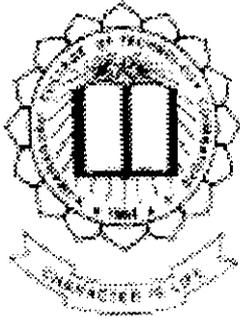


# E-COMMERCE SALES & ORDER PROCESSING

## PROJECT REPORT

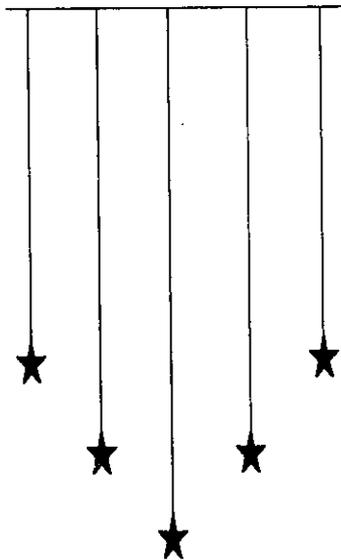
Submitted in partial fulfillment of the requirements for  
award of degree

M.Sc.,[Applied Science] Software Engineering



P. 939

Submitted By  
**G. Dhinakaran**  
9837S0043



UNDER THE GUIDANCE OF,

External Guide

Internal Guide

Mr. Ramprabhu

Mr.P.Gopalakrishnan

Project Leader,

Lecturer,

ProSys

CSE Department

**Department Of Computer Science and Engineering**

**Kumaraguru College of Technology**

(Affiliated to Bharathiar University)

Coimbatore-641006.

***E - COMMERCE SALES  
AND ORDER PROCESSING***

Department of Computer Science and Engineering  
**Kumaraguru College of Technology**  
Coimbatore-641006.

**CERTIFICATE**

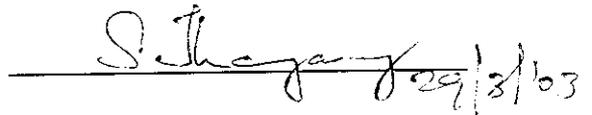
This is to certify that the project work entitled  
**“E-Commerce Sales and order processing”**  
Has been submitted by

**Mr. G.Dhinakaran**

In partial fulfillment of the award of the degree of  
Master of Science in Applied Science- Software Engineering of  
Bharathiar University, Coimbatore  
during the academic year 2002-2003.

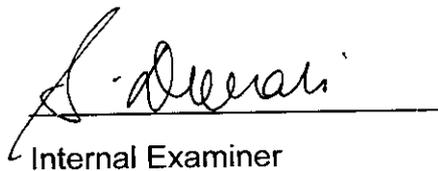


Guide

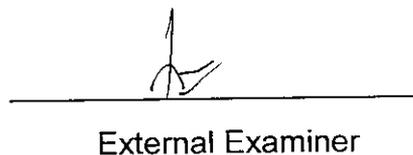


Head of the Department

Certified that the candidate was examined by us in the Project Work Viva Voce  
Examination held on 5-4-2003 and the University Register Number  
was **9837S0043**



Internal Examiner



External Examiner



**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that **Mr.G.Dhinakaran**, doing M.Sc., Software Engineering in Kumaraguru College of Technology, Coimbatore, has successfully completed his project work entitled “ e – Commerce Sales And Order Processing” at our organization during the period December 2002 – March 2003 .

His work has been found to be excellent.

Yours faithfully,

For Prosystech

**Ramprabhu**

Project Leader



***Dedicated***

***To my***

***Beloved Parents***

***And***

***Friends***

---

## ***Acknowledgement***

I thank the almighty; he has been very generous and kind to me. My parents have been my source of inspiration. They have sacrificed almost every thing to provide me with an excellent foundation. I will never be able to translate my gratitude in the form of words.

I am sincerely thankful to Mr. Ramprabhu, Project Leader, ProSys for allowing me to undertake the project in the organization. And my special thanks goes to Mr.P. Gopalakrishnan, MCA for his constant support.

Special thanks to Mr.Venkatesh, Managing Director, ProSys, for his constant encouragement, technical inputs, and valuable suggestions and support despite of his busy schedule.

Kumaraguru College of Technology was the best thing that could have happened to me. My sincere gratitude to its principal Dr.K.K.Padmanaban B.Sc, M.Tech, Ph.D.

I extend my gratitude to Dr. S.Thangasawmy, our beloved HOD of CSE, & our class coordinator Asst.Prof.Mrs. S. Devaki, B.E., M.S., for their constant support, encouragement and valuable internal guidance.

Last but not the least, thank all my lecturers, friends and colleagues they made life much easier for me.

**G.Dhinakaran**

---

## ***Synopsis***

# SYNOPSIS

---

The project entitled "E-Commerce Sales and Order Processing" was developed in the premises of Prosys Solutions. The project was brewed by using HTML and ASP (Active Server Pages). Using Internet Platform previously the company had developed a static website using HTML and offering no web services.

The major idea of the project is to incorporate online order placing such as online enquiry of the products, online registration and order, online purchasing of the required products, service for the computer, Networking the computers and advertising new products. These modules aim at facilitating quick and easy services and equip them with the latest trends in the IT Industry.

These objects are achieved through the following sub-systems:

- **REGISTRATIOIN** - Registering customer with database
- **BUILD YOUR PC** - Selecting the configuration for customized personal computer.
- **Standard Configuration** - Standard Configuration provided by organization
- **Service Page** - Troubleshooting and customer servicing
- **Product Page** - Display of products, advertisement purpose
- **Password Retrieval** - In case the user forgets his password.
- **Customer Login/Logout** - The termination point of customer interactivity.

# Contents

<b>1.</b>	<b><u>INTRODUCTION</u></b> .....	2
1.1	<b><u>COMPANY PROFILE</u></b> .....	2
1.2	<b><u>ORGANIZATION STRUCTURE</u></b> .....	3
1.3	<b><u>ABOUT SALES AND ORDER PROCESSING</u></b> .....	3
1.4	<b><u>NEW TECHNOLOGIES</u></b> .....	6
1.5	<b><u>NEED FOR THE NEW SYSTEM</u></b> .....	8
<b>2.</b>	<b><u>SOFTWARE REQUIREMENT SPECIFICATION</u></b> .....	9
2.1	<b><u>EXISTING SYSTEM</u></b> .....	9
2.2	<b><u>DRAWBACKS IN THE EXISTING SYSTEM</u></b> .....	10
2.3	<b><u>PROBLEM DEFINITION</u></b> .....	10
2.4	<b><u>PROPOSED SYSTEM</u></b> .....	12
2.4.1	<b><u>OUTLINE AND OBJECTIVES</u></b> .....	13
2.4.2	<b><u>ADVANTAGES OF THE PROPOSED SYSTEM</u></b> .....	13
2.5	<b><u>PERFORMANCE REQUIREMENTS</u></b> .....	14
2.6	<b><u>OTHER NON-FUNCTIONAL ATTRIBUTES</u></b> .....	14
2.6.1	<b><u>TESTABILITY</u></b> .....	14
2.6.2	<b><u>MAINTAINABILITY</u></b> .....	14
2.6.3	<b><u>REUSABILITY</u></b> .....	15
2.6.4	<b><u>SECURITY</u></b> .....	15
2.7	<b><u>HARDWARE REQUIREMENTS</u></b> .....	16
2.8	<b><u>SOFTWARE REQUIREMENT</u></b> .....	16
<b>3.</b>	<b><u>SYSTEM DESIGN AND DEVELOPMENT</u></b> .....	17
3.1	<b><u>LOGICAL SYSTEM DESIGN</u></b> .....	17
3.1.1	<b><u>DATA FLOW DIAGRAM</u></b> .....	17
3.1.2	<b><u>SYSTEM FLOW DIAGRAM</u></b> .....	19
3.1.3	<b><u>STRUCTURED CHART</u></b> .....	20
3.1.4	<b><u>DATA DICTIONARY</u></b> .....	21
3.2	<b><u>INPUT DESIGN</u></b> .....	26
3.3	<b><u>OUTPUT DESIGN</u></b> .....	27
3.4	<b><u>DEVELOPMENT SCHEDULE</u></b> .....	28
3.4.1	<b><u>MILESTONES</u></b> .....	28
3.4.2	<b><u>REVIEWS</u></b> .....	28
3.5	<b><u>PHYSICAL SYSTEM DESIGN</u></b> .....	29
3.6	<b><u>CODE DESIGN</u></b> .....	30
3.7	<b><u>MODULE WISE DESCRIPTION</u></b> .....	35
<b>4.</b>	<b><u>SYSTEM TESTING AND IMPLEMENTATION</u></b> .....	37
4.1	<b><u>TESTING</u></b> .....	37
<b>5.</b>	<b><u>CONCLUSION</u></b> .....	43
<b>6.</b>	<b><u>FUTURE ENHANCEMENT</u></b> .....	44
<b>7.</b>	<b><u>GLOSSARY</u></b> .....	45
<b>8.</b>	<b><u>REFERENCE</u></b> .....	46
<b>9.</b>	<b><u>APPENDIX</u></b> .....	47
9.1	<b><u>RELATIONSHIP BETWEEN TABLES</u></b> .....	47
9.2	<b><u>SCREEN LAYOUTS</u></b> .....	48

# 1. INTRODUCTION

---

## 1.1 COMPANY PROFILE

Prosys is a sole promoter and pioneer in system assembling and also in software development. Together with the expertise and experience of the staff's.

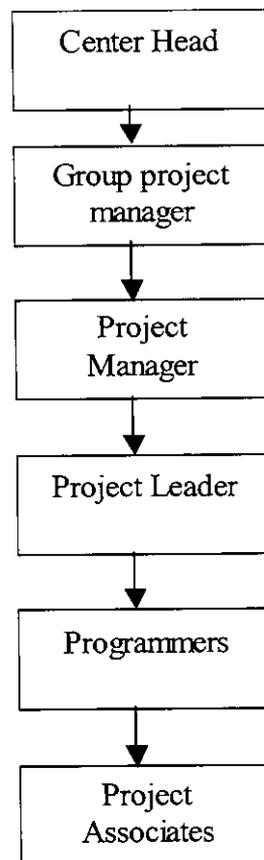
Within a short span of year, prosys has earned itself a distinguished and credible name in imparting quality and qualitative amount of hardware and software.

Prosys is also accredited with having been the first to install new and latest upgraded computer peripherals for others to follow. It has well established proven a track of records of the client.

Prosys can improve the competitiveness of clients through a set of consulting practices that results in knowledge-intensive business solution with appropriate hardware components.

We fully understand that knowledge is a key enabler for global success.

## 1.2 ORGANIZATION STRUCTURE



## 1.3 ABOUT SALES AND ORDER PROCESSING

When big business started to think about making money on the web, the first thing they thought of was selling things. These days, companies are beginning to realize that selling products in only one way to make money on the Internet, but it is still a very important way.

There are two ways to make money by selling products. The first, and obvious, is to sell many products and make a profit on them. The second, and less obvious, is to use the products as a draw-even, in some cases, pricing items below cost - to get customers to your site to make money via advertising and other avenues.

In either case, goals are the same, the customer should be able to find what they need quickly and easily and should be able to part with their money as painlessly as possible.

The parameters for an online shop should be defined keeping in mind, that unlike in a traditional shop, there is no face-to-face interaction between the customer and the company. All that is available is a few moments of a prospective customers time. During those moments, the site should be able to attract the customer's attention and make to buy the product.

The project aims at accepting orders as well as it gives online description of certain items on net. Moreover, it facilitates the customer to place an order. Presenting products is straightforward. The tricky part is keeping track of the items customer want.

The customer can purchase the assembled computer through two ways. One is that the configuration produced by the company and other is the customer can built their assembled computer by selecting the necessary computer peripherals to their wish.

The service for the products is very important. The customer needs service for their computer peripherals can post their problems in the service and complaints registration. Apart from these Annual Maintenance Contract for the computers peripherals can also include in this project.

Quality of service is very important in the online world. As on person is available to handle the customer, one has to ensure a pleasant online shopping experience for the customer.

## 1.4 NEW TECHNOLOGIES

The sales and order processing is entirely different approach from the existing technologies. The sales and order processing has done by manually. This manual work has been computerized to online shopping.

Static content does not change. Most HTML pages are static. Every time we open one with our browser, they say exactly the same thing.

Dynamic content changes and adapts to the situation at hand. When we change anything the database, which is reflected in the front end, that is dynamic content. This ability to provide up-to-the-minute information gives admin a tremendously powerful tool. Instead of just blindly providing information to the mass of users, they could not accept information from individual people. Searches had been a part of the web since its inception, but now admin could collect information from their users and provide customized content generated on the fly.

Scalability is the ability to handle large amount of activity. Some system work fine whether there is a small number of users, as long as they have enough hardware to back them up. Some, however, consume so many resources that beyond a certain usage level, supporting them becomes extremely difficult, or even impossible.

Active server pages or ASP, changes all that, instead of running a program that happens to split out an HTML page, an Active Server Page is an HTML page that happens to have programming commands in it. The reduction in complexity is enormous.

## **1.5 NEED FOR THE NEW SYSTEM**

The project mainly aims at providing Online purchasing of computer peripherals and facilities accepting order on NET. It also includes various modules such as Annual Maintenance Contract for the computer and it provides an important option that the customer can purchase the standard configuration computer, which the company states. The customer can also build their assembled computer by selecting the necessary computer peripherals to there needs.

The system facilitates dynamic interactivity thereby automating activities such as registration, purchase, servicing, vouchers, billing and advertisements. Online queering and excellent help increases the usability of the system.

## **2. SOFTWARE REQUIREMENT SPECIFICATION**

---

### **2.1 EXISTING SYSTEM**

The existing system Prosys Solutions Software consists of a static web site only, most of the data processing is done manually. User friendliness is minimum because the site does not furnish up to date details of the concern and it is non-interactive site excluding server side scripting. The existing system does not offer any web business. The site has developed using HTML only.

In the existing system for the making a purchase of an item, a quotation is called for, including the specification of the product, delivery period, mode of transport etc. Once the customer is satisfied with the details contained in the quotation, a supply order is placed with the manufacturer / agent who in turn dispatches the product along with the bill of cost. In some cases the products is dispatched only after the bill of cost paid partly or fully. The bill is generated and displaced manually.

This involves lot of investment by employing marketing executives and administrative staff besides spending a lot of money on advertisement. The whole process is highly time consuming too, which will even sometimes results in escalation of prices etc.

## **2.2 DRAWBACKS IN THE EXISTING SYSTEM**

- Verification of data is tedious.
- Storing and retrieval of information is time consuming
- The Man-Power is wasted.
- Lose of data becomes unavoidable.
- Storage of data is difficult.

## **2.3 PROBLEM DEFINITION**

Sales and Order processing is done manually in the existing system. The existing system has many drawbacks. There can be a considerable time delay in making an order in the existing system and lose of data are occurred.

Customer has no chance of selecting the computer peripherals to their wish. Therefore, the system must be able to accommodate these facilities. The system is to develop considering the aspect that the customer has no knowledge about the computer peripherals.

The service to the computer peripherals is important aspect. The customer may or may not know whether the problem occurred.

The various latest computer peripherals, their advantages and relevant information about the product have incorporated in this system.

The reports has classified according to the data. The reports for the various modules like built your PC, readymade PC, Service order etc., have incorporated in this system. The users can interact freely in this site.

## **2.4 PROPOSED SYSTEM**

Here the products have queried on net and orders are to place online without human intervention. This will enable saving in time and cost for the procurement of the desired products, since the conventional infrastructure facilities required for marketing the product is almost eliminated.

The existing system has many drawbacks and does not cater to the modern needs of the management. The proposed system will be an interactive and dynamic web site. The system is to be very user friendly and the end user will find it easy to operate.

The proposed system is marketing of certain items. It has given the relevant information about the product available. The customer can query the products and marks the quantity required.

The system will automatically handle all the registrations and tracking of their online activities. Besides that it will serve as a platform for their close interaction, with proper monitoring.

#### **2.4.1 OUTLINE AND OBJECTIVES**

- Provision for online registration for the prospective customers.
- Create facilities to place the order online.
- Facilities for advertise new products mainly to enlarge online business.
- To incorporate various reports like product report, purchase report, sales report etc.
- The site has to be interactive and user friendly.
- Provide up-to-date information about the new products.

#### **2.4.2 ADVANTAGES OF THE PROPOSED SYSTEM**

- The customer can purchase the computer peripherals from any part of the world, where there is Internet connectivity.
- Each customer can have a unique user name of his/her own choice.
- The customer time in procurement of the product is minimum
- The customer need not come to the purchase place.
- Order id is created automatically.
- Delivery date is also furnished.
- The infrastructure facilities by way of office, staff etc. are minimized.
- Man-power is not wasted.

## **2.5 PERFORMANCE REQUIREMENTS**

The system would maintain a consistent output frequency. The system response time would be as per normal standards taking into consideration the Network speed. To increase the processing time, review of code is done to reduce the number of loops in the application and to maintain asp-coding standards. The product needs some fine tune works to be carried out before it is being delivered.

## **2.6 OTHER NON-FUNCTIONAL ATTRIBUTES**

### **2.6.1 TESTABILITY**

The application is developed in a modular way, so the testability is high. Internal code reviews and functional test will be conducted on each module. The functional points and test cases for each module is prepared and documented. Unit testing is done for each module and an integration testing is done for the entire system. After integration testing the functionality test is carried out for the entire system. The validation test is done on each field based on the requirements.

### **2.6.2 MAINTAINABILITY**

Since each phase of development is properly documented the maintainability of the system is high.

### **2.6.3 REUSABILITY**

All the programs can be re used in similar applications without changing the code. Internally all the operations are put in a function to avoid rework.

### **2.6.4 SECURITY**

The product would be accessible only to authorized users who are employees of Prosys.

## 2.7 HARDWARE REQUIREMENTS

### Client :

OS : Windows NT Server  
Browser : Internet Explorer5.0 or Compatible  
Processor : Pentium III  
RAM : >64 MB  
HDD : 40 GB

### Server :

OS : Windows 9X or WindowsNT  
Browser : Internet Explorer5.0 or Compatible  
Processor : Pentium III  
RAM : >64 MB  
HDD : 40 GB

## 2.8 SOFTWARE REQUIREMENT

- |               |                            |
|---------------|----------------------------|
| 1. Browser    | MS Internet Explorer       |
| 2. Platform   | MS Windows 98 & above      |
| 3. Web server | Personal Web Server or IIS |
| 4. RDBMS      | MS Access                  |

### 3. SYSTEM DESIGN AND DEVELOPMENT

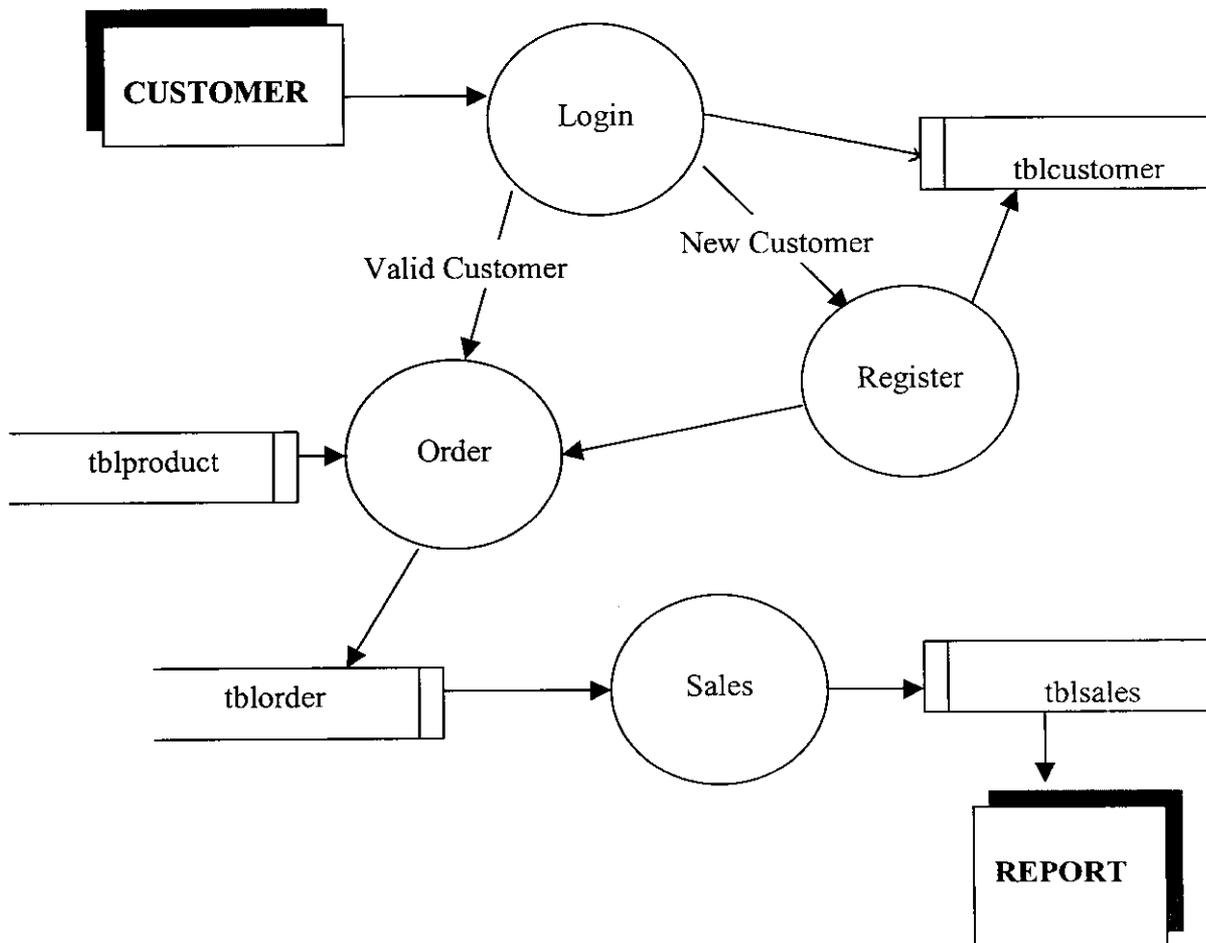
---

#### 3.1 LOGICAL SYSTEM DESIGN

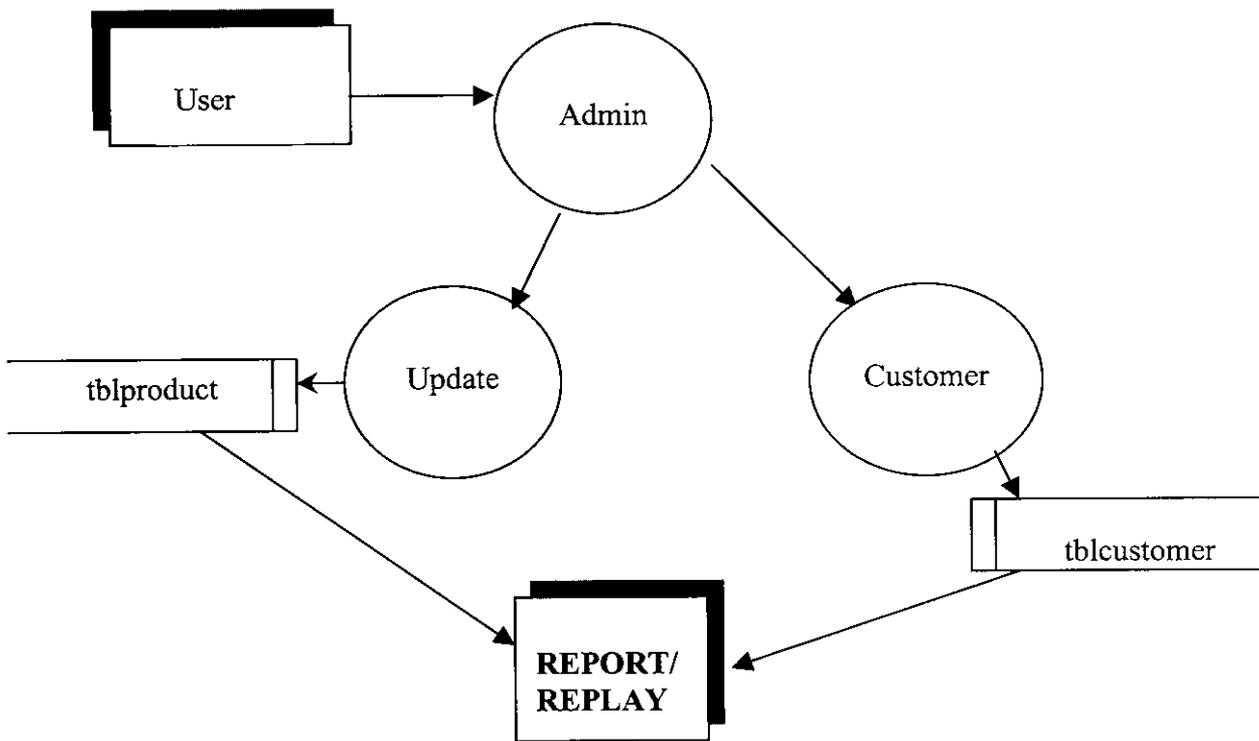
##### 3.1.1 DATA FLOW DIAGRAM

A Data flow diagram is a graphical technique that depicts information flow and transforms that applied as data move from input to output. The data flow diagram may be used to represent a system or software at any level of abstraction. In fact, DFDs may be partitioned into many levels.

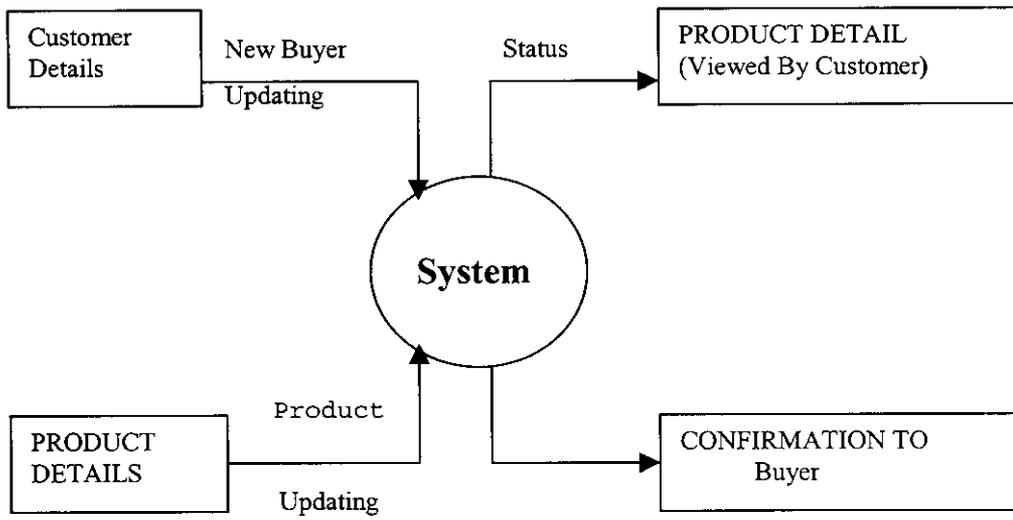
##### DATA FLOW DIAGRAM - CUSTOMER



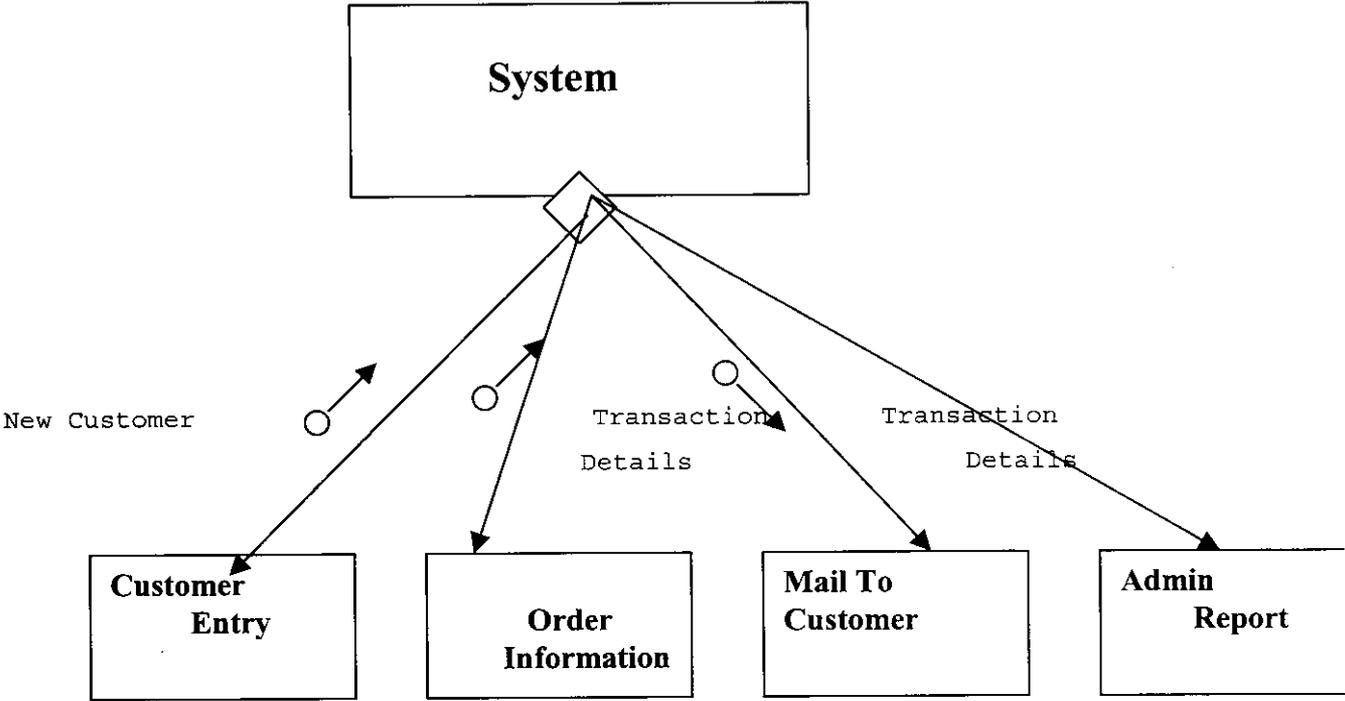
# DATA FLOW DIAGRAM - ADMIN



### 3.1.2 SYSTEM FLOW DIAGRAM



3.1.3 STUCTURED CHART



### 3.1.4 DATA DICTIONARY

The entire database is in normalized form. The MS-Access database has made in a manner convenient for inserting, updating, and deleting the records.

Table: tblAmc

Columns

Name	Null	Type	Size
Amcid	Not Null	Long Integer	4
Loginid	Not Null	Long Integer	4
Cdate	Not Null	Text	1

Table: tblCategory

Columns

Name	Null	Type	Size
catid	Not Null	Long Integer	4
catname	Not Null	Text	50
Catdesc		Text	50

Table: tblLan

Columns

Name	Null	Type	Size
lanid	Not Null	Long Integer	4
Loginid	Not Null	Long Integer	4
Cdate	Not Null	Text	15
Systems		Text	3

Table: tblLogin

Columns

Name	Null	Type	Size
loginid	Not Null	Long Integer	4
Loginname	Not Null	Long Integer	15
Password	Not Null	Text	15

Table: tblOrder\_Asspc

Columns

Name	Null	Type	Size
transid	Not Null	Long Integer	4
orderid	Not Null	Long Integer	4
Catid	Not Null	Long Integer	4
Prodid	Not Null	Long Integer	4

Table: tblOrder\_Incomp

Columns

Name	Null	Type	Size
transid	Not Null	Long Integer	4
orderid	Not Null	Long Integer	4
Catid	Not Null	Long Integer	4
Prodid	Not Null	Long Integer	4
Qty	Not Null	Long Integer	4

Table: tblOrder\_mas

Columns:

Name	Null	Type	Size
orderid	Not Null	Long Integer	4
loginid	Not Null	Long Integer	4
Cdate	Not Null	Text	15
pctype		Long Integer	4

Table: tblPersonal

Columns

Name	Null	Type	Size
Personalid	Not Null	Long Integer	4
Loginid	Not Null	Long Integer	4
Cname	Not Null	Text	50
Contperson		Text	30
Phone		Text	20
Fax		Text	20
Email	Not Null	Text	50
Add1	Not Null	Text	50
Add2		Text	50
City	Not Null	Text	25
State	Not Null	Text	50
Qno	Not Null	Text	50
Hintans	Not Null	Text	25
Cdate	Not Null	Text	15

Table: tblProduct

Columns

Name	Null	Type	Size
Prodid	Not Null	Long Integer	4
catid	Not Null	Long Integer	4
prodname	Not Null	Text	50
proddesc		Text	50

Table: tblService

Columns

Name	Null	Type	Size
Serviceid	Not Null	Long Integer	4
Loginid	Not Null	Long Integer	4
Cdate	Not Null	Text	50
Problem	Not Null	Text	30

Table: tblStconfig

Columns

Name	Null	Type	Size
Configid	Not Null	Long Integer	4
orderid	Not Null	Long Integer	4
Cdate	Not Null	Text	25
Accessories	Not Null	Text	50

## **User Permission**

**Admin:** Delete, read permission, set permission, change owner, read definition, write definition, read data, insert data, update data, delete data.

## **Group Permission**

**Admin:** Delete, read permission, set permission, change owner, read definition, write definition, read data, insert data, update data, delete data.

**Users:** Delete, read permission, set permission, read definition, write definition, read data, insert data, update data.

\*

## 3.2 INPUT DESIGN

Input design is a process of converting user-organized input into computer-based format. To enter the various data captured through the paper forms into the system, screens are designed. The elements are shown in the screen by which any user or customer can easily follow. The input to the system was designed such that the required information can be collected and corrected quickly.

The goal of input design is to make data entry easier, logical and free from errors. The decisions made during input design are:

- To provide cost-effective methods of input.
- To achieve the highest possible level of accuracy.
- To ensure that input is understood by user.

Input data of a system may not necessarily be raw data captured into the system. These can also be output of another system or subsystem. The design of input covers all phases of input from the creation of initial data to actual entering of data into the system for processing. It involves identifying the data need, specification the characteristics of each data item, ensuring correctness of data.

Here in this project, the user has to fill in the personal details so that it will be stored for further processing. This is like how he enters his username and password and how he fills the registration form. Further, the user can move into the staff maintenance page, project maintenance page or to timesheet page. In this manner the input data is secure and it is stored in the database forever.

### **3.3 OUTPUT DESIGN**

The output is designed in terms of data content and approximate layout. The information required by the management is also taken into consideration. Output design refers to the results and information that are generated by the system. For many end-users, output is the main reason for developing the system on the basis on which they will evaluate the usefulness of this application.

Output of a system can take various forms. The most common are reports, screen displays, printed forms, graphical drawings etc. the basic requirements of output are, it should be accurate, timely and appropriate in terms of content, medium and layout for its intended purpose. Hence it is necessary to design output, so that the objective of the system is met in the best possible manner.

They are three types:

- External output are those whose destination will be outside the organization and which requires special attention.

- Internal outputs are whose destination is within the organization and to be carefully designed, as they are the users of main interface with the system.
- Interactive output are those, which the user uses in communicating directly with the computer.

Here the user after filling his details and almost finished purchasing gets a bill regarding his purchase. Here all the specification of the product is mentioned and the customer is well aware of the total cost. Finally, a report is sent to the management about the purchase details requesting them to produce more quantity from the concerned company. The quantity for ordering is also mentioned.

## **3.4 DEVELOPMENT SCHEDULE**

### **3.4.1 MILESTONES**

Milestones are being established for each and every module to improve the product visibility. It enhances the development process to become more tangible. It exposes errors, which help in improving the product quality and increases project communication. In our application it has been done sub-module wise.

### **3.4.2 REVIEWS**

The review summary report is prepared on weekly basis to know the progress of each member. Review issues lists, are prepared to identify problem areas within the product, and it is attached with every review summary. As a programmer we do the following reviews.

- Critical Design Review
- Source Code Review
- Acceptance Test Review

### **3.5 PHYSICAL SYSTEM DESIGN**

Software Design is both a process and a model. The design is a set of iterative steps that enables the designer to describe all aspects of software to be built. It begins by representing the locality of the thing to be built and slowly refines it to provide guidance for constructing each in detail.

The process involved are given below:

- Establish customer contact.
- Provide product literature and related information.
- Confirmation of registration.
- Accept sales order.
- Check the availability of configuration
- Confirmation configuration, pricing, transportation with the customer.
- Transmit delivery order
- Follow up with the customer

## 3.6 CODE DESIGN

The project sales and order processing was built using Active Server Pages technology, HTML, and MS Access database.

### HTML

Somehow, it shouldn't be surprising that the lingua franca of the World Wide Web was developed in Switzerland, which has four official state languages. Perhaps acutely aware of how difficult is for people to communicate with a common language, the programmers at the CERN research lab created a kind of Esperanto for computers: the Hypertext Markup Language, or html.

HTML allows you to format text, add rules, graphics, sound, and video and save it all in a text only ASCII file that any computer can read. The key to HTML is in the tags, keywords enclosed in less than (<) and greater than (>) signs that indicate what kind of content is coming up.

Of course, HTML just look like a lot of text sprinkled with greater than and less than signs until you open the file with a special program called a browser. A browser can interpret the HTML tags and then show the formatted document on screen.

The HTML used by Internet Explorer provides key handlers for experience WWW authors to move outside HTML into scripting such as VB Script and Java Script. A HTML

document is a text file that displays text, multimedia objects and hyperlinks.

Using HTML an author can formulate a document for display and add hyperlink jumps to other documents. A user can select text that is formatted as a hyperlink.

### **ACTIVE SERVER PAGES**

Active Server Pages or ASP is Microsoft's solution to server-side scripting. With simple HTML pages, the clients request a web page from a server. The server just sends the file to the client, and the page is shown on the clients browser.

With ASP, the server gets a chance to alter the file before sending it to the user. So, for every request for a file with an .ASP extension, the server runs the file through a DLL called ASP.DLL, which parses the ASP commands.

To use ASP you must be running Microsoft Personal web server. We can have your ASP code connect to the database and dynamically insert the data into the HTML pages. This leads to some very powerful possibilities including Ecommerce, customized sites, data entering and a slew of other possibilities.

There are many advantages of using ASP. They include database connectivity, the ability to create dynamic web sites, and the ease with which we can create web sites to sell inventory on the web.

## **NORMALIZATION**

Normalization reduces redundancy. Redundancy is the unnecessary repetition of data. It causes problems with storage and retrieval of data. Redundancy can lead to:

### **Inconsistency:**

- Errors are more likely to occur when facts are repeated.

### **Update Anomalies:**

- Inserting, Modifying and Deleting data may cause Inconsistencies.

There is high likelihood of updating or deleting data in one table while omitting to make corresponding changes in other relations.

During the process of normalization, we can identify dependencies, which can cause problems when deleting or updating. Normalization also helps simplify the structure of tables.

A fully normalized record consist of:

- A primary key that identifies an entity
- A set of attributes that describes the entity

## **MS ACCESS**

MS Access is meant to provide the most universally useful database features. However each user or organization is bound to have special needs and process that requires enhancing the access database table, forms, reports, and queries. As a bonus, programming access can create a full proof user interface, significant errors trapping procedures that can ensure vital database validity.

When computers connected via a network, making information available to multiple users is greatly simplified. The data can reside on a single place on the network and be making accessible to all users.

MS Access was created with multiple user capabilities. The split database design has become so common in many environments. The database splitter add on simplifies the process of greeting back database, exporting files to the backend, and linking to tables between the two halves.

MS Access can manage all the information in a single database file within the file. The data is stored in the form of tables. We can retrieve them using queries.

### **VB Script:**

VBScript, the newest member of the Visual Basic family of programming languages, brings active scripting to a wide variety of environments, including Web client scripting in Microsoft Internet Explorer version 3.0 and Web server

scripting in Microsoft Internet Information Server version 3.0. If you already know Visual Basic or Visual Basic for Applications, VBScript will be very familiar. Even if you don't know Visual Basic, once you learn VBScript, you're on your way to programming with the whole family of Visual Basic languages. Although you can learn about VBScript in just these few Web pages, they don't teach you how to program. To get started programming, take a look at Step by Step books available from Microsoft Press.

## **3.7 MODULE WISE DESCRIPTION**

### **REGISTRATION**

This module covers the initial process of making customer and allowing customer to choose their username. Customers can register themselves online by giving account details such as username, password, a hint question and answer for password retrieval. The other necessary details are customer phone, customer email. This module valid the password and conform password are to be the same and it also valid the necessary details such as email, phone, address etc.

### **BUILT YOUR PC**

The individual computer peripherals according to category have listed. The customer can built their own assembled PC according to their wish. The customer can select the individual components for their dream PC and they can mention the total number of assembled PCs required. Then the customer can place the order.

### **STANDARD CONFIGURATION**

In this module, the company has provided a standard configuration of assembled PC. The standard configuration has published in the web site with complete specification. The customer who may not know about the individual computer peripherals can choose this module. The customer can choose the standard configuration and they place the order.,

## **SERVICE PAGE**

In this service page, the customer can post the complaints or problems found in the computer peripherals. The customer can select where the problem found that is whether problem found in monitor, processor, motherboard etc., and they can state the problem.

## **PRODUCTS PAGE**

The latest computer peripherals and their relevant information has clearly described in this module. The picture of the products and their advantages is stated. The customer can click the products and get the information.

## **PASSWORD RETRIEVAL**

It may happen that a customer can lose the password. So in order to remind the correct password, the system has redirected them to forgot password pages, which ask a hint question, choose by the customer while registration. When the answer given by the customer is match correctly, the password has revealed to the customer, otherwise, the user will not get his password. This will prevent misuse of the system.

## **CUSTOMER LOGIN AND LOGOUT**

Customer login process is just like a security wall. Only authorized customer has allowed in and others have not allowed ordering the product. Login process is comprehensive and exhaustive. More over a security plug-in will ensure that no unauthorized entries are made in to the system.

## **4. SYSTEM TESTING AND IMPLEMENTATION**

---

### **4.1 TESTING**

Testing is an important phase in development in software development and application development in the World Wide Web. Testing will lead the error free application to the client.

For E-commerce sales and order processing there is a need for six types of testing. They are: -

- Unit Testing
- Validation Testing
- Integration Testing
- Output Testing
- Acceptance Testing
- User Acceptance Testing

#### **4.1.1 UNIT TESTING**

Unit Testing comprises the set of tests performed by an individual programmer prior to the integration of the unit into the large system. A program unit is usually small

enough that the programmer who developed the unit can test it. Then the unit is integrated into the large part of the system. Unit testing is always white-box oriented and the step can be conducted in parallel for modules.

#### **4.1.2 VALIDATION TESTING**

Software Testing and validation is achieved through a series of black box tests that demonstrate conformity with the requirements. A test plan outlines the classes to test to be conducted and a test procedure defines specific test cases that will be used to demonstrate conformity with the requirements.

Both, the planned procedures are designed to ensure that all functional requirements are archived, documentation is correct and other requirements are met. After each validation test case has been conducted, one of the two possible conditions exists.

They are:

The function or performance characteristics conform to the specification and are accepted.

A deviation from specification is uncovered and a deficiency list is created.

This project is validated under different test conditions. The requirements as per the specification are

met. The performance is tested at full capacity of users, accessing, saving and modifying the alumni details.

#### **4.1.3 INTEGRATION TESTING**

Bottom-up integration is the traditional strategy to integrate the components of the software system into the functional unit. Bottom-up integration consists of unit testing of the entire system.

Modules are tested in isolation from one another in an artificial environment, known as a "test harness", which consist of the driver programs and data necessary to exercise the modules.

Moreover integration testing addresses the issues associated with the dual problem of verification and program construction. After the application has been integrated a set of high-order tests were conducted.

#### **4.1.4 OUTPUT TESTING**

The outputs are tested thoroughly by giving sample data, for which results are known. The outputs from the system are matched with that of the known values and the results are found to be accurate. Test data of about 10n username are validated on the registration form. The results were found to be accurate.

## **4.1.5 ACCEPTANCE TESTING**

Acceptance Testing involves planning and execution of functional tests, performance tests, and stress tests in order to demonstrate that the implemented system satisfies its requirements.

In addition to functional performance tests, stress tests are performed to determine the limitations of the system. Tools of special importance during acceptance testing include a test coverage analyzer, a timing analyzer and a coding standard checker.

Testing is the process of executing test cases with the intension of exposing the errors.

## **4.2 SYSTEM IMPLEMENTATION**

Implementation is the stage where the theoretical design is converted into working system. It consist of

- Testing and Debugging
- Error Correction
- Training the user
- Change over

Implementation includes equipments installation and user training. For the system to begin operation, a sufficient number of users have been trained to the system. Several hours were scheduled for a number of users so that they were able to fully understand the new system and had an opportunity to familiarize themselves with various input screens and generation of output.

The change over is another important aspect of the implementation process and had to be handled carefully.

The existing system is changed to the new system and the system is found to meet its objectives. Data from the previous system, static contend is ported to the new system and the result produced are compared with that of previous system. The new system is found to satisfy the user needs.

It allows the result to the new system to be compared with the old system before acceptance by the user, thereby promoting the user confidence.

### **4.3 MAINTENANCE OF THE SYSTEM**

It is very essential to maintain any system. The categories in maintenance namely perfect, adaptive and corrective maintenance are used in maintaining the system.

The web pages are updated regularly. The dead links are checked and removed as soon as it is found it in any pages. The web server performance is monitored at equal intervals of time.

The database records are backed up at regular of time. The search pages are improved for the user to browse them without any trouble. The users with lowest modem configuration can view the web pages without any long result pages.



## 5. CONCLUSION

---

An interactive and dynamic website has been successfully developed. This system has satisfied all the needs of the company. Moreover, it gives the information of the latest computer peripherals and their pictures.

In this E-commerce site, the order processing made very simple and the customer can order products to their needs from anywhere else. The service to the computer peripherals is an excellent tool to the customer who needs the best service.

The customer can interact user friendly with the system. This system does not allow any authorized users to enter and it has highly secured. A strong foundation has laid for the future enhancements and the others can start at any time without any difficulty.

## 6. FUTURE ENHANCEMENT

---

The database has designed in such a way that it will be helpful for further enhancement of the system. The credit card facilities will have added to the system for further development.

The various articles relating to the latest computer peripherals will be post into the administration by the customer. The administration can delete or update the new products by using the administrator privilege.

The database backup facilities will add into the system. The database can be upgrade to MS SQL server and this will result in increase in performance.

## 7. GLOSSARY

---

ASP	active Server Pages
DLL	Dynamic Link Layer
HTML	Hyper Text Markup Language
PWS	Personal Web Server
WWW	World Wide Web

## 8. REFERENCE

1. Active Server Pages 3.0 from Scratch,  
Nicholas chase, Prentice-Hall of India Pvt.  
Ltd
2. Active Server Pages Bible, Eric Smith, IDG  
Books India (P)Ltd
3. HTML Complete Reference - Patrick Naughton

### WEBSITE

[www.aspcorner.com](http://www.aspcorner.com)

[www.asponline.com](http://www.asponline.com)

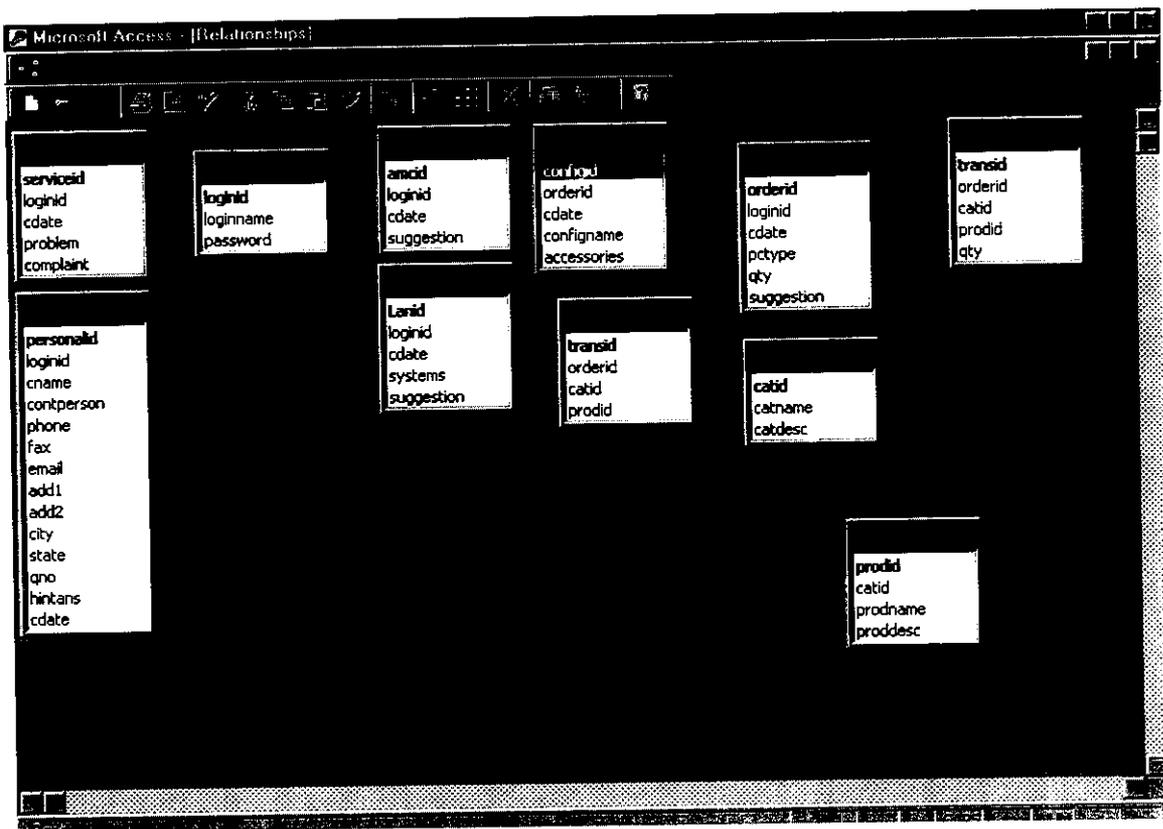
[www.asp.com](http://www.asp.com)

[www.w3schools.com](http://www.w3schools.com)

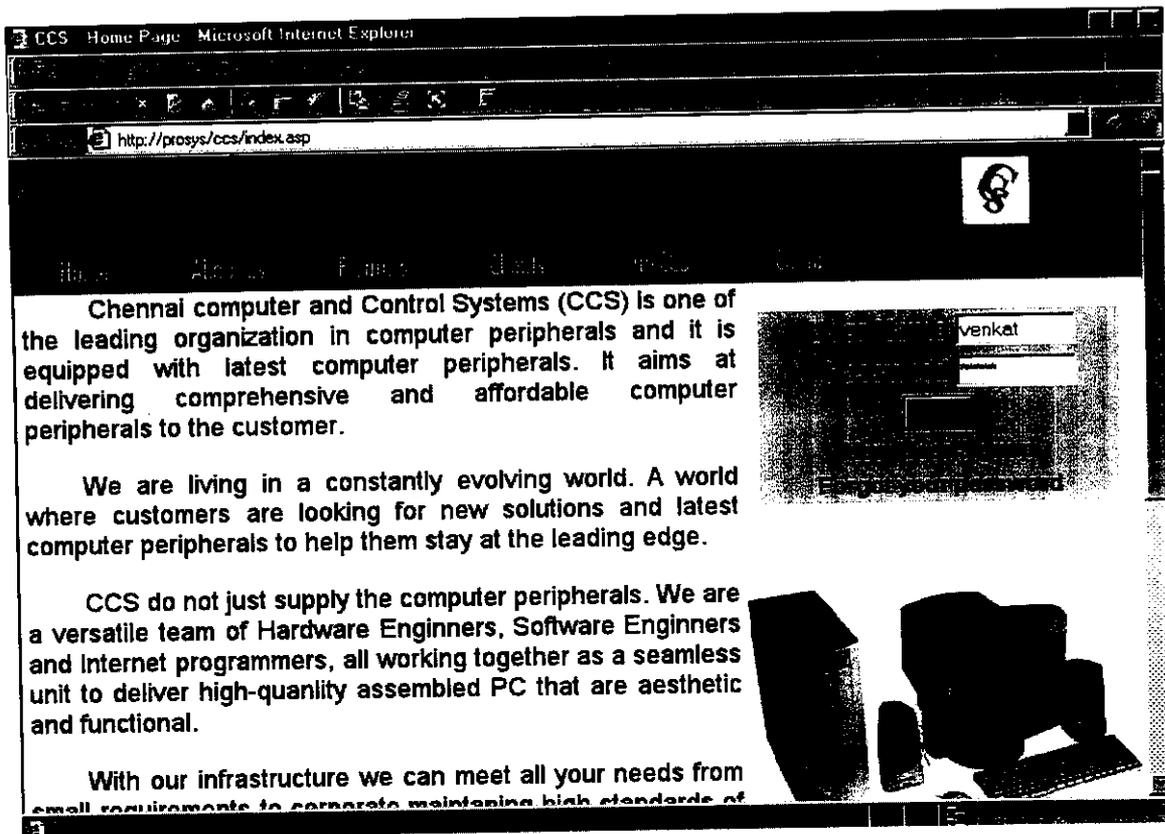
## 9. APPENDIX

---

### 9.1 RELATIONSHIP BETWEEN TABLES



## 9.2 SCREEN LAYOUTS



http://prosys/ccs/planprinter.asp - Microsoft Internet Explorer

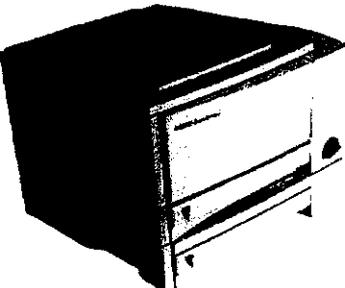
http://prosys/ccs/planprinter.asp

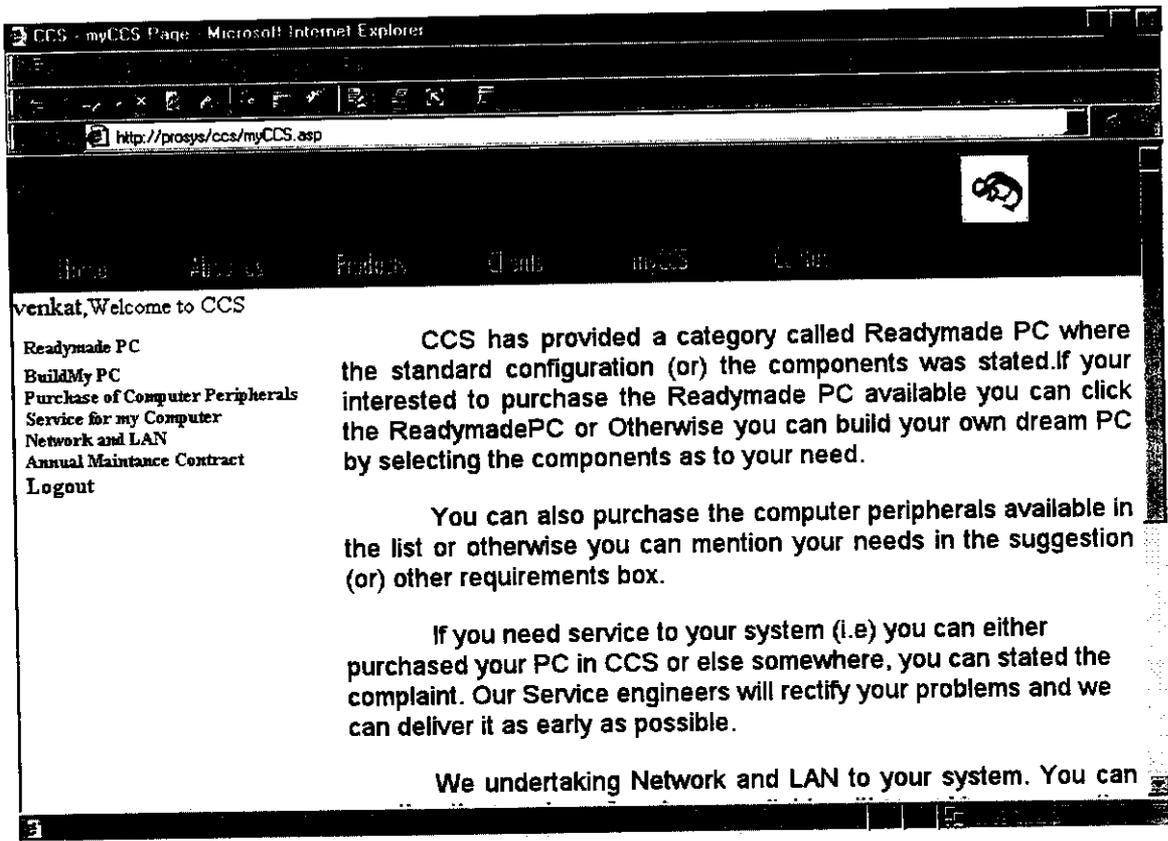
Home About Us Products Clients myCCS Contact Us

<b>3D - Graphics Cards</b>
<b>CD - Drives</b>
<b>CD-RW Drives</b>
<b>DVD Drives</b>
<b>External Storage</b>
<b>Handheld PC's</b>
<b>Hard Disks</b>
<b>Inkjet Printers</b>
<b>Laser Printers</b>
<b>Monitor [19/21"]</b>
<b>Monitor [14/15"]</b>
<b>Monitor [17"]</b>
<b>MotherBoards</b>
<b>MP3 Player</b>
<b>PC's</b>
<b>Processor</b>
<b>Scanner</b>

**Hewlett Packard LaserJet 2100**

One of the most formidable printers for a large office or workgroup, the HP LaserJet 2100 is capable of delivering 10 pages per minute at a maximum resolution of 1200x1200 dpi. This printer is also a true office workhorse since it can be upgraded to network compatibility. For this, all you have to do is add a JetDirect card that enables it to be directly connected to a network point and thereafter, it can be used in a corporate environment. It also features an infrared port that enables it to be used by devices that do feature such ports, such as laptops. There is also an I/O buffering setting that enables the printer handle instructions and data that is sent to it more efficiently. The printer gave average print speeds (45, 71 and 174 seconds for the five-page text file, combination and image prints, respectively) with an overall score of 64 points.





venkat, Welcome to CCS

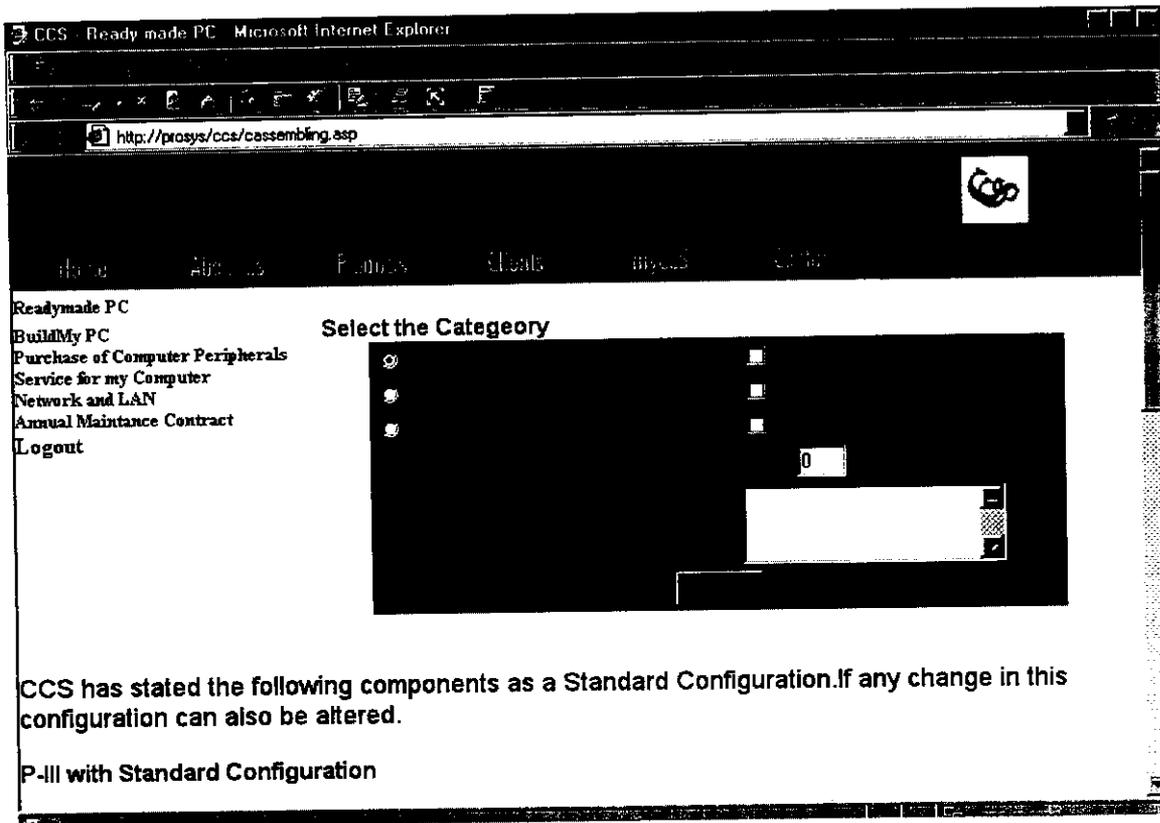
- Readymade PC
- BuildMy PC
- Purchase of Computer Peripherals
- Service for my Computer
- Network and LAN
- Annual Maintenance Contract
- Logout

CCS has provided a category called Readymade PC where the standard configuration (or) the components was stated. If your interested to purchase the Readymade PC available you can click the ReadymadePC or Otherwise you can build your own dream PC by selecting the components as to your need.

You can also purchase the computer peripherals available in the list or otherwise you can mention your needs in the suggestion (or) other requirements box.

If you need service to your system (i.e) you can either purchased your PC in CCS or else somewhere, you can stated the complaint. Our Service engineers will rectify your problems and we can deliver it as early as possible.

We undertaking Network and LAN to your system. You can



CCS - Buildmypc - Microsoft Internet Explorer

http://prosys/ccs/buildmypc.asp

Home About Us Products Contact Us myLab Cart

Ready-made PC **Select the components**

BuildMy PC  
 Purchase of Computer Peripherals  
 Service for my Computer  
 Network and LAN  
 Annual Maintenance Contract  
 Logout

Intel Pentium-III 800 MHz	128 MB SD
20 GB Samsung	Mercury 810 C Chipset
1.44 FDD Acer	15" Microtek color
52X Acer	Amkette 105 keys
Logitech 3 Button	Samsung
SS 15"	Microtek 300 watts
Samsung-Laser	Samsung
Powersoft UPS	

2

CCS - Computer Peripherals - Microsoft Internet Explorer

http://prosys/ccs/component.asp

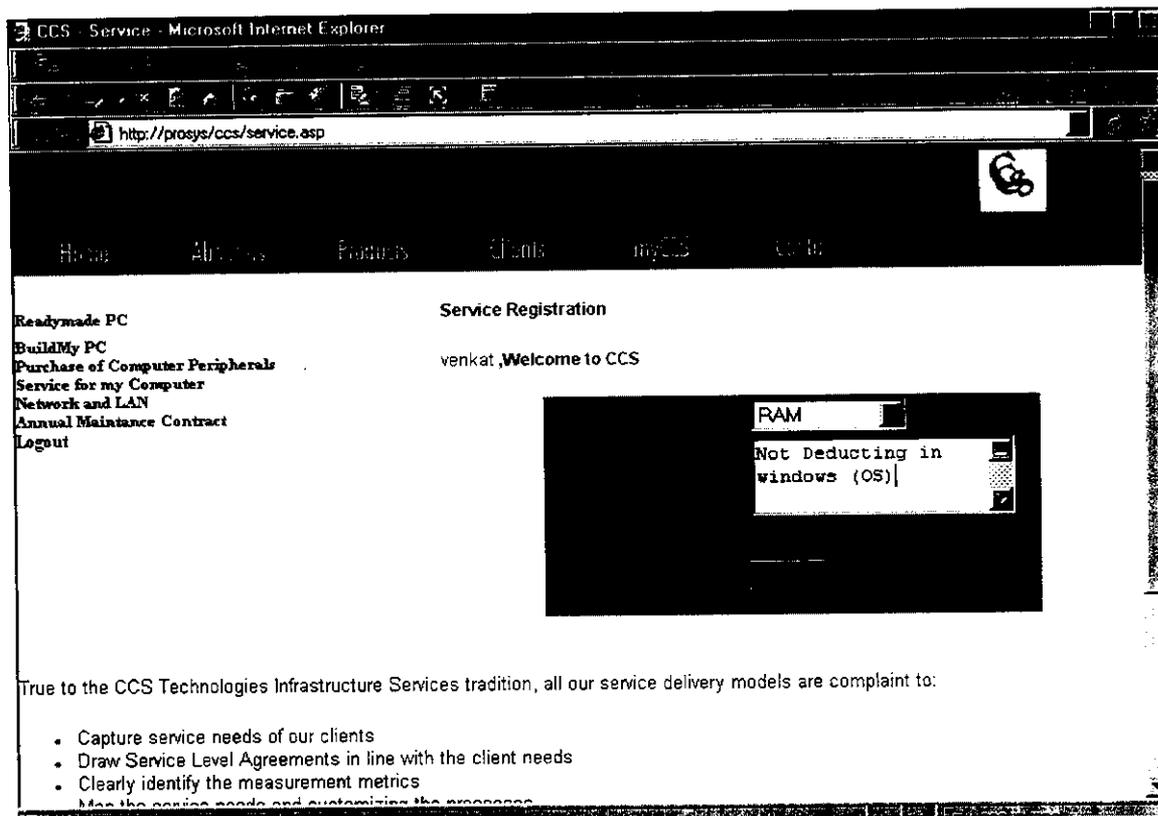
Home About Us Products Claims myCS Contact

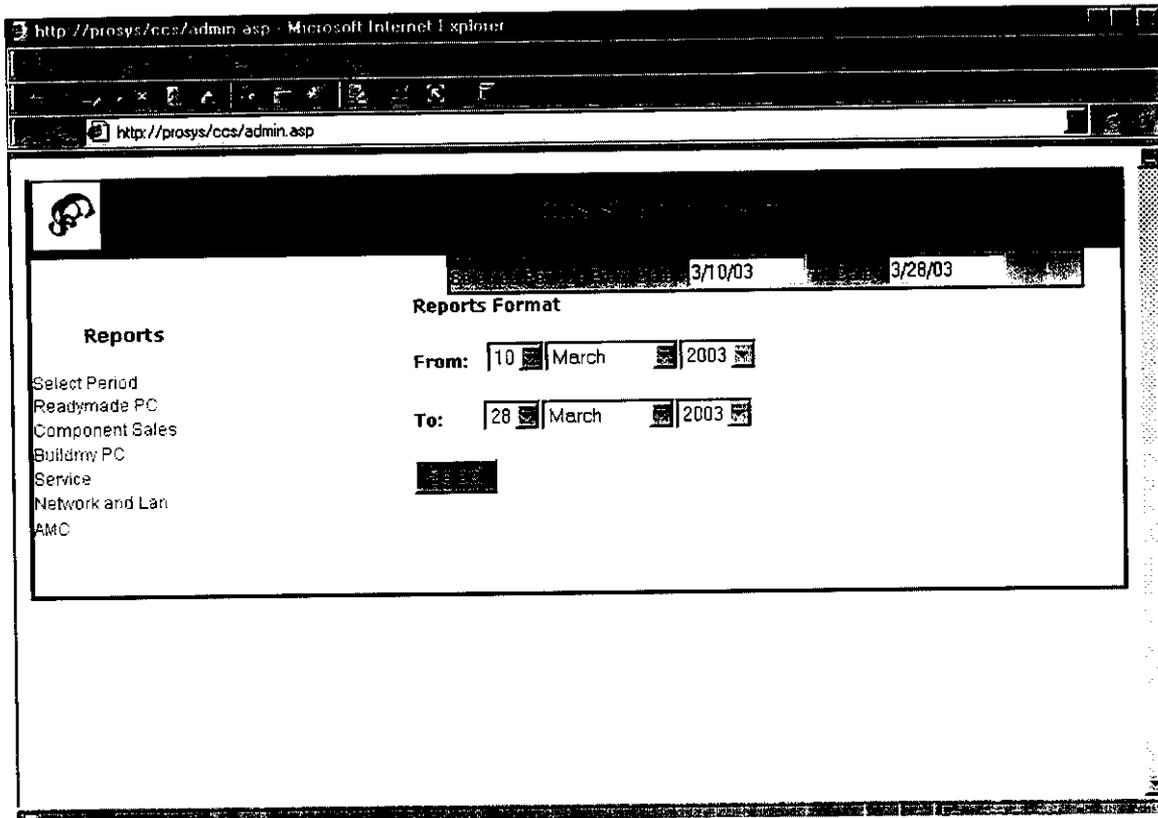
Ready-made PC  
BuildMy PC  
Purchase of  
Computer  
Peripherals  
Service for my  
Computer  
Network and LAN  
Annual Maintenance  
Contract  
Logout

### Select the components

Intel Pentium-III 800 MHz	1	16 MB	1
20 GB Seagate	1	Intel 810 D	1
1.44 FDD Samsung	1	14" LG Color	1
52X Samsung	1	TVS 110 keys	1
Logitech 3 Button	1	Mercury	1
AT 14"	1	Mercury 330 watts	1
HP-inkjet	1	Umax-Astra	1
Cansoft UPS	1		

no comments





http://prosys/ccs/Rep\_readymadepc.asp Microsoft Internet Explorer

http://prosys/ccs/Rep\_readymadepc.asp



### Reports

Select Period  
Readymade PC  
Component Sales  
Buildmy PC  
Service  
Network and Lan  
AMC

Login Id	Order Id	Order Date	Configuration	Quantity	Accessories	Suggestion
1		5/15/03	13	2	0	low price

http://prosys/ccs/Rep\_Det\_readymadepc.asp?loginid=1&Orderid=7 Microsoft Internet Explorer

http://prosys/ccs/Rep\_Det\_readymadepc.asp?loginid=1&Orderid=7

Date 3/19/03

Login Name: svenkat  
 Full Name: S Venkat  
 Contact Person: S Venkat  
 Address: 220 Nagaraya New Street No.3  
 Bangalore - Tamilnadu  
 Phone: 98422-478822  
 Fax:  
 E-Mail: svenkat@india.com

Dear Sir/Madam,

**Sub : Quotation for the Computer Peripherals**

Thanks for your interest to purchase the computer peripherals in CCS. We have Quoted the best price in the market. The details of the product that you have selected are listed below. Verify this details and acknowledge this details to CCS as soon as possible. Feel free to ask any queries regarding this.

Details	Configuration	Accesserious	Quantity	Suggestion
	P3	0	2	low price