servlet/ConformServlet>");
                out.println("<input type = submit value = \"finish shopping\">");
                out.println("</th>");
                out.println("</form>");
                out.println("</tr>");
                out.println("</table>");
                out.println("</body>");
                out.println("</html>");
                out.close();
        }
}
```

Code for Show Form

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class ShowForm extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet result;
        String category;
        String categoryId;

        public void init(ServletConfig config) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
                }
                catch(Exception e)
                {
                        System.out.println("In init of ShowForm " + e.toString());
                }
        }

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
ServletException , IOException
        {
                int i=0;

                res.setContentType("text/html");
                PrintWriter out = res.getWriter();
                out.println("<html>");
                out.println("<head>");
                out.println("<title> it is a product form </title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff text = black>");

                categoryId = req.getParameter("category");

                try
```

```
                {
                        stat = con.prepareStatement("select * from Category where
cCategoryId = ?");
                        stat.setInt(1,Integer.parseInt(categoryId));
                        result = stat.executeQuery();
                        result.next();
                        category = result.getString(2);
                }
                catch( Exception e )
                {
                        //space for exception handling
                }

                out.println("<center>");
                out.println("<h1><u></i>" + category + "</u></i></h1>");
                out.println("<form name = Show method = post action =
\"http://localhost:8080/servlet/NewAddToCart\" >");
                out.println("<table bgcolor = #87cefa>");
                out.println("\t<tr>");
                out.println("\t\t<th>Select</th>");
                out.println("\t\t<th>Product Id</th>");
                out.println("\t\t<th>Details</th>");
                out.println("\t\t<th>Quantity</th>");
                out.println("\t</tr>");

                try
                {
                        stat = con.prepareStatement("select * from Product where
cCategory = ?");
                        stat.setString(1,category);
                        result = stat.executeQuery();
                        while(result.next())
                        {
                                i++;
                                String productId = result.getString(1);
                                String productName = result.getString(2);
                                String description = result.getString(3);
                                String specification = result.getString(5);
                                String cost = result.getString(6);

                                out.println("\t<tr>");
                                out.println("\t\t<td> <input type = checkbox name =
product" + i + " value = " + productId + "> </td>");
                                out.println("\t\t<td> " + productId + "</td>");
                                out.println("\t\t<td> ");
                                out.println("\t\t\t" + productName + "<hr>");
```

```
                                out.println("\t\t\t" + description + "<hr>");
                                out.println("\t\t\t" + specification +"<hr>");
                                out.println("\t\t\t" + cost);
                                out.println("\t\t</td>");
                                out.println("<td>");
                                out.println("\t<input type = Text name = Quantity'+ i +
">");
                                out.println("</td>");
                                out.println("\t</tr>");
                        }
                }
                catch( Exception e )
                {
                        out.println("exception occured" + e.toString());
                        //space for exception handling
                }

                out.println("</table>");
                out.println("<input type = submit value = \" Add to Cart \">");
                out.println("</center>");
                out.println("<input type = hidden name = numberOfItems value = " + i +
">");
                out.println("</form>");
                out.println("</body>");
                out.println("</html>");
        }
}
```

Code for Select Form

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class SelectForm extends GenericServlet
{
        Connection con;
        Statement stat;
        ResultSet result;

        public void init(ServletConfig config) throws ServletException
        {
                try
```

```
            {
                    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                    con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
            }
            catch(Exception e)
            {
                    System.out.println(e.toString());
            }
        }
        public void service( ServletRequest req , ServletResponse res ) throws
ServletException , IOException
        {
                int i=0;
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();
                out.println("<html>");
                out.println("<head>");
                out.println("<title> Select Category </title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff text = black>");
                out.println("<form name = Select method = post action =
\"http://localhost:8080/servlet/ShowForm\">");
                out.println("<center>");
                out.println("<h3> <u> Select the category of product </u> </h3>");
                out.println("<table bgcolor = #696969 cellspacing = 5 cellpadding = 5 >");
                out.println("<caption> Select any one of the categories </caption>");
                try
                {
                        stat = con.createStatement();
                        result=stat.executeQuery("select * from Category");
                        while(result.next())
                        {
                                i++;
                                String category = result.getString(2);
                                String categoryId = result.getString(1);
                                out.println("\t<tr align = center>");
                                if(i == 1)
                                        out.println("\t\t<td> <input type = radio name =
 category value = " + categoryId + " checked > </td>");
                                else
                                        out.println("\t\t<td> <input type = radio name =
 category value = " + categoryId + "> </td>");
                                out.println("\t\t<td> " + category + "</td>");
                                out.println("\t</tr>");
                        }
```

```
                }
                catch( Exception e )
                {
                        //space for exception
                }
                out.println("</table>");
                out.println("<br><br>");
                out.println("<input type = submit value = Show Details>");
                out.println("</form>");
                out.println("</body>");
                out.println("</html>");
        }
}
```

Code for Signin

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;

public class Signin extends GenericServlet
{
        public void service(ServletRequest req , ServletResponse res ) throws
ServletException , IOException
        {
                PrintWriter out = res.getWriter();
                res.setContentType("text/html");

                out.println("<html>");
                out.println("<head>");
                out.println("<title>Sing in - Super Systems</title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff >");
                out.println("<center><h1>Super systems</h1><hr></center>");
                out.println("<blockquote>");
                out.println("<font size = 4 ><p>Please enter your user id and password to
 Login to the store.</p></font>");
                out.println("</blockquote>");
                out.println("<center>");
                out.println("<img
 src=file:///c:\\mydocu~1\\java\\servlet\\project\\images\\doorin2.gif><br>");
                out.println("<form action = http://localhost:8080/servlet/SigninServlet
 method = post>");
```

```
            out.println("<table>");
            out.println("<tr>");
            out.println("<td>");
            out.println("User ID : ");
            out.println("</td>");
            out.println("<td>");
            out.println("<input type = text name = SuserId size = 15>");
            out.println("</td>");
            out.println("</tr>");
            out.println("<tr>");
            out.println("<td>");
            out.println("Password : ");
            out.println("</td>");
            out.println("<td>");
            out.println("<input type = password name = Spassword size = 15>");
            out.println("</td>");
            out.println("</tr>");
            out.println("</table>");
            out.println("<br>");
            out.println("<input type = submit value = Sign-in>");
            out.println("      ");
            out.println("<input type = reset value = Clear>");
            out.println("</form>");
            out.println("</center>");
            out.println("</body>");
            out.println("</html>");
        }

}
```

Code for Register Form

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class RegisterForm extends HttpServlet
{
        // variables for getting data form the form

        HttpServletRequest req;
        HttpServletResponse res;
        boolean exitFlag = true;
```

```
String sex;
String fName;
String lName;
String phone;
String eMail;
String address;
String city;
String state;
String country;
String zipcode;
String userId;
String password;
String rePassword;

// variables for database connectivity

Connection con;
PreparedStatement stat;
ResultSet result;

public void init(ServletConfig config) throws ServletException
{
        try
        {
                Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
        }
        catch(Exception e)
        {
                System.out.println(e.toString());
        }
}

public void doPost( HttpServletRequest request , HttpServletResponse response )
throws ServletException , IOException
{
        // method for handlig POST from the form

        req = request;
        res = response;

        sex = req.getParameter("Rsex");
        fName = req.getParameter("RFName");
        lName = req.getParameter("RLName");
```

```
            phone = req.getParameter("RPhone");
            eMail = req.getParameter("REmail");
            address = req.getParameter("RAddre");
            city = req.getParameter("RCity");
            state = req.getParameter("RState");
            country = req.getParameter("RCountry");
            zipcode = req.getParameter("RZipcode");
            userId = req.getParameter("RUserID");
            password = req.getParameter("RPassword");
            rePassword = req.getParameter("RRetypepassword");

            // calling validateData to validate them

            validateData();

            // Checks for the uniquness of the user ID

            if(exitFlag == true)
                    checkUserId();

            // calling storeDetails to store them in DataBase

            if(exitFlag == true)
                    storeDetails();

            // Response message for user after registration

            if(exitFlag == true)
                    welcome();
    }

    public void storeDetails()
    {
            //statements to perform database operations

            try
            {
                    stat = con.prepareStatement("insert  into Shopper( cSex ,
vFirstName , vLastName , cPhone ,  vEmailId , vAddress , cCity , cState , cCountry ,
cZipcode , cShopperId , cPassword ) values( ? , ? , ? , ? , ? , ? , ? , ? , ? , ? , ? , ? ) " );
                    stat.setString(1,sex);
                    stat.setString(2,fName);
                    stat.setString(3,lName);
                    stat.setString(4,phone);
                    stat.setString(5,eMail);
                    stat.setString(6,address);
```

```
                stat.setString(7,city);
                stat.setString(8,state);
                stat.setString(9,country);
                stat.setString(10,zipcode);
                stat.setString(11,userId);
                stat.setString(12,password);
                stat.executeUpdate();
            }
            catch( Exception e )
            {
                // space for exception handling
                System.out.println("insertion exception " + e.toString());
                exitFlag = false;
            }
        }

        public void checkUserId() throws ServletException , IOException
        {
            boolean flag = false;

            try
            {
                stat = con.prepareStatement("select * from Shopper where
cShopperId = ? ");
                stat.setString(1,userId);
                result = stat.executeQuery();
                while(result.next())
                {
                if(userId.equals(result.getString(1)))
                  flag = true;
                }
            }
            catch(Exception e)
            {
                System.out.println("Check user id " + e.toString());
            }
            if(flag == true)
            {
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Re-enter Registeration </title>");
                out.println("</head>");
                out.println("<body bgcolor=\"#eeeeff\">");
```

```
                    out.println("<center><h1>Super Systems</h1></center>");
                    out.println("<hr>");
                    out.println("<blockquote>");
                    out.println("<p>Sorry the User ID you have typed already exists,
for best operation it has to be unique, so try with other one.</p><br>");
                    out.println("<p>Best way is to use append number at the end, or
add an under score ( _ )</p>");
                    out.println("<p> User ID you have Entered is : " + userId );
                    out.println("</p>");
                    out.println(" To re-enter");
                    out.println("<a href=\"file:///C|/My
Documents/java/servlet/shopper.htm\" >");
                    out.println("<font size=\"4\">");
                    out.println("click Here");
                    out.println("</font>");
                    out.println("</a>");
                    out.println("</blockquote>");
                    out.println("</body>");
                    out.println("</html>");
                    out.close();
                    exitFlag = false;
            }
    }

    public void validateData() throws ServletException , IOException
    {

        boolean flag=true;

        if(sex.length() == 0)
          flag=false;
        if(fName.length() == 0)
          flag=false;
        if(lName.length() == 0)
          flag=false;
        if(phone.length() == 0)
          flag=false;
        if(eMail.length() == 0)
          flag=false;
        if(address.length() == 0)
          flag=false;
        if(city.length() == 0)
          flag=false;
        if(state.length() == 0)
          flag=false;
```

```
if(country.length() == 0)
 flag=false;
if(zipcode.length() == 0)
 flag=false;
if(userId.length() == 0)
 flag=false;
if(password.length() == 0)
 flag=false;
if(rePassword.length() == 0)
 flag=false;
if(!password.equals(rePassword))
 flag=false;
try
{
        int i;
        i=Integer.parseInt(phone);
        i=Integer.parseInt(zipcode);
}
catch(Exception e)
{
        System.out.println("Validation exception" + e.toString());
        flag = false;
}
if(flag == false)
{
        res.setContentType("text/html");
        PrintWriter out = res.getWriter();

        out.println("<html>");
        out.println("<head>");
        out.println("<title> Re-enter Registeration </title>");
        out.println("</head>");
        out.println("<body bgcolor=\"#eeeeff\">");
        out.println("<center><h1>Super Systems</h1></center>");
        out.println("<hr>");
        out.println("<blockquote>");
        out.println("<p>You have made some mistakes in entering the
details.</p><br>");
        out.println("<p> See to that the following conditions should be
matched. </p>");
        out.println("<blockquote>");
        out.println("<ul>");
        out.println("<li>Please do not leave any of the fields empty.");
        out.println("<li>The passwords entered has to match.");
        out.println("<li>The phone and zipcode fields has to be numbers");
        out.println("</ul>");
```

```
                    out.println("</blockquote>");
                    out.println(" To re-enter");
                    out.println("<a href=\"file:///C|/My
Documents/java/servlet/shopper.htm\" >");
                    out.println("<font size=\"4\">");
                    out.println("click Here");
                    out.println("</font>");
                    out.println("</a>");
                    out.println("</blockquote>");
                    out.println("</body>");
                    out.println("</html>");
                    out.close();
                    exitFlag = false;
            }
        }

        public void welcome() throws ServletException , IOException
        {
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Super systems - Welcome</title>");
                out.println("</head>");
                out.println("<body bgcolor=\"#eeeeff\">");
                out.println("<center><h1>Super Systems</h1></center>");
                out.println("<hr>");
                out.println("<blockquote>");
                out.println("<p>Dear " + fName + " " + lName + "!");
                out.println("</p>");
                out.println("<p>Welcome to Super systems and a big thanks for
registering with us. We are sure you have gone through the benefits of being a registered
member of Super systems. We are committed to making your visit here at Super systems
a memorable experience that'll make you want to come back for more.</p>");
                out.println("<p>Just to reassure you, whatever information you give us
will never be sold. Rented or in any way divulged to anybody.</p>");
                out.println("<a href=\"http://localhost:8080/servlet/SelectForm\">");
                out.println("<font size=\"4\">");
                out.println("continue Shopping");
                out.println("</font>");
                out.println("</a>");
                out.println("<a href=\"http://localhost:8080/servlet/BiddingShow\">");
                out.println("<font size=\"4\">");
                out.println("continue Bidding");
                out.println("</font>");
```

```
                out.println("</a>");
                out.println("</blockquote>");
                out.println("</body>");
                out.println("</html>");
                out.close();
        }
}
```

Code for SigninServlet

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class SigninServlet extends HttpServlet
{
        // variables for getting data form the form

        HttpServletRequest req;
        HttpServletResponse res;
        boolean exitFlag = true;

        String userId;
        String password;

        // variables for database connectivity

        Connection con;
        PreparedStatement stat;
        ResultSet result;

        public void init(ServletConfig config) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
                }
                catch(Exception e)
                {
```

```
                System.out.println("connection exception " + e.toString());
            }
        }

    public void doPost( HttpServletRequest request , HttpServletResponse response )
throws ServletException , IOException
    {
        // method for handlig POST from the form

        req = request;
        res = response;

        userId = req.getParameter("SuserId");
        password = req.getParameter("Spassword");

        System.out.println(userId + "   " + password);
        // Checks for the presence user ID

        checkUserId();

        // Checks for the correctness of password

        if( exitFlag == true )
            checkPassword();

        // Response message for user after registration

        if(exitFlag == true)
            welcomeToShop();
    }

    public void checkUserId() throws ServletException , IOException
    {
        boolean flag = false;

        try
        {
            stat = con.prepareStatement("select * from Shopper where
cShopperId = ? ");
            stat.setString(1,userId);
            result = stat.executeQuery();
            while(result.next())
            {
            if(!userId.equals(result.getString(1)))
```

```
                    flag = true;
                }
            }
            catch(Exception e)
            {
                System.out.println("Check user id " + e.toString());
            }
            if(flag == true)
            {
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Re-enter Sign-in </title>");
                out.println("</head>");
                out.println("<body bgcolor=\"#eeeeff\">");
                out.println("<center><h1>Super Systems</h1></center>");
                out.println("<hr>");
                out.println("<blockquote>");
                out.println("<p>Sorry the User ID you have typed does not
exists.</p><br>");
                out.println("<p> User ID you have Entered is : " + userId );
                out.println("</p>");
                out.println(" To re-enter");
                out.println("<a href=\"http://localhost:8080/servlet/Singin\" >");
                out.println("<font size = 4 >");
                out.println("click Here");
                out.println("</font>");
                out.println("</a>");
                out.println("</blockquote>");
                out.println("</body>");
                out.println("</html>");
                out.close();
                exitFlag = false;
            }
            System.out.println("exitFlag in checkUserId " + exitFlag );
        }

        public void checkPassword() throws ServletException , IOException
        {
            boolean flag = false;

            try
            {
```

```
                    stat = con.prepareStatement("select cPassword from Shopper
where cShopperId = ? ");
                    stat.setString(1,userId);
                    result = stat.executeQuery();
                    while(result.next())
                    {
                    if(!password.equals(result.getString(1)))
                     flag = true;
                    }
                }
                catch(Exception e)
                {
                        System.out.println("Check password " + e.toString());
                }
                if(flag == true)
                {
                        res.setContentType("text/html");
                        PrintWriter out = res.getWriter();

                        out.println("<html>");
                        out.println("<head>");
                        out.println("<title> Re-enter Sign-in </title>");
                        out.println("</head>");
                        out.println("<body bgcolor=\"#eeeeff\">");
                        out.println("<center><h1>Super Systems</h1></center>");
                        out.println("<hr>");
                        out.println("<blockquote>");
                        out.println("<p>Sorry the password you have Entered is not
  correct.</p><br>");
                        out.println(" To re-enter ");
                        out.println("<a href=\"http://localhost:8080/servlet/Singin\" >");
                        out.println("<font size = 4 >");
                        out.println("click Here");
                        out.println("</font>");
                        out.println("</a>");
                        out.println("</blockquote>");
                        out.println("</body>");
                        out.println("</html>");
                        out.close();
                        exitFlag = false;
                }
                System.out.println("exitFlag in checkPassword " + exitFlag );
        }

        public void welcomeToShop() throws ServletException , IOException
        {
```

```
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Super systems - Welcome To Shop</title>");
                out.println("</head>");
                out.println("<body bgcolor=\"#eeeeff\">");
                out.println("<center><h1>Super Systems</h1></center>");
                out.println("<hr>");
                out.println("<blockquote>");
                out.println("<p>Welcome to Super systems shop and you can by any thing
you require regarding computers.</p>");
                out.println("<p>The orders placed by you will be processed only after the
conformation through phone.</p>");
                out.println("<a href=\"http://localhost:8080/servlet/Select\">");
                out.println("<font size=\"4\">");
                out.println("continue");
                out.println("</font>");
                out.println("</a>");
                out.println("</blockquote>");
                out.println("</body>");
                out.println("</html>");
                out.close();
        }
}
```

Code for Place Order

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class NewPlaceOrder3 extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet resultOrder;
        ResultSet resultProduct;
        ResultSet resultCart;

        public void init( ServletConfig config )
        {
```

```
            try
            {
                    Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                    con =
DriverManager.getConnection("jdbc:odbc:DataSource","","");
            }
            catch(Exception e)
            {
                    System.out.println("In connection " + e.toString());
            }
        }

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
ServletException , IOException
        {
                String tempUserId = "";
                String tempProdId = "";
                String tempProdName = "";
                String tempCategory = "";
                String color[] = {"#949494","#cecece"};
                int tempQuantity = 0;
                float tempUnitPrice = 0;
                float grandTotal = 0;

                res.setContentType("text/html");
                PrintWriter out = res.getWriter();
                Cookie[] cookies = req.getCookies();

                for( int i = 0 ; i < cookies.length ; i++ )
                {
                        String name = cookies[i].getName();
                        String value = cookies[i].getValue();
                        if( name.compareTo("UserId") == 0 )
                        {
                                tempUserId = value;
                        }
                }

                out.println("<html>");
                out.println("<head>");
                out.println("<title> Place Order - Super systems </title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff>");
                out.println("<center><img
src=file:///c:\\myDocu~1\\java\\servlet\\sslogo1.jpg width = 100%></center>");
                out.println("<table align = center width = 100%><tr>");
```

```
                out.println("<td align = left bgcolor = #fffff0><b><h2>Place
Order</h2></b>");
                out.println(" </td>");
                out.println("</tr>");
                out.println("<tr><td align = left  bgcolor = #fafad2><b><h3>Thank You,
" + tempUserId + "</h3></b></td></tr>");
                out.println("</table><br>");

                out.println("<blockquote><p> Thanks for Placing order with us.
</p><p>We have presented the bill here and the products will be delivered to you after
conformation through Phone on the day you specify.</p></blockquote>");

                out.println("<table bgcolor = #87cefa align = center border = 0>");
                out.println("\t<tr bgcolor = #87cefa >");
                out.println("\t\t<th>Product Id</th>");
                out.println("\t\t<th>Product Name</th>");
                out.println("\t\t<th>Category</th>");
                out.println("\t\t<th>Quantity</th>");
                out.println("\t\t<th>Unit Price</th>");
                out.println("\t\t<th>Cost</th>");
                out.println("\t</tr>");

                int numberOfProducts =
 Integer.parseInt(req.getParameter("numberOfProducts"));

                System.out.println(numberOfProducts);

                for(int i = 1 ; i <= numberOfProducts ; i++)
                {
                        tempProdId = req.getParameter("product" + i);
                        if(tempProdId != null)
                        {

                                // get the quantity from the Cart table

                                try
                                {
                                        stat = con.prepareStatement("select * from Cart
 where cShopperId = ? and cProductId = ?");
                                        stat.setString(1,tempUserId);
                                        stat.setString(2,tempProdId);
                                        resultCart = stat.executeQuery();
                                        while(resultCart.next())
                                        {
                                                tempQuantity =
 Integer.parseInt(resultCart.getString(4));
```

```
                    }
                    System.out.println("Quantity = " + tempQuantity);
                }
                catch(Exception e)
                {
                        System.out.println("In reading Quantity " +
e.toString());
                }

                // get the unit price, Product Name & category of the
product from the Product table

                try
                {
                        stat = con.prepareStatement("select * from Product
where cProductId = ?");
                        stat.setString(1,tempProdId);
                        resultProduct = stat.executeQuery();
                        while(resultProduct.next())
                        {
                                tempProdName =
resultProduct.getString(2);
                                tempCategory = resultProduct.getString(4);
                                tempUnitPrice =
Float.parseFloat(resultProduct.getString(6));
                        }
                        grandTotal += tempQuantity*tempUnitPrice;
//
                }
                catch(Exception e)
                {
                        System.out.println("In reading the Product table " +
e.toString());
                }

                // display the bill

                out.println("\t<tr bgcolor = " + color[i%2] + " align =
center >");
                out.println("\t\t<td>");
                out.println("\t\t\t" + tempProdId );
                out.println("\t\t" + "</td><td>");
                out.println("\t\t\t"+tempProdName);
                out.println("\t\t</td><td>");
                out.println("\t\t\t" + tempCategory);
                out.println("\t\t</td><td>");
                out.println("\t\t\t" + tempQuantity + "</td>");
```

```
                        out.println("<td>"+tempUnitPrice +"</td><td>" + (
tempQuantity * tempUnitPrice ) + "</td>" );
                        grandTotal += ( tempQuantity * tempUnitPrice );
                        out.println("\t</tr>");
                }
                else
                {

                        // get the hidden product id from the Conform Servlet

                        tempProdId = req.getParameter("hiddenproduct" + i);

                        // get the quantity from the Cart table

                        try
                        {
                                stat = con.prepareStatement("select * from Cart
 where cShopperId = ? and cProductId = ?");
                                stat.setString(1,tempUserId);
                                stat.setString(2,tempProdId);
                                resultCart = stat.executeQuery();
                                while(resultCart.next())
                                {
                                        tempQuantity =
 Integer.parseInt(resultCart.getString(4));
                                }
                        }
                        catch(Exception e)
                        {
                                System.out.println("In reading Quantity " +
 e.toString());
                        }

                        // get the unit price of the product from the Product table

                        try
                        {
                                stat = con.prepareStatement("select mCost from
 Product where cProductId = ?");
                                stat.setString(1,tempProdId);
                                resultProduct = stat.executeQuery();
                                while(resultProduct.next())
                                {
                                        tempUnitPrice =
 Float.parseFloat(resultProduct.getString(1));
                                }
```

```
                        }
                        catch(Exception e)
                        {
                                System.out.println("In reading the Product table " +
e.toString());
                        }

                        // Insert the order into the DropOrderDetail table

                        try
                        {
                                stat = con.prepareStatement("insert into
DropOrderDetail( cDropShopperId , cDropProductId , sDropiQty ) values ( ? , ? , ? )");
                                stat.setString(1,tempUserId);
                                stat.setString(2,tempProdId);
                                stat.setInt(3,tempQuantity);
                                stat.executeUpdate();
                        }
                        catch(SQLException e)
                        {
                                System.out.println("In inserting into
DropOrderDetail " + e.toString());
                                System.out.println("In inserting into
DropOrderDetail SQL State " + e.getSQLState());
                                System.out.println("In inserting into
DropOrderDetail Error Code " + e.getErrorCode());
                        }
                }
        }
        out.println("</table>");
        out.println("<p><center><b>Grand Total : " + grandTotal +
"</b></center></p>");

        // Insert the order into the Bill table

        try
        {
                stat = con.prepareStatement("insert into Bill( cShopperId ,
nGrandTotal ) values ( ? , ? )");
                stat.setString(1,tempUserId);
                float m;
                m = grandTotal;
                stat.setString(2,Float.toString(m));
                stat.executeUpdate();
        }
        catch(SQLException e)
```

```
                {
                        System.out.println("In inserting into Bill " + e.toString());
                        System.out.println("In inserting into Bill SQL State " +
e.getSQLState());
                        System.out.println("In inserting into Bill Error Code " +
e.getErrorCode());
                }

                // delete all the entries from the Cart table

                try
                {
                        stat = con.prepareStatement("delete * from Cart where cShopperId
= ?");
                        stat.setString(1,tempUserId);
                        stat.executeUpdate();
                }
                catch(Exception e)
                {
                        System.out.println("In deleting from Cart " + e.toString());
                }
                out.println("<table>");
                out.println("<hr width = 90%>");
                out.println("<font size = 2>");
                out.println("<tr>");
                out.println("<center>");
                out.println("<a href =
  file:///c:\\mydocu~1\\java\\servlet\\project\\superhomepagems.htm>
  Home</a>      ");
                out.println("<a href = JavaScript:window.close()>Logout</a><br><br>");
                out.println("<a href = JavaScript:history.back(1)>
  Back</a>    ");
                out.println("<a href =
  http://localhost:8080/servlet/BiddingListing>Bidding</a>    &
  nbsp; ");
                out.println("<a href =
  http://localhost:8080/servlet/SelectForm>Shopping</a>");
                out.println("</center>");
                out.println("</tr>");
                out.println("</font>");
                out.println("</table>");
        }
  }
```

Code for Bidding Info

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class BiddingInfo extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet result;

        // Initialise method to establish database Connectivity

        public void init( ServletConfig config ) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con = DriverManager.getConnection("jdbc:odbc:DataSource");
                }
                catch( Exception e )
                {
                        System.out.println("Connecting to database ..." +e.toString());
                }
        }

        // The method for servicing the http request

        public void doGet( HttpServletRequest req , HttpServletResponse res ) throws
ServletException , IOException
        {
                String productId = req.getParameter("ProductId");
                String productName = new String();
                String description = new String();
                String spesification = new String();
                String userId =  new String();
                String color[] = {"#949494","#cecece"};
                int i;

                // read user id from the cookie
```

```
            Cookie[] cookies = req.getCookies();

            for( i = 0 ; i < cookies.length ; i++ )
            {
                    String name = cookies[i].getName();
                    String value = cookies[i].getValue();
                    if( name.compareTo("UserId") == 0 )
                    {
                            userId = value;
                    }
            }

            // Html output starts here

            res.setContentType("text/html");
            PrintWriter out = res.getWriter();

            out.println("<html>");
            out.println("<head>");
            out.println("<title> Select Category </title>");
            out.println("</head>");
            out.println("<body bgcolor = #eeeeff text = black>");
            out.println("<center><img
src=file:///c:\\myDocu~1\\java\\servlet\\sslogo1.jpg width = 100%></center>");
            out.println("<table align = center width = 100%><tr>");
            out.println("<td align = left bgcolor = #fffff0><b><h2>Bidding for " +
productId + "</h2></b>");
            out.println(" </td>");
            out.println("</tr>");
            out.println("<tr><td align = left  bgcolor = #fafad2><b><h3>Welcome, "
+ userId + "</h3></b></td></tr>");
            out.println("</table><br>");

            // Details about the product goes here

            out.println("<table align = center bgcolor = #86cefa>");
            try
            {
                    stat = con.prepareStatement("select * from BiddingProduct where
cBProductId = ?");
                    stat.setString( 1 , productId );
                    result = stat.executeQuery();
                    result.next();

                    productName = result.getString(2);
                    description = result.getString(3);
```

```
                spesification = result.getString(4);

                out.println("\t<tr>");
                out.println("\t\t<th><b>" + productId + "</b></th>");
                out.println("\t</tr>");

                out.println("\t<tr>");
                out.println("\t\t<th><b>" + productName + "</b></th>");
                out.println("\t</tr>");

                out.println("\t<tr>");
                out.println("\t\t<th><b>" + description + "</b></th>");
                out.println("\t</tr>");

                out.println("\t<tr>");
                out.println("\t\t<th><b>" + spesification + "</b></th>");
                out.println("\t</tr>");
        }
        catch( Exception e )
        {
                System.out.println("Error in reading bidding product");
                System.out.println(e.toString());
        }
        out.println("</table>");

        // The actual bidding info goes here

        out.println("<table align = center bgcolor = #86cefa>");
        out.println("\t<tr>");
        out.println("\t\t<th>User Id</th>");
        out.println("\t\t<th>Amount Bidded</th>");
        out.println("\t</tr>");

        try
        {
                stat = con.prepareStatement("select * from BiddingTransaction
where cBProductId = ?");
                stat.setString( 1 , productId );
                result = stat.executeQuery();

                while( result.next() )
                {
                        i++;
                        String biddingUserId = result.getString(1);
                        String biddingAmount = result.getString(3);
                        out.println("\t<tr bgcolor = " + color[i%2] + ">");
```

```
                        out.println("\t\t<td>" + biddingUserId + "</td>");
                        out.println("\t\t<td>" + biddingAmount + "</td>");
                        out.println("\t</tr>");
                    }
                }
                catch( Exception e )
                {
                        System.out.println("Error in reading BiddingTransaction");
                        System.out.println(e.toString());
                }

                out.println("</table>");

                out.println("<form method = POST action =
\"http://localhost:8080/servlet/QuoteAmount\">");
                out.println("<table align = center>");
                out.println("\t<tr>");
                out.println("\t\t<th>");
                out.println("\t\t\t Enter the Amount you wish to Quote:");
                out.println("\t\t</th>");
                out.println("\t\t<td>");
                out.println("\t\t\t <input type = text name = BiddedAmount width = 10>");
                out.println("<input type = hidden name = ProdId value = " + productId
+">");
                out.println("\t\t</td>");
                out.println("\t</tr>");
                out.println("\t<tr>");
                out.println("\t\t<td colspan =  2 align = center>");
                out.println("\t\t\t<input type = submit value = \"Enter Bidded
 Amount\">");
                out.println("\t\t</td>");
                out.println("\t</tr>");
                out.println("</form>");
                out.println("</table>");

                out.println("<br><br>");
                out.println("<center><a href = \"javascript:history.back(1)\">");
                out.println("View Products under Bidding");
                out.println("</a></center>");
                out.println("<br>");

                out.println("<hr width = 90%>");
                out.println("<font size = 2>");
                out.println("<center>");
                out.println("<a href =
 http://localhost:8080/servlet/SelectForm>Shopping</a>    ");
```

```
                out.println("<a href =
file:///c:\\mydocu~1\\java\\servlet\\project\\superhomepagems.htm>
Home</a>  ");
                out.println("</center>");
                out.println("</font>");
                out.println("</body>");
                out.println("</html>");
        }
}
```

Code for Bidding Info Home

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class BiddingInfoHome extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet result;

        // Initialise method to establish database Connectivity

        public void init( ServletConfig config ) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con = DriverManager.getConnection("jdbc:odbc:DataSource");
                }
                catch( Exception e )
                {
                        System.out.println("Connecting to database ..." +e.toString());
                }
        }

        // The method for servicing the http request

        public void doGet( HttpServletRequest req , HttpServletResponse res ) throws
  ServletException , IOException
```

```
    {
            String productId = req.getParameter("ProductId");
            String productName = new String();
            String description = new String();
            String spesification = new String();
//          String userId =  new String();
            String color[] = {"#949494","#cecece"};
            int i=0;


/*          // read user id from the cookie

            Cookie[] cookies = req.getCookies();

            for( int i = 0 ; i < cookies.length ; i++ )
            {
                    String name = cookies[i].getName();
                    String value = cookies[i].getValue();
                    if( name.compareTo("UserId") == 0 )
                    {
                            userId = value;
                    }
            }       */

            // Html output starts here

            res.setContentType("text/html");
            PrintWriter out = res.getWriter();

            out.println("<html>");
            out.println("<head>");
            out.println("</head>");
            out.println("<body bgcolor = #eeeeff text = black>");
            out.println("<center><h1><u>Super Systems</u></h1></center>");
            out.println("<center><img
src=file:///c:\\myDocu~1\\java\\servlet\\sslogo1.jpg width = 100%></center>");
            out.println("<table align = center width = 100%><tr>");
            out.println("<td align = left bgcolor = #fffff0><b><h2>Bidding " +
productId + "</h2></b>");
            out.println(" </td>");
            out.println("</tr>");
            out.println("<tr><td align = left  bgcolor = #fafad2><b><h3>Welcome,
Guest</h3></b></td></tr>");
            out.println("</table><br>");
```

```
            // Details about the product goes here

            out.println("<table align = center bgcolor = #86cefa>");
            try
            {
                    stat = con.prepareStatement("select * from BiddingProduct where
cBProductId = ?");
                    stat.setString( 1 , productId );
                    result = stat.executeQuery();
                    result.next();

                    productName = result.getString(2);
                    description = result.getString(3);
                    spesification = result.getString(4);

                    out.println("\t<tr>");
                    out.println("\t\t<th><b>" + productId + "</b></th>");
                    out.println("\t</tr>");

                    out.println("\t<tr>");
                    out.println("\t\t<th><b>" + productName + "</b></th>");
                    out.println("\t</tr>");

                    out.println("\t<tr>");
                    out.println("\t\t<th><b>" + description + "</b></th>");
                    out.println("\t</tr>");

                    out.println("\t<tr>");
                    out.println("\t\t<th><b>" + spesification + "</b></th>");
                    out.println("\t</tr>");
            }
            catch( Exception e )
            {
                    System.out.println("Error in reading bidding product");
                    System.out.println(e.toString());
            }
            out.println("</table>");

            // The actual bidding info goes here

            out.println("<table align = center bgcolor = #86cefa>");
            out.println("\t<tr>");
            out.println("\t\t<th>Guest</th>");
            out.println("\t\t<th>Amount Bidded</th>");
            out.println("\t</tr>");
```

```
                try
                {
                        stat = con.prepareStatement("select * from BiddingTransaction
where cBProductId = ?");
                        stat.setString( 1 , productId );
                        result = stat.executeQuery();

                        while( result.next() )
                        {
                                i++;
                                String biddingUserId = result.getString(1);
                                String biddingAmount = result.getString(3);
                                out.println("\t<tr bgcolor = " + color[i%2] + ">");
                                out.println("\t\t<td>" + biddingUserId + "</td>");
                                out.println("\t\t<td>" + biddingAmount + "</td>");
                                out.println("\t</tr>");
                        }
                }
                catch( Exception e )
                {
                        System.out.println("Error in reading BiddingTransaction");
                        System.out.println(e.toString());
                }

                out.println("</table>");

                out.println("<form method = POST action =
\"http://localhost:8080/servlet/QuoteAmountHome\">");
                out.println("<table align = center>");
                out.println("\t<tr>");
                out.println("\t\t<th>");
                out.println("\t\t\t Enter the Amount you wish to Quote:");
                out.println("\t\t</th>");
                out.println("\t\t<td>");
                out.println("\t\t\t <input type = text name = BiddedAmount width = 10>");
                out.println("<input type = hidden name = ProdId value = " + productId
+">");
                out.println("\t\t</td>");
                out.println("\t</tr>");
                out.println("\t<tr>");
                out.println("\t\t<td colspan =  2 align = center>");
                out.println("\t\t\t<input type = submit value = \"Enter Bidded
Amount\">");
                out.println("\t\t</td>");
                out.println("\t</tr>");
```

```
                out.println("</form>");
                out.println("</table>");

                out.println("<br><br>");
                out.println("<center><a href = \"javascript:history.back(1)\">");
                out.println("View Products under Bidding");
                out.println("</a></center>");

                out.println("<hr width = 90%>");
                out.println("<font size = 2>");
                out.println("<center>");
                out.println("<a href =
http://localhost:8080/servlet/Hardware>Shopping</a>    ");
                out.println("<a href =
file:///c:\\mydocu~1\\java\\servlet\\project\\superhomepagems.htm>
Home</a>  ");
                out.println("</center>");
                out.println("</font>");
                out.println("</body>");
                out.println("</html>");
        }
}
```

Code for Bidding Listing Home

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class BiddingListingHome extends HttpServlet
{
        Connection con;
        Statement stat;
        ResultSet result;

        // Initialise method to establish database Connectivity

        public void init( ServletConfig config ) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con = DriverManager.getConnection("jdbc:odbc:DataSource");
```

```
            }
            catch( Exception e )
            {
                    System.out.println("Connecting to database ..." +e.toString());
            }
    }

    // The method for servicing the http request

    public void service( ServletRequest req , ServletResponse res ) throws
ServletException , IOException
    {
            String color[] = {"#949494","#cecece"};
            int i=0;

            res.setContentType("text/html");
            PrintWriter out = res.getWriter();

            out.println("<html>");
            out.println("<head>");
            out.println("<title> Select Category </title>");
            out.println("</head>");
            out.println("<body bgcolor = #eeeeff text = black>");
            out.println("<center><img
src=file:///c:\\myDocu~1\\java\\servlet\\sslogo1.jpg width = 100%></center>");
            out.println("<table align = center width = 100% ><tr>");
            out.println("<td align = left bgcolor =
#fffff0><b><h2>Bidding</h2></b>");
            out.println(" </td>");
            out.println("</tr>");
            out.println("<tr><td align = left  bgcolor = #fafad2><b><h3>Welcome,
Guest</h3></b></td></tr>");
            out.println("</table><br>");
            out.println("<strong><p>Poduct listed below is for bidding,you can select
");
            out.println("any product and quote the amount  that you can affort.
</p></strong>");
            out.println("<p><strong>You will get the product if the amount quoted by
you is the maximum. </p></strong>");
            out.println("<table align = center bgcolor = #86cefa>");
            out.println("\t<tr>");
            out.println("\t\t<th>Product Id</th>");
            out.println("\t\t<th>Product Name</th>");
            out.println("\t\t<th>Description</th>");
            out.println("\t\t<th>Spesification</th>");
            out.println("\t</tr>");
```

```
try
{
        stat = con.createStatement();
        result = stat.executeQuery("select * from BiddingProduct");

        while( result.next() )
        {
                i++;

                //reading data from database  for display

                String productId = result.getString(1);
                String productName = result.getString(2);
                String description = result.getString(3);
                String spesification = result.getString(4);

                out.println("\t<tr bgcolor = " + color[i%2] + ">");
                out.println("\t\t<th>");
                out.println("\t<a href =
\"http://localhost:8080/servlet/BiddingInfoHome?ProductId=" + productId +
"&amp\">");
                out.println("\t\t" + productId + " </th>");
                out.println("</a>");
                out.println("\t\t<th>" + productName + "</th>");
                out.println("\t\t<th>" + description + "</th>");
                out.println("\t\t<th>" + spesification + "</th>");
                out.println("\t</tr>");

        }

        out.println("</table>");
}
catch(Exception e)
{
        System.out.println("Error while reading from bidding Product");
        System.out.println(e.toString());
}

out.println("<hr width = 90%>");
out.println("<center>");
out.println("<font size = 2>");
out.println("<a href=JavaScript:history.back(1)>Back</a>");
out.println("</font>");
out.println("</center>");
out.println("</body>");
```

```
                out.println("</html>");
                out.flush();
        }
}
```

Code for Quote Amount Home

```
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;

public class QuoteAmountHome extends HttpServlet
{
/*      Connection con;
        PreparedStatement stat;
        ResultSet result;

        // Initialise method to establish database Connectivity

        public void init( ServletConfig config ) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con = DriverManager.getConnection("jdbc:odbc:DataSource");
                }
                catch( Exception e )
                {
                        System.out.println("Connecting to database ..." +e.toString());
                }
        }       */

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
  IOException , ServletException
        {

                String productId = req.getParameter("ProdId");
                String amountQuoted = req.getParameter("BiddedAmount");

                // Html output starts here
```

```
                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> SuperSystems - BiddingCompleted </title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff text = black>");
                out.println("<img src = file:///c:\\mydocu~1\\java\\servlet\\sslogo1.jpg
width = 100%>");
                out.println("<br>Dear Guest");
                out.println("<blockquote>");
                out.println("<br><p>This facility is available only for the registered user's
of Super Systems.</p>");
                out.println("<p>If you like to register with us ");
                out.println("<a href=file:///c:\\mydocu~1\\java\\servlet\\shopper.htm>
click here </a> </p>");
                out.println("<p>If you are a Registered user you can login by </p>");
                out.println("<a href=http://localhost:8080/servlet/Signin>");
                out.println("clicking here</a></p>");
                out.println("</blockquote>");
                out.println("<hr width = 90%>");
                out.println("<font size = 2>");
                out.println("<center>");
                out.println("<a href =
 file:///c:\\mydocu~1\\java\\servlet\\project\\superhomepagems.htm>
 Home</a>      ");
                out.println("<a href = JavaScript:history.back(1)>
 Back</a>      ");
                out.println("<a href =
 http://localhost:8080/servlet/Hardware>Shopping</a>  ");
                out.println("</center>");
                out.println("</font>");

                out.println("</body>");
                out.println("</html>");
                out.close();
        }
 }
```

Code for Quote Amount

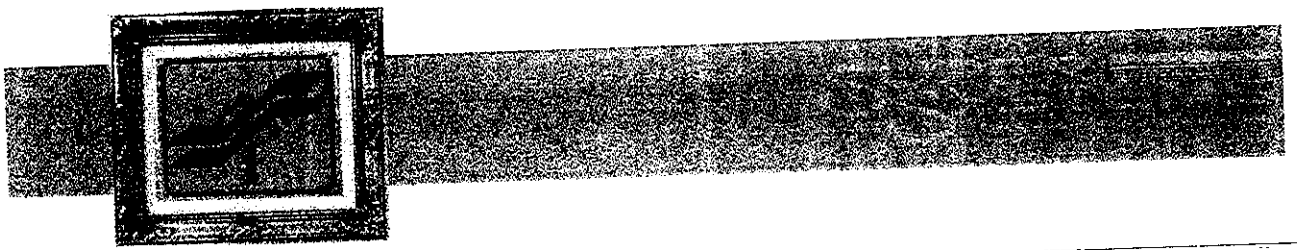
```
import javax.servlet.*;
import javax.servlet.http.*;
```

```
import java.io.*;
import java.sql.*;

public class QuoteAmount extends HttpServlet
{
        Connection con;
        PreparedStatement stat;
        ResultSet result;

        // Initialise method to establish database Connectivity

        public void init( ServletConfig config ) throws ServletException
        {
                try
                {
                        Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
                        con = DriverManager.getConnection("jdbc:odbc:DataSource");
                }
                catch( Exception e )
                {
                        System.out.println("Connecting to database ..." +e.toString());
                }
        }

        public void doPost( HttpServletRequest req , HttpServletResponse res ) throws
IOException , ServletException
        {

                String productId = req.getParameter("ProdId");
                String amountQuoted = req.getParameter("BiddedAmount");
                String userId =  new String();

                // read user id from the cookie

                Cookie[] cookies = req.getCookies();

                for( int i = 0 ; i < cookies.length ; i++ )
                {
                        String name = cookies[i].getName();
                        String value = cookies[i].getValue();
                        if( name.compareTo("UserId") == 0 )
                        {
                                userId = value;
                        }
                }
```

```
                // database operation goes here
                try
                {
                        stat = con.prepareStatement("insert into
BiddingTransaction(cBShopperId,cBProductId,mCostQuoted) values( ? , ? , ?)");
                        stat.setString(1,userId);
                        stat.setString(2,productId);
                        stat.setString(3,amountQuoted);
                        stat.executeUpdate();
                }
                catch( Exception e )
                {
                        System.out.println("Exception in inserting into
BiddingTransaction");
                        System.out.println(e.toString());
                }

                // Html output starts here

                res.setContentType("text/html");
                PrintWriter out = res.getWriter();

                out.println("<html>");
                out.println("<head>");
                out.println("<title> SuperSystems - BiddingCompleted </title>");
                out.println("</head>");
                out.println("<body bgcolor = #eeeeff text = black>");
                out.println("<img src = file:///c:\\mydocu~1\\java\\servlet\\sslogo1.jpg
 width = 100%>");
                out.println("<table align = center width = 100%><tr>");
                out.println("<td align = left bgcolor = #fffff0><b><h2>
 Bidding</h2></b>");
                out.println(" </td>");
                out.println("</tr>");
                out.println("<tr><td align = left  bgcolor = #fafad2><b><h3>Thank you, "
 + userId + "</h3></b></td></tr>");
                out.println("</table><br>");
                out.println("<blockquote><b>");
                out.println("<br><p>You have quoted " + amountQuoted + " for the
 product with Id " + productId + "</p>");
                out.println("</p>It has been added to the auction you will be intimated
 through mail ");
                out.println(" if the amount quoted by you is the highest among the quoted
 amounts.</p>");
                out.println("</b></blockquote>");
                out.println("<hr width = 90%>");
```

```
                out.println("<font size = 2>");
                out.println("<center>");
                out.println("<a href =
file:///c:\\mydocu~1\\java\\servlet\\project\\superhomepagems.htm>
Home</a>      ");
                out.println("<a href = JavaScript:history.back(1)>
Back</a>      <br><br>");
                out.println("<a href =
http://localhost:8080/servlet/SelectForm>Shopping</a>    &nb
sp; ");
                out.println("<a href =
http://localhost:8080/servlet/BiddingListing>Bidding</a>    &
nbsp; ");
                out.println("</center>");
                out.println("</font>");
                out.println("</body>");
                out.println("</html>");
                out.close();
        }
}
```

SAMPLE FORMS



Please fill in the form below to register youself with Super Systems.
All fields are mandatory to register yourself.

◉ Mr. ○ Ms. ○ Mrs.

First name :	Sylvester
Last name :	Stallone
Phone (ISD) :	007024534256
E-Mail :	rambo@hotmail.com
Address :	b6,Parkavenue
City :	NewYark
State :	Washingtone
Country :	U.S.A
Zip code :	6437822
Credit Card Number :	231 456 3456
Credit Type :	Master Card
Bank :	CitiBank
Date of Issue :	24/04/1998
Card Expiry Date :	23/04/2002

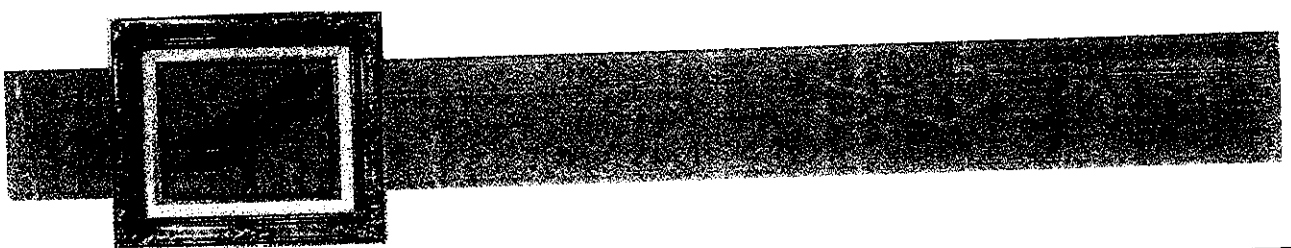
This will be used as your default shipping address.
You can provide a different address during the ordering process.

User ID :	sylvester
Password :	*****
Retype Password :	*****

Submit Clear Back

Sing in - Super Systems

http://localhost:8080/servlet/Signin

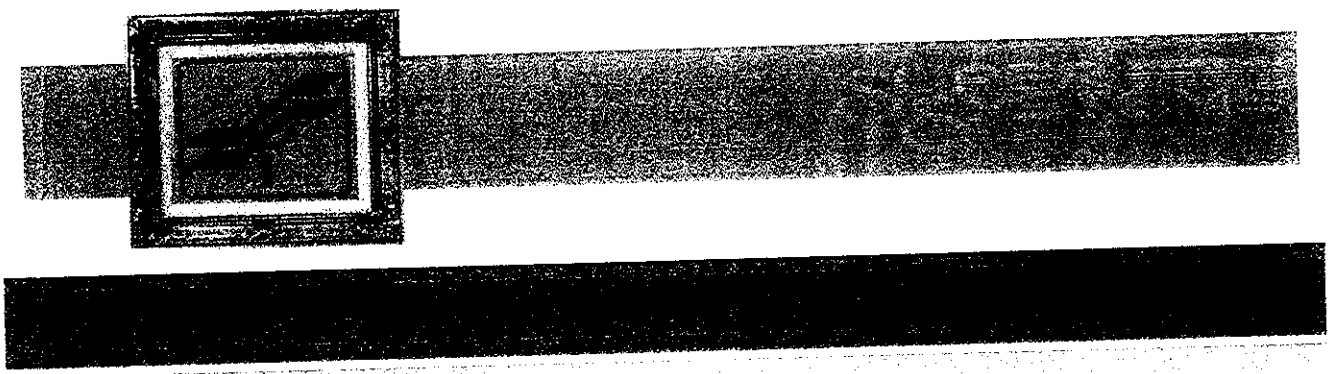


Please enter your user id and password to sign in to the store.

User ID : sylvester

Password : *****

Log-in Clear Back

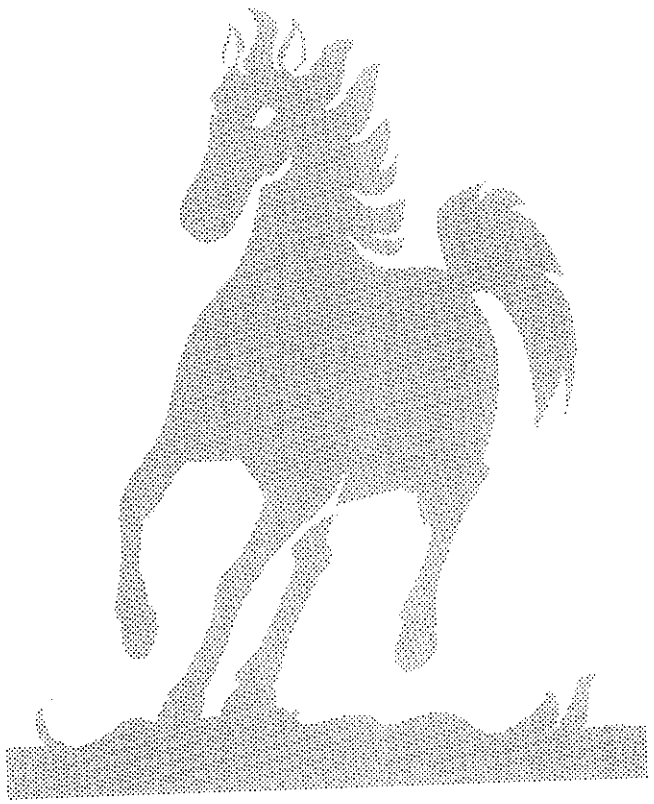


Welcome, Guest

There are certain conditions that you have to satisfy in order to be the customer of Super Systems.

- To have transactions with us you will have to Register with us.
- Every time to have transactions with us you have to enter the UserId and password to Login.
- You should provide your phone number.
- Every time you place order, only after conforming your orders through phone the goods will be send to you.
- Credit facility is provided only for the regular customers.
- Reasonable discounts will be given on placement of **Bulk** orders.

Shopping Home
Bidding About us



SAMPLE OUTPUT

about us

Hardware

Booking

Terms & conditions

Cyber Space

Super Systems

Welcome to Super Systems® Home page.

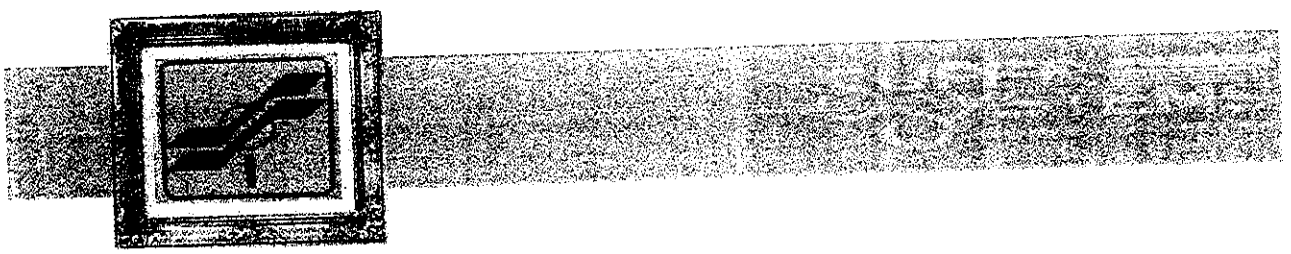
This home page is hosted on Local Host with port number 8080. The servlet runner running Windows® 95 or Windows 98 dos platform acts like a Web server and enables instant access to the browsers. In this web site we have tried to simplify sharing of information on corporate intranets or the Internet for all users.

You can visit any of the of the Super Systems web pages from here. If you like to be the customer of Super Systems the click on the ***Register*** or if you are already the customer click on the ***Login*** option.

You can purchase any thing regarding computers Hardware from us through NET. The payment is also made onLine using Credit Cards.

If You like to register with us click

To Login click

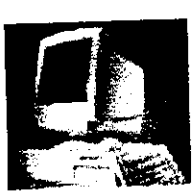


Dear Sylvester Stallone!

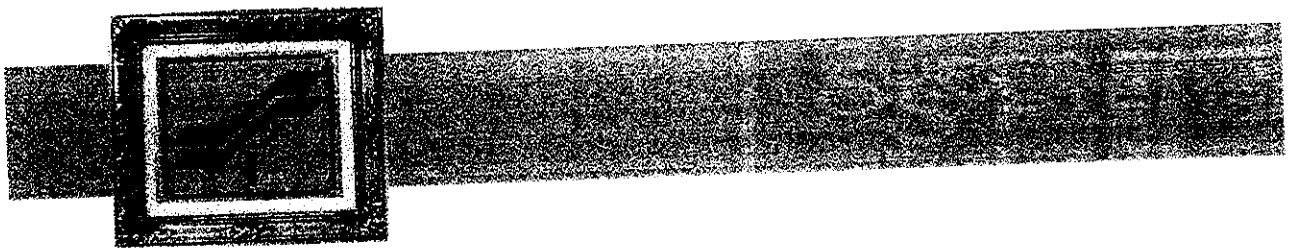
Welcome to Super systems and a big thanks for registering with us. We are sure you have gone through the benefits of being a registered member of Super systems. We are committed to making your visit here at Super systems a memorable experience that'll make you want to come back for more.

Just to reassure you, whatever information you give us will never be clandestine, we assure that it will not berented or in any way divulged to anybody.

Shopping You can buy the products that are listed in the following forms.



Bidding This is the place where you can get some rare products, you can quote your own price for any of the products displayed, the person Quoted the maximum price will be given the product, try to get one if required.



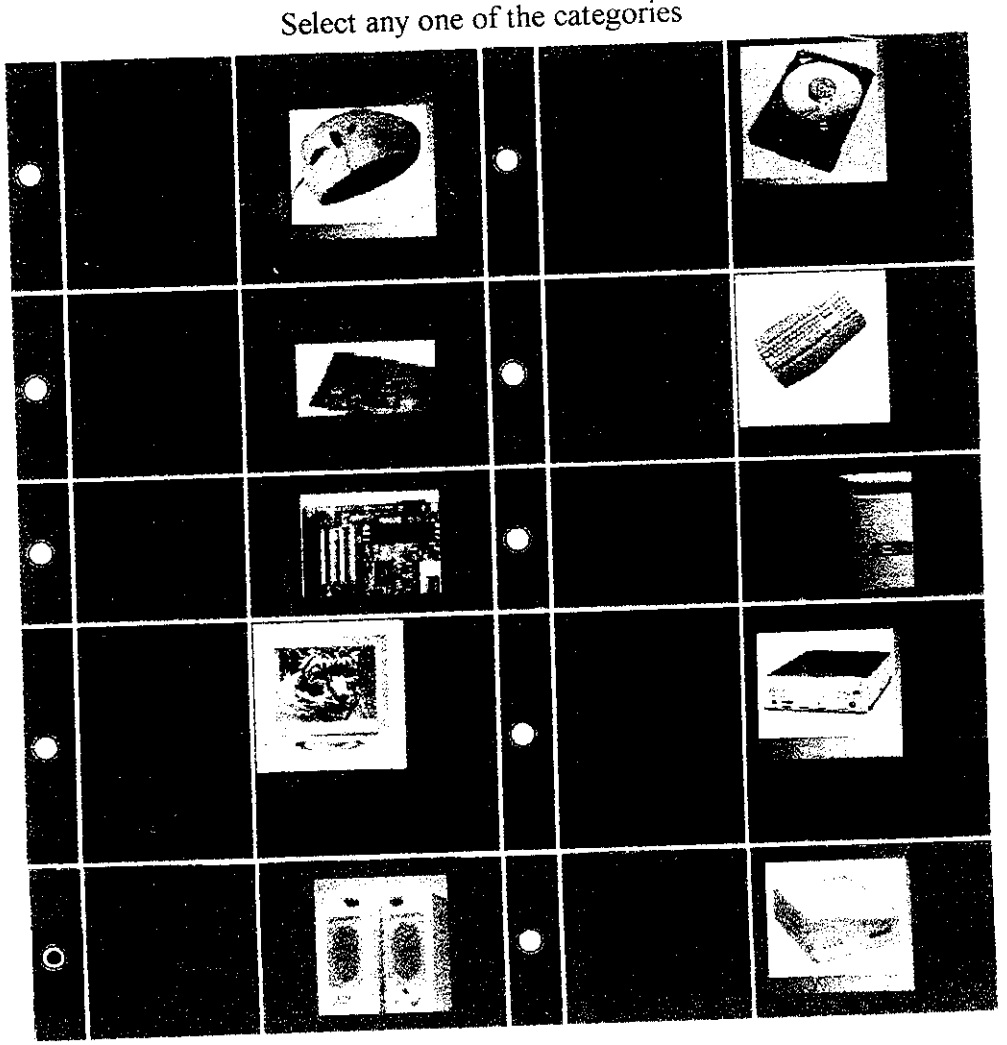
Product List by catogery

Welcome, sylvester

Select the category of product

View Cart

Select any one of the categories



Show

View Cart

Keyboard

Welcome, sylvester

View Cart

Please select the Keyboard that you require and enter the quantity in the space provided.

Select	Product Id	Details	Quantity
☑	KB1501	Logitech Multispeed turbo f1 - f7 104Kbd 600.0000 Industrial	3
☑	KB1502	Multimedia keyboard 110Kbd 1200.0000 Acer	2
☐	KB1503	Internet Keyboard 124Kbd 350.0000	

Add to Cart

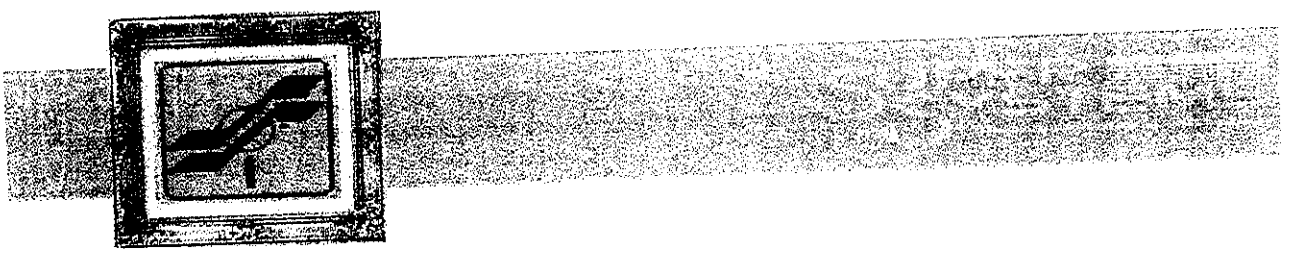
View Cart

You have selected the following products.

Product Id	Product Name	Category	Quantity	Unit Price	Cost
KB1501	Logitech	Keyboard	3	600.0	1800.0
KB1502	Industrial	Keyboard	2	1200.0	2400.0
MO1601	Microsoft	Mouse	4	850.0	3400.0
SP1401	Creative	Speaker	2	600.0	1200.0
HD1301	Seagate	Hard Disk	3	4800.0	14400.0

Grand Total : 23200.0

select again finish shopping



Confirmation of purchase

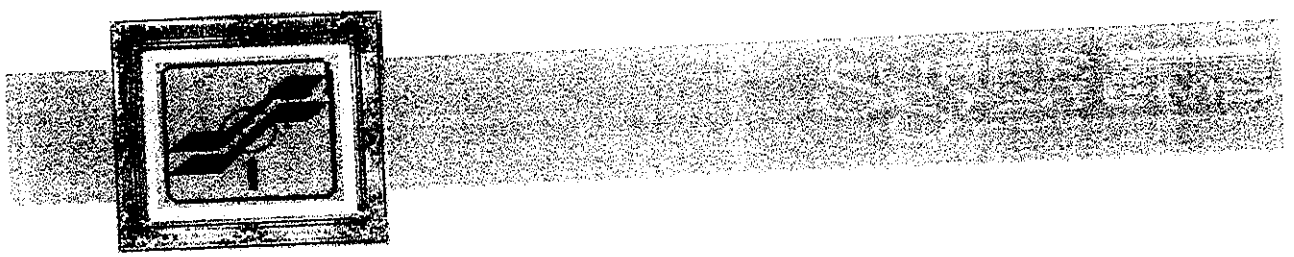
Welcome, sylvester

Confirm your order, you can uncheck the unwanted items listed here

Select	Product Id	Product Name	Category	Quantity	Unit Price	Cost
☐	KB1501	Logitech	Keyboard	3	600.0	1800.0
☑	KB1502	Industrial	Keyboard	2	1200.0	2400.0
☑	MO1601	Microsoft	Mouse	4	850.0	3400.0
☑	SP1401	Creative	Speaker	2	600.0	1200.0
☑	HD1301	Seagate	Hard Disk	3	4800.0	14400.0

Grand Total : 23200.0

Place Order



Place Order

Thank You, sylvester

Thanks for Placing order with us.

We have presented the bill here and the products will be delivered to you after conformation through Phone on the day you specify.

Product Id	Product Name	Category	Quantity	Unit Price	Cost
KB1502	Industrial	Keyboard	2	1200.0	2400.0
MO1601	Microsoft	Mouse	4	850.0	3400.0
SP1401	Creative	Speaker	2	600.0	1200.0
HD1301	Seagate	Hard Disk	3	4800.0	14400.0

Grand Total : 21400.0

Select Category

Bidding

Welcome, sylvester

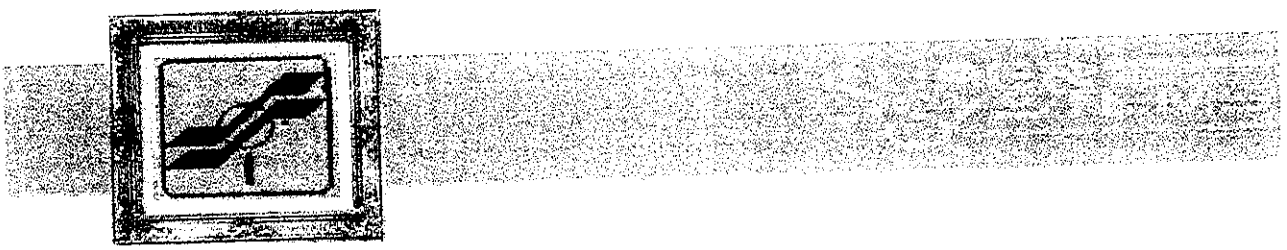
Product listed below is for bidding, you can select any product (by clicking on the Product Id field) and quote the amount that you can affort.

You will get the product if the amount quoted by you is the maximum.

Product Id	Product Name	Description	Spesification
BME1000	EDO - Ram	It is the only ram supported by the older 386 486	4 MB
BHD1001	Hard disk	It is the 1.2 GB hard disk any 486 system will req	Cegate
BMB1002	Mother Board	It is the 386 mother board with 100 MHZ speed	256KB internal Catch
BVA1003	Video Adapter	It is an Video adapter for 386 system	Highresolution color

Select Category

http://localhost:8080/servlet/BiddingInfo?ProductId=BMB1002&



Bidding for BMB1002

Welcome, sylvester

BMB1002

Mother Board

It is the 386 mother board with 100 MHZ speed

256KB internal Catch

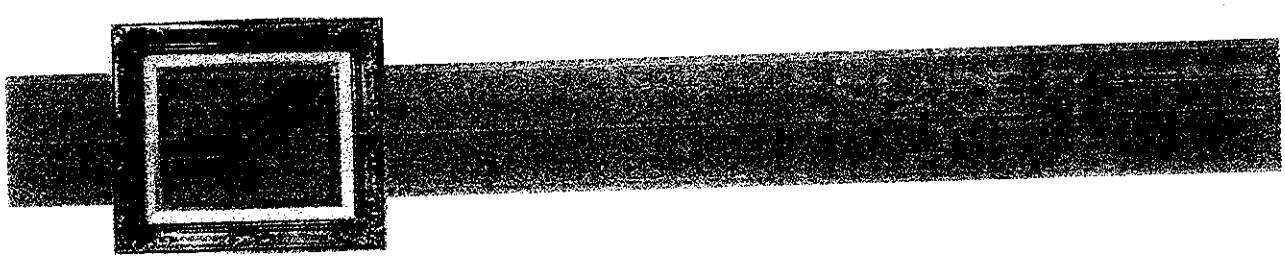
User Id	Amount Bidded
Arnold	500.0000
Cindy	501.0000

Enter the Amount you wish to Quote: 550

Enter Bidded Amount

View Products for Bidding

Shopping Cart



Bidding

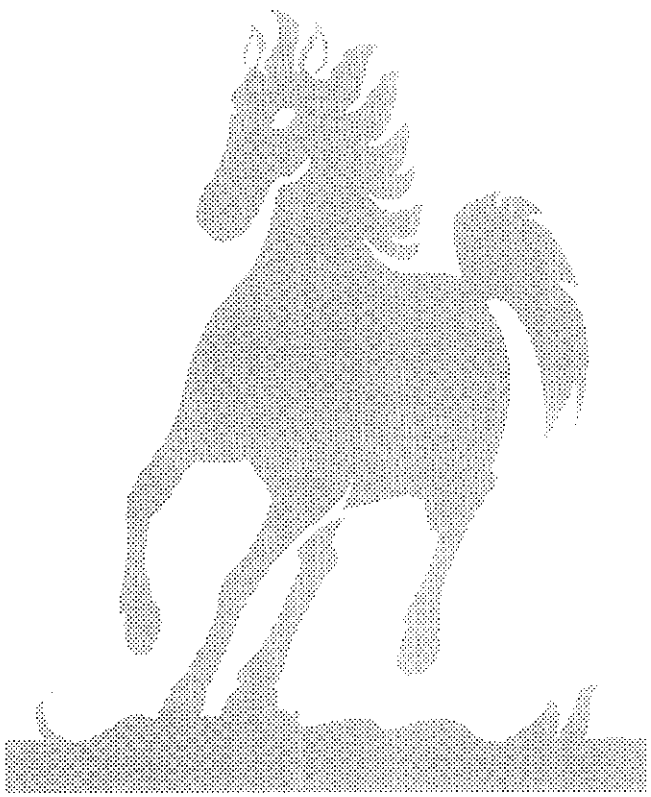
Thank you, sylvester

You have quoted Rs.550/- for the product with Id BMB1002

It has been added to the auction you will be intimated through mail if the amount quoted by you is the highest among the quoted amounts.

Home Back

Shopping Bidding



CONCLUSION

FURTHER

FUTURE ENHANCEMENTS

The project has been completed successfully and all the requirements have been met. However the possibilities for renovation are infinite and the scope for development innumerable.

A feature that can be included is the implementation of concessions. A separate section can be included to evaluate, maintain and process individual customer details so that appropriate concessions can be provided.

Security can be provided for authentication of credit card by creating a firewall or by implementing Secure Socket Layer.

System administration can also be done to maintain the shopping databases and for the various credit card databases.

BIBLIOGRAPHY