

# WEB ORDER PURCHASE AND PROCESS SYSTEM



PROJECT WORK DONE AT p-565

OBJECTPRO SOFTWARE PRIVATE LIMITED, CHENNAI.

## PROJECT REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
**MASTER OF COMPUTER APPLICATIONS**  
OF BHARATHIAR UNIVERSITY, COIMBATORE.

SUBMITTED BY  
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MAY-2001

**BONAFIDE CERTIFICATE**

This is to certify that **Ms. RADHIKA.V, M.C.A (Final Year)** of **Kumaraguru College of Technology** has successfully completed her project work titled “ **Web Order Purchase & Process System** ” under my guidance.

This project was carried out by her during the period of **December '2000 to April '2001.**

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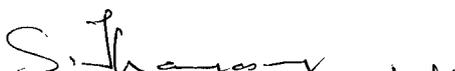
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Dear Sir/Madam,

As we are bound by the conditions of the agreement with our client, we are unable to release the source code. We are ready to give full support to **Ms. Radhika. V**, who completed this project. Wishing success for her future endeavours.

Regards,

  
~~Rangarajan. R~~  
Deputy Manager





## DECLARATION

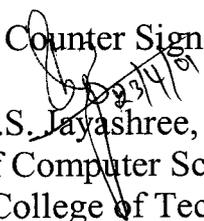
I hereby declare that this project entitled **WEB ORDER PURCHASE AND PROCESS SYSTEM**, submitted to the Bharathiar University as the project of the Master of Computer Applications Degree, is a record of original work done by me under the supervision and guidance of **Mr. Gideon Sugirtha Raj**, Project Manager, Computer Services Department, ObjectPro Software Private Limited, Chennai and **Mrs. L.S. Jayshree, M.E., MISTE**, Department of Computer Sciences and Engineering, Kumaraguru College of Technology, Coimbatore. And this project work has not formed the basis for the award of any Degree/Diploma/Associateship/Fellowship or similar title to any candidate of any university.

Place : **COIMBATORE**

Date : **23.04.2001.**

  
(RADHIKA. V.)

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**V.RADHIKA**

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*Synopsis*

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## **SYNOPSIS**

The project work entitled '**Web Order Purchase and Process System**' is an online shopping system developed for ObjectPro Software Solutions Limited, Chennai. It provides webservice for the customers to do shopping on-line and administration services for the administrator.

The customer who wishes to order products manufactured by this organization has to register himself, wherein he is allowed to choose his own user id and password. Signing up forms the guideline for the online shopping. The customer is given a catalogue of items manufactured by the company. The customer is allowed to place orders of his own choice, once the order is confirmed payment and shipping for the ordered products are done.

The user at the administration side is provided with user name and password. He has complete control over the data. Provision has been given for the administrator to add new category, new item and to delete an item.

The system is developed using

➤ Weblogic Server

A web server used to satisfy the clients requests

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➤ Java Server Pages

An Advanced tool to communicate with the database and server by writing scripts in jsp.

➤ HTML

Tool to provide good interface for the users in web pages.

➤ Java Script

Scripting languages used to process client side requests and validations.

➤ Microsoft Access

Back end to store database.

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## *Introduction*

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## **1. INTRODUCTION**

### **1.1 PROJECT OVERVIEW**

The project work entitled '**Web Order Purchase And Process System**' is a web-enabled part of a Net Shopping system. This Application provides Webservice for the clients to do shopping on-line and administration services for the Administrator. Web enabled shopping system replaces paper based processes resulting in lower cost, higher speed and availability.

Any person who wishes to do business has to first register himself as user. Options are given both for new user and an already registered user. In case of a new user he has to fill in the details requested in the registration form.

The user is allowed to choose his own User name and Password which forms the basis for identification through out the system until the final delivery of products.

The system works as follows

- ◆ Once the user registers, he is provided with the details of the products produced in the company.
  - ◆ Customer is allowed to place order by choosing products of his own choice.
-

- ◆ The ordered products are entered into the shopping cart where an option is provided to delete an item or to include new item.
- ◆ Order is then confirmed and the total prices of the products ordered are displayed.
- ◆ The total cost is displayed to the user and he is asked to enter the credit card number, and to choose the roadways transport available.
- ◆ Based on the roadways transport selected shipment is done.

The Administrator side of the system works as follows

The user at the administration side has to login by entering his user id and password.

He has complete control over the data in transit. Provision has been given to the administrator for the addition of new category, for the addition of new item and for the deletion. Since the user at this site forms a very important part in the successful transmission, knowledge about the items involved in transit and about the transaction details is an essential ingredient.

Various reports like transaction report and product report are produced.

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Transaction Report and Product Report are produced by the user at the administrator side based on the transactions made by the customer with in the given date and the products transacted respectively.

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## **1.2 ORGANIZATION PROFILE**

### **OBJECTPRO SOFTWARE LIMITED, CHENNAI**

Objectpro Software limited is a leading product/project developer focusing on end to end solution of the enterprise. We are a front ranking IT company, known for our impeccable track Record in software development, training, consultancy & on-site Services using object and component technology. Backed by a management endowed with a clear vision, object has evolved a unique organizational culture that is most conducive to achieve excellence in quality and performance. A team of software professionals with core competencies in e-commerce, enterprise applications, distributed computing and component solutions strives to translate the organizational objectives into reality.

#### **Areas of Specialization**

##### **A. On the design front:**

Object Oriented Analysis and Design, Design patterns, Unified Modeling Language Rational Rose.

##### **B. Database Area :**

Versant, Objectivity an Gemstone.

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Our expertise is in developing e-solution application server products like weblogic, websphere etc.

### **Blazing new trails in Software Development**

Objectpro designs develops and deploys software to meet the specific needs of service and manufacturing industries, health care and insurance sectors, to name a few. We have created a unique work environment that facilitates free interaction between the s/w developer design and expert so that they both understand the terminology and the nature of the work in a given domain. With experience and expertise in domain industry and s/w solutions, we match global standards and specifications with natural ease.

### **Standards matched by object pro**

#### **In the area of s/w design**

- ❖ Unified modeling language (a unified approach of Booch Rambaugh & Jacobsen Lorensen)
- ❖ Design patterns

#### **In the area of s/w development**

- ❖ Object coding standards
  - ❖ Uniform coding standards
-

- ❖ Documentation done by developers
- ❖ Total documentation by technical writers
- ❖ Quality assurance
- ❖ Growing towards standard quality procedures

**In the area of software deployment**

- ❖ User manual
  - ❖ Cook-book installation manual
  - ❖ User training
  - ❖ Maintenance
  - ❖ User participation in deployment
-

# *System Study & Analysis*

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## **2. SYSTEM STUDY & ANALYSIS**

Requirement analysis is used to analyze the knowledge about the existing system. After understanding the limitations of the existing system and the identification of the problems, alternate system solutions are studied and recommendations are made about committing the resources required to design the system. Various studies are done in order to get the information like

- ◆ How the data are processed with in the organization.
  - ◆ How data is spread over the organization.
  - ◆ How data are searched for within the organization.
  - ◆ How the users communicate.
  - ◆ How the users distribute the data to others for their use.
  - ◆ How safe the data is used within the organization.
  - ◆ What are the files currently in use within the existing system.
  - ◆ How the data flows between these files.
  - ◆ What is the procedure in use for the data retrieval and transit.
-

## **2.1 EXISTING SYSTEM - LIMITATIONS**

The existing system uses a manual system for most of the process involved. Any user who wishes to have business with the organization does the registration process and signing up all in means of person. Then the organization gives him the list of products at hand and the whole system works in this manner until the final delivery of the products is done. Since manual processing is the only way for accessing the information, this system will lead to the following limitations.

- It increases the amount of paper work and clerical cost involved, thus decreasing the productivity and increasing the costs.
  - It results in wastage of time for the communication between the company and the customers.
  - There can be information mishandling at every stage during the transaction of the orders.
  - It results in an unsecured information flow between the customers and it can also lead to inconsistency and redundancy of the same information.
  - It results in non - uniform communication between the organization and the customers. The communication in short, will not be effective at all.
  - With effect of all these limitations the company finally loses its position within the market with respect to its competitors.
-

These disadvantages of the existing system have led to the development of new system using automatic technology which replaces the paper-based processes, resulting in lower costs, greater accuracy, higher speed and larger scale of availability.

## **2.2 PROPOSED SYSTEM**

The proposed system should be developed in such a way to solve the problems faced by the existing system. The tool used to develop the system is Java Server Pages for its flexibility and versatility.

The proposed system uses Microsoft Access which is a database system with powerful querying functions and easy accessing. The system is very user-friendly and driven by hyperlink. Enough security features are provided both to the administrator side functions consisting of the databases and the client of the new system. A good user interface is provided to the user in the form of an easily understandable point-and-click interface system.

The system has been segregated into two, based upon the mode of use by the user in the client side and administrator side. The client side functions from the view point of the end user of the system.

The client side functions of the proposed system works as follows:

Any user who wishes to establish business with the organization can do so by registering himself as a user. Within the organization's home page that is shown initially, options have been given for both the Registered User and the New User of the organization. Once the new user gives his particulars and chooses his own User Name and Password,

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which forms the basis of his identification through out until the final delivery of the products. Signing up the registration means that the user agrees, that any transaction done via this system more legal than a transaction done through over the phone or by person .

Once the user logs in with the User Id and Password, the system provides the user with the list of products manufactured wherein he can choose the products of his own choice. As the user chooses the products, the ordered products are added to the Shopping Cart. In the Shopping Cart user is allowed to delete the ordered products or choose new products. Once the final choice of ordering is completed, order confirmation is done after which payment and shipping of the products take place.

The administrator side functions include the maintenance of all the data involved in the transit. The user at the administrator side is allowed to add new category, to add new item and to delete particular item. Since the user at the administrator side forms a very important part in the successful transmission, knowledge about the items involved in the transit and about the transaction details is an essential ingredient here. Transaction Report and Product Report are produced by the user at the administrator side based on the transactions made by the customer with in the given date and the products transacted respectively.

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The advantages of this system are as follows:

The bottom line is that if the system is implemented correctly can save organization's money. However the specific benefits are

➤ **Fragmented Supply Chain**

For those markets in which it's hard for buyers and sellers to find one another, this system intermediary can bring them together to help buyers compare offerings. And when products and prices change quickly (when it is hard for buyers to compare product information) the system intermediary can aggregate such information and make it easier to search.

The importance of supply chain fragmentation has been increasing in the new world economy, where political boundaries change almost daily and globalization must always be considered.

➤ **Streamlined Business Processes**

The internet fosters a culture of connectivity and speed that can be translated into a need to develop business systems faster than the competition and create business process that cross functions and organizations. In order to engage in e-commerce with customers, rapidly synthesize shared business processes, and continuously innovate the

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business for greater efficiency, organizations are making this system a business imperative.

➤ **Extension of the selling chain**

The proposed system offers business, the ability to reach new buyers, such as small accounts that wouldn't have been cost-effective for a sales rep to handle or that are located elsewhere in the world or to unload surplus inventory.

➤ **Procurement Trends**

For those organizations that choose to develop longer-term relationships with one or two consumers, this provides a wider field to select from when developing these relationships.

➤ **Technology wealth**

The developed system flourishes in a business environment where technology is a driver for competitive advantage. Technology advancements now enable the hardware, software, and infrastructure necessary for high-performance systems.

## **FEASIBILITY STUDY**

The purpose of the feasibility study is

- To gather
- To analyze and
- To document the data needed to make an informal intelligent decision regarding a system's practicability.

The various types of feasibility study conducted on the proposed system are as follows.

### **TECHNICAL FEASIBILITY:**

- The memory capacity of the existing hardware is quite sufficient for the execution of the system.
- The speed of the existing hardware and the system is quite sufficient.
- Technical enhancement may be needed in this system in future, and it will not force any barrier to estimated budget.

Thus a thorough study reveals that this project is technically feasible.

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## **ECONOMIC FEASIBILITY:**

The cost of the system is evaluated here.

- There is no extra cost needed for implementing the system, because this organization already has network and windows environment.
- Since it is very easy to use, no training is needed. So training cost can be avoided.
- This system is flexible so that further enhancement is possible according to the future needs of the users.

## **OPERATIONAL FEASIBILITY:**

The developed system provides a very easy understandable and readable point-and-click interface system. It has used all the latest Internet technology for it's development.

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## **2.3 REQUIREMENTS OF NEW SYSTEM**

The e-commerce facility has been set up by the organization for their business transactions. In this system the ordering of the products and billing for the transactions via some electronic means. The system is being designed in order to overcome the limitations faced by the existing system and hence should possess the following features.

- The system should enable communication between both the customer and the organization faster and more accurately. Since all the process starting from the signing up and ordering of the products until the final delivery of the products are done electronically, it improves the efficiency and results in a more reliable transaction.
  - It should help in increasing the productivity of the company at a lower cost. The only cost involved during the transaction is for the internet connection, which is very less compared to that involved in the case of manual transactions.
  - It should have a speedy order fulfillment and tracking system. The user can achieve the updation and retrieval of data at any data.
  - There should be uniform communication between the customer and the organization through out the system.
-

## **2.4 USER CHARACTERISTICS**

The system has been designed as a very easy to understand point - and-click interface system. The whole system is partitioned into two namely the client side and the administrator side depending on the mode of operation of the system by the corresponding user at each side. Hence the characteristics to be possessed by the user vary on both the sides.

The user using this system should possess the following knowledge

- A fair knowledge about how to browse through the internet.
  - The user should know about the business to consumer transaction system and the order in which the transactions take place.
  - He should also possess knowledge about the various terminologies involved in the transaction that involves signing up, shopping cart, order confirmation and billing information
-

*Programming Environment*

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### **3. PROGRAMMING ENVIRONMENT**

#### **3.1 HARDWARE CONFIGURATION**

- Intel 486 and above
- 16 MB RAM
- Cache Memory 512 KB
- Network Interface Card

#### **SOFTWARE CONFIGURATION**

- Windows Operating System
  - Netscape Communicator 4.5 or Internet Explorer
  - MS Access ODBC Driver
  - Weblogic Application Server.
-

### **3.2 DESCRIPTION OF SOFTWARES AND PACKAGES USED**

The software used to develop the proposed system is as follows:

- ◆ **Java server pages**

- Internet tool used for web publications.

- ◆ **Hypertext Markup Language**

- Internet tool used for web designing.

- ◆ **Java Script**

- Scripting language used to run client side events.

- ◆ **Weblogic Server**

- Web Server used to satisfy client side requests.

- ◆ **Microsoft Access**

- Database used to store values.

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## **ABOUT OPERATING SYSTEM**

Windows 98 is a 32-bit, preemptive multitasking operating system that belongs to the Microsoft Windows family of operating system products. This operating system is being used in the project for the following reasons.

The feature provided includes:

**Portability:** Unlike most operating systems, Windows 98 can run on a variety of platforms. This flexibility can be a great advantage when implementing a computer strategy for an organization.

**Multitasking Operations:** From the perspective of the end user, multitasking means that different type of applications can run simultaneously. While the user is working on one application can be running in the background.

**File Systems:** Windows 98 supports a variety of file systems, including FAT, NTFS and VFAT.

File Allocation Table (FAT): The file system used in DOS. New Technology File System (NTFS): The file system introduced by Windows 98. Virtual File Allocation Table (VFAT): The file system introduced by Windows 95.

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**Security:** Windows 98's security features such as a mandatory logon procedure, memory protection, and auditing and limited network access have been developed.

**Support for many clients:** A wide variety of clients can serve as workstation on a Windows 98 network.

**Storage space:** Windows 98 supports a virtually limitless amount of memory and hard disk space.

### **Reasons for selecting Java Server Pages**

The Java Server Pages technology provides a simplified, fast way to create web pages that display dynamically-generated content. JSP technology was designed to make it easier and faster to build web-based applications that work with a wide variety of web servers, application servers, browsers and development tools. The technology also provides a means for creating dynamic Web-based content using server-side processing.

JSP simplifies the process of creating these dynamic pages by separating the application logic from the page design and encapsulating logic in portable, reusable Java components. JSP extends the servlet technology making it easier and faster to build, deploy, and maintain server-side applications that communicate with Web-based clients

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## **Benefits of the Java Server Pages Technology**

### **➤ Write Once, Run Anywhere properties :**

The JavaServer Pages technology is platform independent, both in its dynamic Web servers, and its underlying server components. JSP pages can be run on any Web Server or Web enabled application server, and access them from any Web browser.

### **➤ High quality tool support:**

JSP allows user to choose best-of breed tools and it enable the creation of high quality portable tools.

### **➤ Separation of Roles:**

Developers write components that interact with server-side objects, while the authors put static data and dynamic content together to create presentations best suited. Each of these roles emphasizes different types of abilities.

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➤ **Reuse of components and tag libraries:**

JSP emphasizes the use of reusable components such as JavaBeans, Enterprise JavaBeans and tag libraries. These components can be used in interactive tools for component development and page composition. This saves considerable development time and power of flexibility.

➤ **Separation of dynamic and static content:**

It simplifies the creation of content and is supported by beans specifically designed for the interaction with server-side objects and specially by the tag extension mechanism.

➤ **Support for scripting and actions:**

Actions permit encapsulation of useful functionality in a convenient form that can also be manipulated by tools. Scripts provide a mechanism to glue together this functionality.

---

## **Reasons for selecting Hyper Text Markup Language**

Hyper Text Markup Language (HTML) is a collection of platform independent styles (indicated by markup tags) that define the various components of World Wide Web (WWW) document. HTML was invented by Tim Berners-Lee while at CERN, the European Laboratory for Particle Physics in Geneva. HTML documents are plain-text files that can be created using any text editor.

An element is a fundamental component of the structure of a text document. Some examples are *heads, tables, paragraphs* and *lists*. To denote the various elements in a HTML document you should use tags.

Some elements may include an attribute, which is additional information that is included inside the start tag. HTML is not case sensitive. Not all tags are supported by the World Wide Web browsers. If a browser does not support a tag, it will simply ignore it.

For passing the value from client side to server side we use HTML forms tag.

The form can contain interface elements such as text fields, buttons, check box, radio buttons, and selection lists that let users enter text and make choices. Each interface element in the form must be

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defined with an appropriate tag. As well as user input elements, the form can contain other elements such as heading, paragraphs, tables and so on.

When the form is displayed in a web browser, the user can fill it out by making choices and entering text using interface elements. And then submit the form by clicking a “submit” button.

Forms uses two types of methods one is “post” and another is “get”. We pass the value into JSP file using the ACTION method. The input values are taken into the jsp file for processing at the client side. Sometimes JavaScript is also used in the HTML file for more efficiency.

Eg.

```
<form method = “post” action = response.jsp”>  
Enter name : <input type = “text” name = “name”>  
Enter password : <input type = “password” name = “pass”>  
<input type = “submit” value = “login”>  
</form>
```

The above example pass the value of name and password for the response.jsp file and the user inputs are processed at the server side using JSP.

### **Reasons for selecting JavaScript**

JavaScript is an easy to use object-scripting language designed for creating live online applications that link together objects and resources

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on both client and server. JavaScript is designed for use by HTML page authors and enterprise application developers to dynamically script the behavior of objects running on either a client or server. Netscape develops JavaScript and Microsoft develops Jscript. With JavaScript we can easily create interactive web pages.

**Java Script is**

- Designed to create net-centric application
  - Complementary to and integrate with java
  - Complementary to and integrate with HTML
  - Open and cross platform.
-

## **Reasons for selecting WebLogic Server**

WebLogic Server is an award-winning Java application server for developing, deploying, and managing Web applications. It simplifies development of portable and scalable applications, and provides interoperability with other applications and systems. WebLogic Server also offers the most complete implementation of the Java 2 Enterprise Edition standard.

## **WebLogic Server Features**

### ➤ WebLogic EJB:

WebLogic Enterprise JavaBeans (EJB) is the J2EE standard for building server-side business logic.

### ➤ WebLogic JMS:

WebLogic Java Messaging Service (JMS) is the J2EE standard for building transactional messaging.

### ➤ WebLogic JDBC:

WebLogic Java Database Connectivity (JDBC) includes everything required for database access in Java.

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➤ WebLogic Servlets:

Servlets are server-side Java programs that generate dynamic web pages for interactive, highly personalized web-based applications.

➤ WebLogic JSP:

WebLogic Java Server Pages (JSP) is the J2EE standard for building web presentation logic.

➤ WebLogic Clustering:

Many standard WebLogic services can be offered in a highly available, failsafe environment with the use of WebLogic Clustering.

➤ WebLogic Clustering:

WebLogic Remote Method Invocation (RMI) is the J2EE standard for distributed computation.

**Reasons for selecting MS-Access**

MS-ACCESS is a powerful multi-user DBMS available with the Microsoft office and which used in the project as the back – end to store the database.

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MS-ACCESS has been chosen within the system for the following reasons.

Access is a multi-featured DBMS that can be used by both beginners and those who have previous DBMS experience.

- Access is windows based application and therefore has an interface similar to Windows 98.
  - Access maintains a single disk file for a database and all its associated objects. However, Access can create links to tables in any other.
  - DBMS capable of handling large volumes of data spread across several databases and users.
  - Access lets you import from or export to FoxPro, Excel, Oracle and other data formats.
  - Access provides user level security features and encrypting/decrypting databases, tables along with password protected databases, tables.
-

**Basic Steps for using Jdbc-Odbc Driver:**

- Load and register the driver to the driver manager:

```
Class.forName("sun.jdbc.odbc.JdbcOdbcDriver");
```

- Open the connection to the database:

Using the connection object and specifying the DSN, opens the connection to the database.

```
Connection con=DriverManager.getConnection("jdbc:odbc:ramya");
```

- Issue the SQL commands to the Databases

After establishing the connection with the database, the SQL commands are passed through the connection object. SQL statements can be used to insert, delete and retrieve database information.

- Close the Database Connection

After accessing the database, the database connection should be closed.

Closing the database connection immediately after using the database makes efficient use of the database resources.

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# *System Design and Development*

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## **4. SYSTEM DESIGN AND DEVELOPMENT**

### **4.1 INPUT DESIGN**

Input design consists of developing specification and procedures for data preparation, steps necessary to fit transaction data into a form that is usable for computer processing.

Whenever a user enters into the shopping site, the homepage is displayed wherein there are two options - for New Users and Registered Users. If the option new user is selected then a registration screen is displayed wherein he has to choose his own user name and password.

The inputs given in the Registration form are,

Name

Age

Address

E-mail

Phone

Company Name

Login ID

Password

---

If the option registered user is selected then a login screen is displayed wherein he has to enter his login name and password.

Once the login details which is the input of this system are completed by the user he is provided with the catalogue of the items manufactured by the company and the user is allowed to order the products his choice.

The ordered items are entered into shopping cart. In shopping cart user is given an option to delete an item or to order new items. The order is placed and confirmation is given to the user.

In the Administrator side, administrator enters Login Name and Password as input after which options for addition of new category, addition of new item, deletion of items are provided.

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## 4.2 OUTPUT DESIGN

One of the most important features of an information system for users is the output it produces. Output is information delivered to users through the information system. Without quality output, the entire system may appear to be unnecessary that users will avoid using it.

The output design of this system is done so that the output screen consists of all the necessary details presented in an attractive and easy readable form.

Any person who wishes to do business with the organization should first register himself as a user. Once the user fills in the details of Login Name and Password the list of products manufactured by the company which includes,

Item Code

Category

Item Name

Unit Price, together with check box is displayed as output to the user.

As the user orders the items a shopping cart displaying the list of orders placed by the user is given as output.

---

Once user confirms the order by entering the quantity required Order Confirmation with the

Item Code

Category

Item Name

Unit Price

Quantity

Total Price is given to the user as output.

When the user enters the credit card details and the required shipping information an output screen is displayed to the user which includes Order ID, Item Code, Category, Item Name, Unit Price, Quantity, Total Price and Total Cost. Order ID can be used by the user for the future usages.

In the administrator side two types of reports are generated namely Transaction Report and Product Report. In the Transaction report for the date specified by the user at the admin side, a report containing the following details such as Customer Name, Product Name, Quantity, Total Price, Order Date, Delivered Date and Order ID is generated. Product report is produced with the details including Product Name, Quantity in Stock, Unit Price, Reorder Level and Category Name.

---

### 4.3 DATABASE DESIGN

All the details of the Web Order Purchase and Process System are stored in the database. The following are descriptions of the tables.

#### Customer Table

Customer table stores the personal information of the user.

Field Name	Description	Data Type
Cust_name	Customer Name	Text
Cust_age	Customer Age	Number
Cust_address	Customer Address	Text
Cust_email	Customer Email	Text
Cust_ph	Customer Phone	Number
Cust_comp_name	Company Name	Text
Cust_comp_ph	Company Phone	Number
Cust_loginid	Login Id	Text
Cust_pass	Password	Text

## Item Table

Item table gives the details of the items.

Field Name	Description	Data Type
Item_name	Item Name	Text
Item_qty	Item Quantity	Number
Total_price	Total Price	Currency
Order_id	Order Number	Number

## Order Table

Order table stores the orders placed by the customer.

Field Name	Description	Data Type
Order_id	Order Number	Autonumber
Order_date	Order Date	Date
Total_price	Total Price	Currency
Cust_name	Customer Name	Text
No_of_items	Quantity	Number

### Catalogue Table

Catalogue table stores in the details of the products manufactured by the company.

Field Name	Description	Data Type
Item_name	Item Name	Text
Item_qty	Item Quantity	Number
Item_unit_price	Unit Price	Currency
Reorder_level	Reorder Level	Number
Ctg_name	Category Name	Text
Item_id	Item Number	Autonumber

### Category Table

Category table stores the types of categories produced by the company.

Field Name	Description	Data Type
Ctg_name	Category Name	Text
Ctg_desc	Category Description	Text

### Shipping Table

Shipping table stores the shipping information for the customer.

Field Name	Description	Data Type
Order_id	Order Number	Number
Cust_name	Customer Name	Text
Ship_name	Shipping Name	Text
Ship_stat	Shipping Status	Yes/No

**Pay Table**

This table stores the credit card information of a customer.

<b>Field Name</b>	<b>Description</b>	<b>Data Type</b>
Cr_name	Credit Card Name	Text
Cr_no	Credit Card Number	Number

**Admin Table**

This table stores the user name and password of the administrator

<b>Field Name</b>	<b>Description</b>	<b>Data Type</b>
admin_name	Administor Name	Text
admin_pass	Administor Password	Text

#### **4.4 PROCESS DESIGN**

The project work entitled 'Web Order purchase and Process System' is an online shopping system. This application provides web services for the customers to do shopping online and administration services for the administrator.

The system has been segregated into two, based upon the mode of use by the user at the client side and the administrator side. The client side functions from the view point of the end user of the system.

The client side functions as follows:

Any user who wishes to order the products produced by the organization has to first register himself. In the organization home page options have been given for both the registered users and the new users. New users should register by filling up the details provided in the registration form, wherein they can choose their own user-id and password.

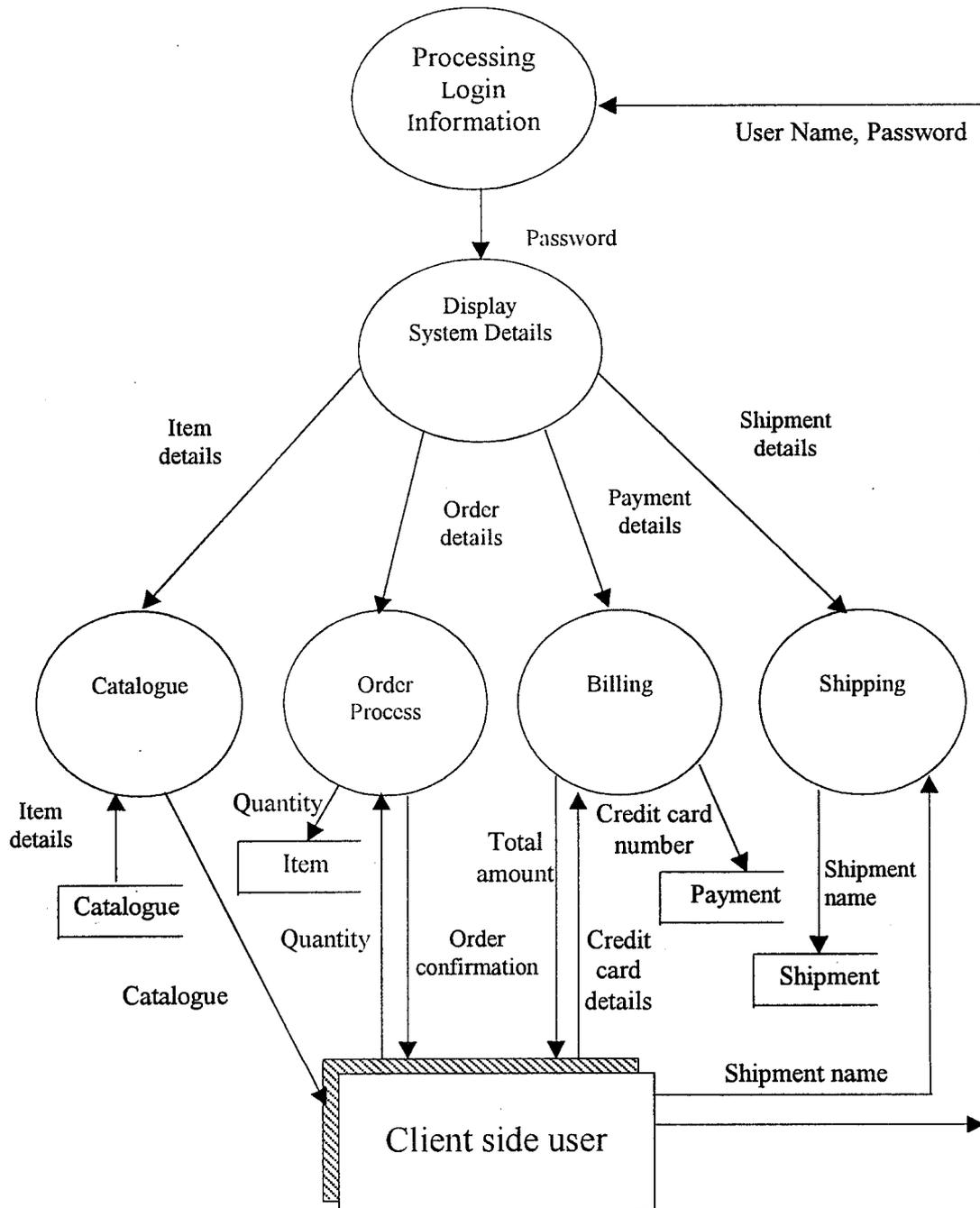
Once the user enters the user id and password, the system provides the user with the list of products produced by the organization.

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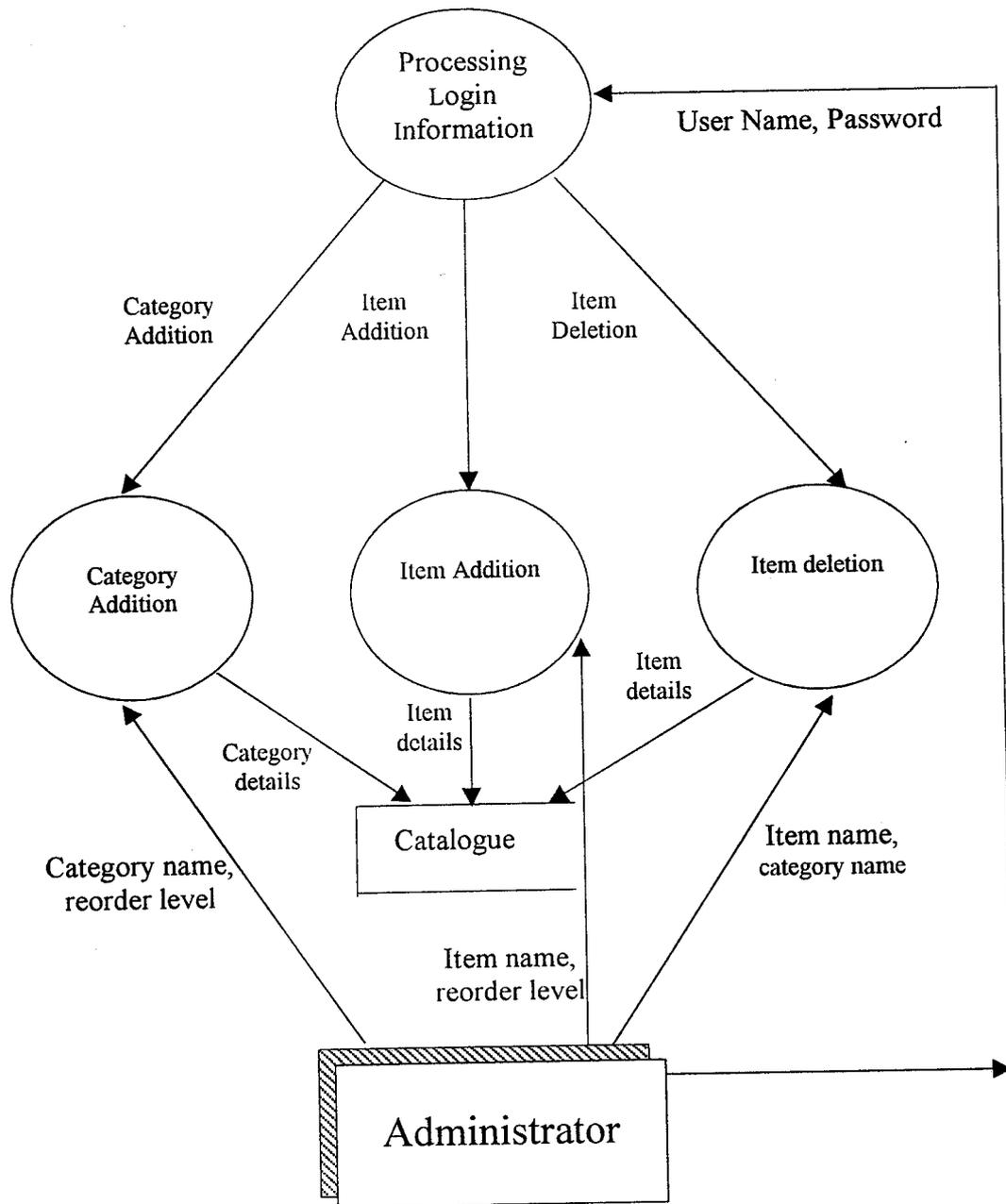
User is allowed to choose the products of his own choice. As the user chooses the products, the ordered products are added to the shopping cart. In the shopping cart user is allowed to delete the ordered products or choose new products. Once the final choice of ordering is completed, order confirmation is given to the user after which payment and shipping of the products take place. The total amount is calculated based on the quantity ordered and the unit price. In billing information total cost is displayed to the customer and he is asked to enter the credit card number and to choose the roadways transport available. Based on the roadways transport selected by the user shipment is done.

The user at the administration side is provided with user-id and password. The administration side functions include the maintenance of all the data in transit. The administrator is allowed to add new item, to add new category and to delete a particular item. Two types of reports namely Transaction report and Product report are produced by the user at the administration side based on the transactions made by the customers within the given date and the products transacted respectively.

---



1. DATA FLOW DIAGRAM FOR CLIENT SIDE



2. DATA FLOW DIAGRAM FOR ADMINISTRATOR SIDE

# *System Implementation & Testing*

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## **5. SYSTEM IMPLEMENTATION & TESTING**

### **5.1 SYSTEM IMPLEMENTATION**

In implementation the theoretical design is turned in to a working system and then to monitor the operation of the system to ensure that it continues to work efficiently and effectively.

It involves careful planning, investigation of the current system and it's constraints on implementation. The system will be implemented only after the thorough test is done on each of its subsystem and checking for, whether it is working according to the specification.

Implementation consists of

- Necessary changes were made to this system as described by the users.
  - Developed package was tested using local machine as server and also with real server.
  - All the errors were corrected.
  - Hardware and software utilities were installed.
-

Since “Web Order Purchase And Process System” consists of several modules. The modules alone cannot be implemented individually. All the other modules also have to be developed and to be integrated for the successful implementation.

---

## **5.2 SYSTEM TESTING**

The objective of system testing is to devise procedures to define strategies for testing a software system in an attempt to detect errors/ bugs that may be present.

The test case design methods applied includes

- Black box Testing

### **BLACK BOX TESTING**

Using this technique incorrect and missing functions were corrected. Interfacing errors, initialization errors and termination errors were also found and corrected using this technique.

Sample errors encountered:

The termination errors encountered includes improper closing of framesets and punctuation error.

The interfacing errors encountered were improper path setting for reference files. The above detected errors were corrected.

---

The other testing methods applied to the project includes

- Unit Testing
- Link Testing

## **UNIT TESTING**

For every unit the inputs required for initiating the execution of the program was tested, and the expected processing on the input was also tested to ensure the expected outputs specified.

The paths to be chosen during certain conditions encountered while executing the program were also checked which includes the responses that should be obtained on pressing invalid key.

## **LINK TESTING**

In link testing every unit is linked and the links were tested. Further the client module and admin module links were also tested.

The errors encountered in this testing includes the reference file links And these errors were rectified and finally the system was tested with the test data and no errors were detected.

---

*Conclusion*

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## **6. CONCLUSION**

The system provides provision for both New user as well as Registered user. Any user who wishes to do business with the organization is allowed to choose the User Name & Password. Every action performed by the user on the client side is acknowledged by confirmation. The whole system has been designed in an easily understandable point & click interface way. The user has been provided with the provision to view the **Product** details.

The system is designed in such an extendable fashion to incorporate the future changes into the system easily. The various user-friendly features are introduced in this project. The system is developed according to the requirements specified by the organization. All the dynamic links to other pages are generated and are tested with the actual system. And the application can be run in any commonly found web browsers.

The product was tested with the user requirements and verified for the validity. The objectives claimed have been met. Needed Documents are generated and adequate documentation has been provided for maintenance and further enhancements. Limitation of the system is that it does not provide search facility for the user to find details of particular item.

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*Scope For Further Development*

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## **7. SCOPE FOR FUTURE DEVELOPMENT**

The project work entitled “Web Order Purchase and Process System” is a software for online shopping. Since it is an Internet based project, modifications and updations can be done easily. At any point of time HTML pages can be attached with hyper links to the existing page. Mailing system, search by category and security features can be included.

Further changes could be made by analysing the user feedbacks.

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5. Elias M. Awad, **SYSTEM ANALYSIS AND DESIGN**, Galgotia Publications 1998.

## **WEBSITES**

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

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

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

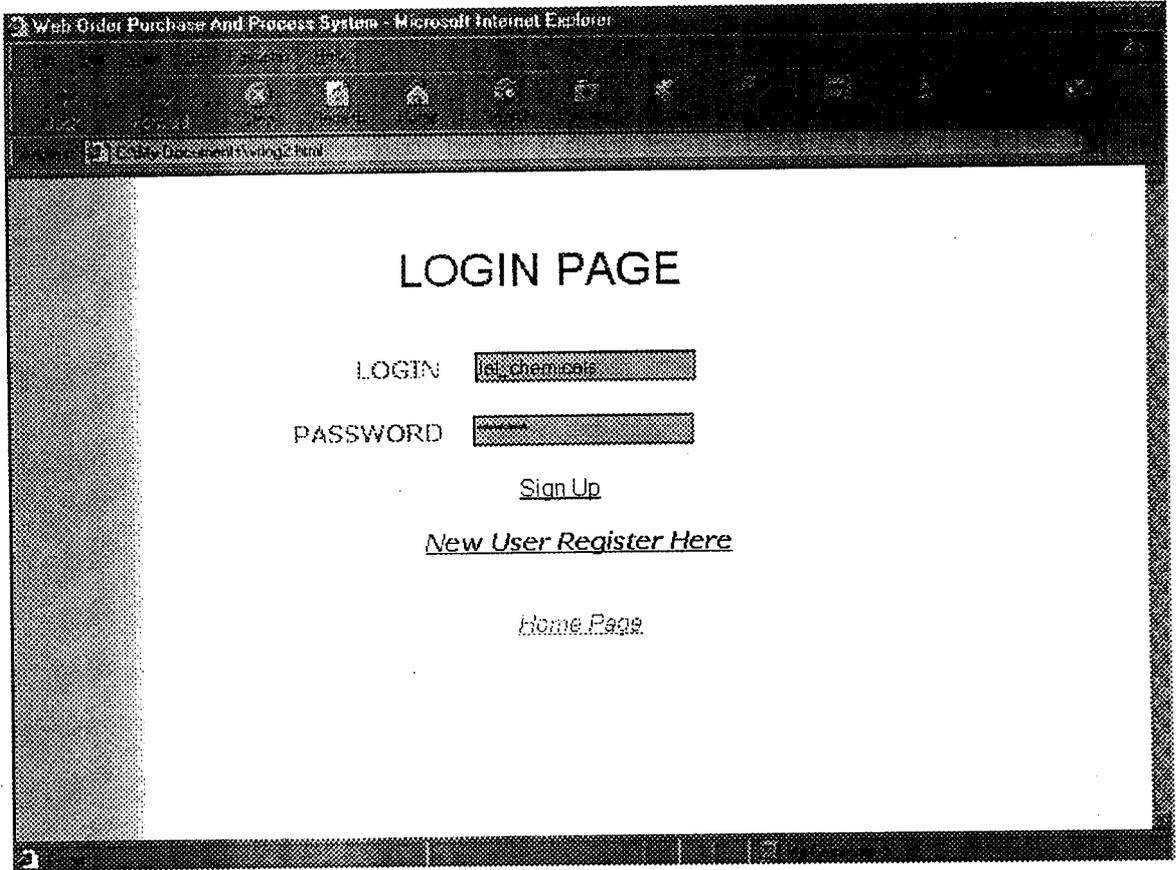
[www.metacrawler.com](http://www.metacrawler.com)

*Screens*

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*Appendix*

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# LOGIN PAGE

LOGIN

PASSWORD

[Sign Up](#)

[New User Register Here](#)

[Home Page](#)

Web Order Purchase And Process System - Microsoft Internet Explorer

FILE DOCUMENT HISTORY

## REGISTER HERE

NAME	<input type="text" value="Avin Lal"/>
AGE	<input type="text" value="40"/>
ADDRESS	<input type="text" value="251 Crocker Street&lt;br/&gt;Gainesville"/>
E-MAIL	<input type="text" value="a.lal@chemfab.com"/>
PHONE(res)	<input type="text" value="817-450"/>
COMPANY	<input type="text" value="LA Diamond Co"/>
PHONE(off)	<input type="text" value="817-480"/>
CHOOSE LOGIN-ID	<input type="text" value="lal_chemfab"/>
PASSWORD	<input type="password"/>
RE-TYPE PASSWORD	<input type="password"/>

[Login Page](#)

Web Order Purchase And Process System - Microsoft Internet Explorer

LIST OF PRODUCTS

Item Code	Category	Item Name	Unit Price	<input type="checkbox"/> >
001	Acids	Acetic Acid Glacial	1200	<input type="checkbox"/> >
002	Acids	Acetic Acid 56%	350	<input type="checkbox"/> >
003	Acids	Boric Acid	990	<input type="checkbox"/> >
004	Acids	Hydrochloric Acid	1050	<input type="checkbox"/> >
005	Acids	HydroFluoric Acid	760	<input type="checkbox"/> >
006	Salts	Sodium Chloride	500	<input type="checkbox"/> >
007	Salts	Ammonium Nitrate	950	<input type="checkbox"/> >
008	Salts	Ammonium Chloride	750	<input type="checkbox"/> >
009	Solvents	Xylene	450	<input type="checkbox"/> >
010	Solvents	Benzene	680	<input type="checkbox"/> >
011	Solvents	Toluene	1500	<input type="checkbox"/> >

To Add Item in the Cart, Click the Check box and press Add Button.

[Add Selected Items To Cart](#)

Web Order Purchase and Process System - Microsoft Internet Explorer

Shopping Cart

To Delete an Item, Uncheck the item and Press Order Now Button

LIST OF PRODUCTS

Item Code	Category	Item Name	Unit Price	Checked
001	Acids	Acetic Acid Glacial	1200	<input checked="" type="checkbox"/> >
002	Acids	Acetic Acid 56%	850	<input checked="" type="checkbox"/> >
004	Acids	Hydrochloric Acid	1050	<input checked="" type="checkbox"/> >
005	Acids	HydroFluoric Acid	760	<input checked="" type="checkbox"/> >
006	Salts	Sodium Chloride	500	<input checked="" type="checkbox"/> >
007	Salts	Ammonium Nitrate	950	<input checked="" type="checkbox"/> >
008	Salts	Ammonium Chloride	750	<input checked="" type="checkbox"/> >

Back  
Confirm Order

## Order Confirmation

Enter the Quantity You Want and Press Confirm Order Button

Item Code	Category	Item Name	Unit Price	Quantity	Total Price
001	Acids	Acetic Acid Glacial	1200	100	120000
002	Acids	Acetic Acid 56%	850	5	4250
004	Acids	Hydrochloric Acid	1050	10	10500
005	Acids	Hydrofluoric Acid	750	100	75000
006	Salts	Sodium Chloride	500	180	90000
007	Salts	Ammonium Nitrate	950	200	190000
008	Salts	Ammonium Chloride	750	100	75000
Total Cost					570750

Web Order And Purchase And Process System - Microsoft Internet Explorer

Home Back Forward Stop Refresh

http://www.abc.com/Order/Checkout.asp

### BILLING INFORMATION

Your total amount is 570750

Credit Card Type

Credit Card Number

Expires on

### SHIPPING INFORMATION

Name

Address 234, Godown Street,  
Chennai-78.

Submit

Web Order Purchase And Process System - Microsoft Internet Explorer

http://www.chemed.com/

Your Order Is Confirmed,

*Your Order ID is 789. Please Make a Note of it for future references Your items will reach you within a week.*

Item Code	Category	Item Name	Unit Price	Quantity	Total Price
001	Acids	Acetic Acid Glacial	1200	100	120000
002	Acids	Acetic Acid 56%	850	5	4250
004	Acids	Hydrochloric Acid	1050	10	10500
005	Acids	HydroFluoric Acid	760	100	76000
006	Salts	Sodium Chloride	500	190	95000
007	Salts	Ammonium Nitrate	950	200	190000
008	Salts	Ammonium Chloride	750	100	75000
Total Cost:					570750

[Back](#)  
[Sign Out](#)   [Feed Back](#)

Web Order Purchase And Process System - Microsoft Internet Explorer

Feed Back

What kind of comment would you like to send?

Complaint  Problem  Suggestion

Enter your comments in the space provided below:

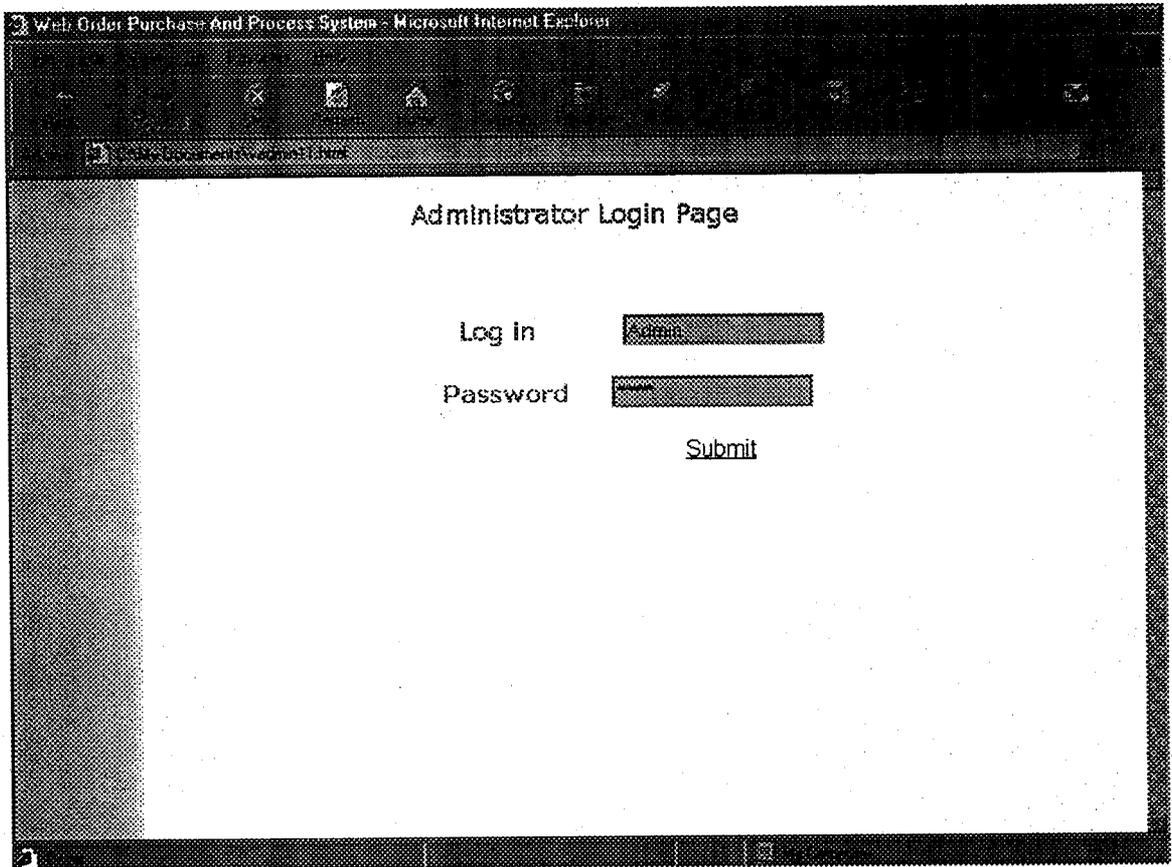
Tell us how to get in touch with you:

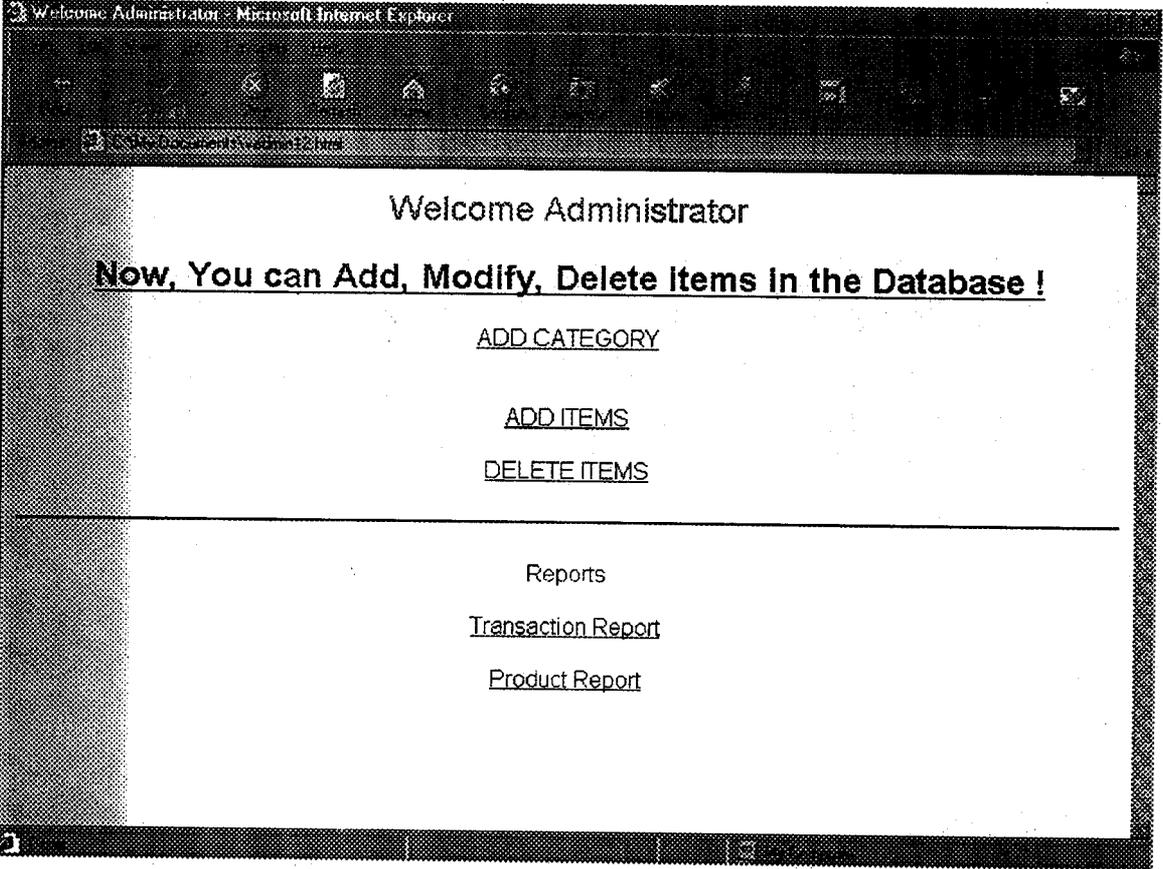
Name

E-mail

Tel

[Sign out](#)





Welcome Administrator

**Now, You can Add, Modify, Delete Items In the Database !**

ADD CATEGORY

ADD ITEMS

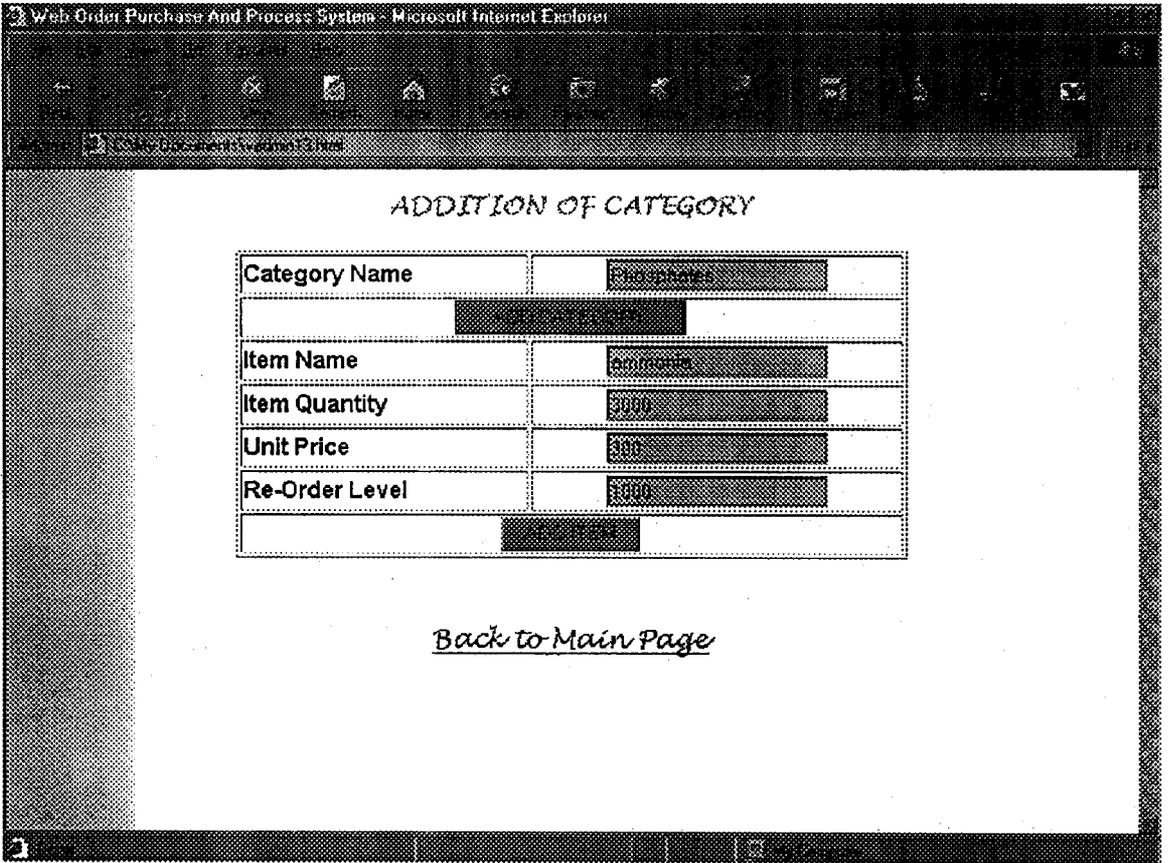
DELETE ITEMS

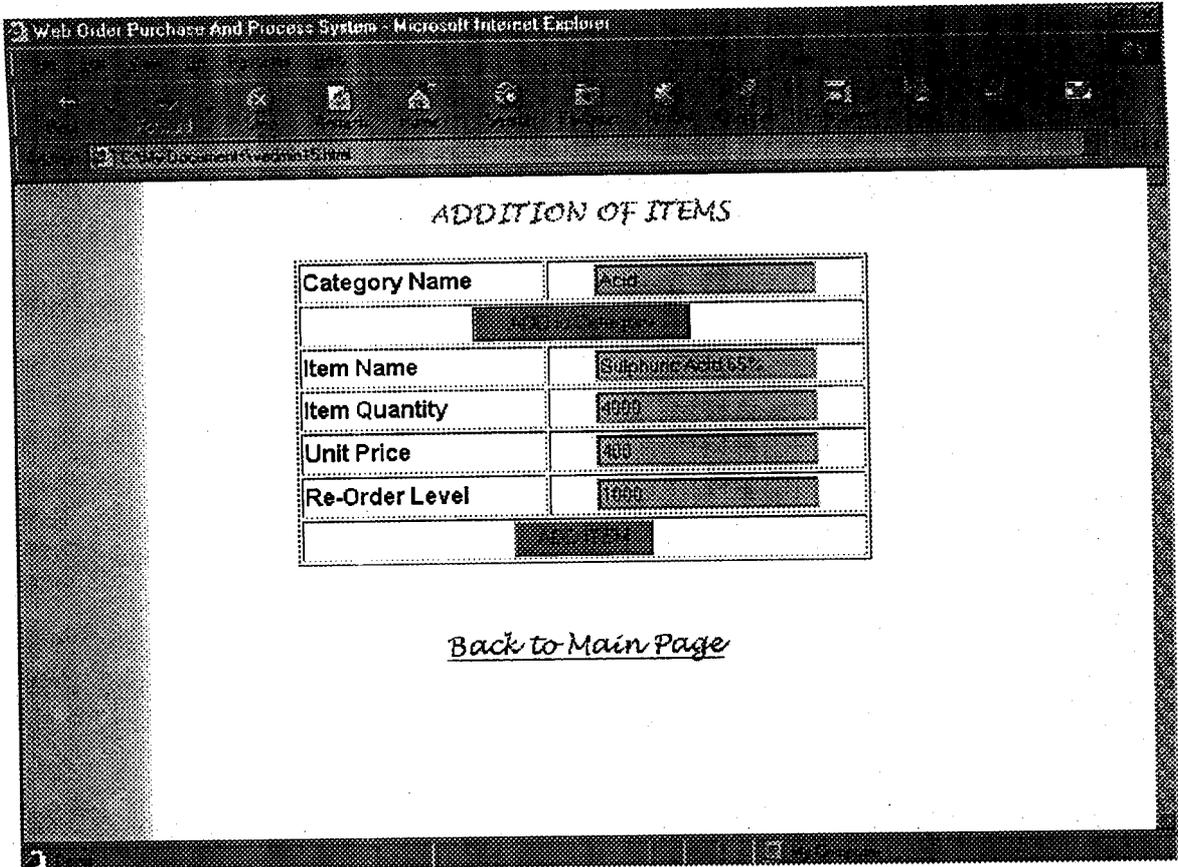
---

Reports

Transaction Report

Product Report

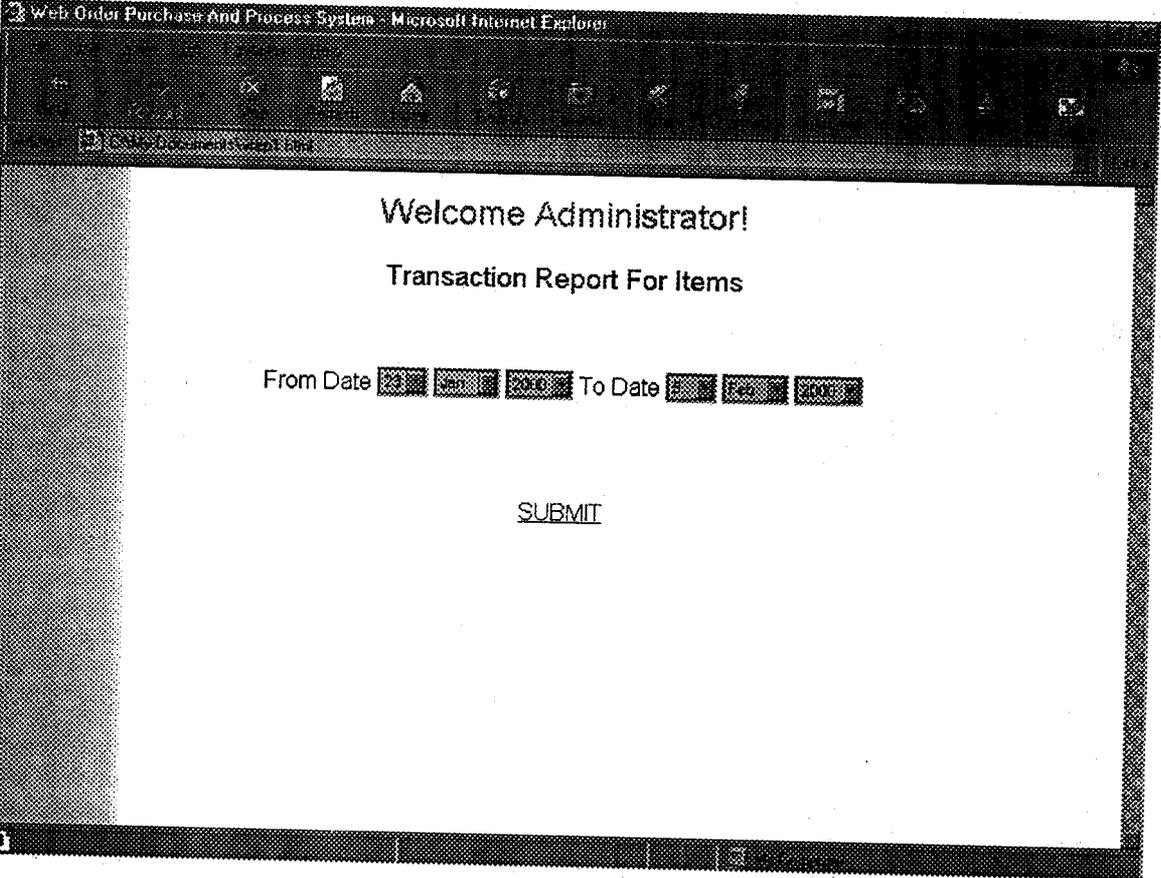




DELETION OF ITEMS

Item Name	<input type="text" value="SuppliesAdd"/>
Category Name	<input type="text" value="Add"/>
	<input type="button" value="Delete"/>

[Back to Main Page](#)



Welcome Administrator!

Transaction Report For Items

From Date    To Date

SUBMIT

Web Order Purchase and Process System - Microsoft Internet Explorer

TRANSACTION REPORT

Customer Name	Product Name	Quantity	Total Price	Order Date	Delivered	Order ID
Marshall Dyeings	Hydrochloric Acid	100	105000	23/1/00	1/2/00	756
Sapna Chemicals	Sodium Chloride	900	450000	23/1/00	1/2/00	757
Sapna Chemicals	Sulphuric Acid	1000	100000	23/1/00	1/2/00	758
Sapna Chemicals	Acetone chloride	10	1000	25/1/00	3/2/00	759
Producer Chemicals	Hydrochloric Acid	50	52500	26/1/00	4/2/00	760
Producer Chemicals	Sodium Nitrate	100	5000	27/1/00	5/2/00	761

[Back](#)

Web Order Purchase And Process System - Microsoft Internet Explorer

Product Report

Product Name	Quantity in Stock	Unit Price	ReOrder Level	Category Name
Sulphuric Acid	20000	100	100	Acid
Acetone	2000	900	100	Solvents
Barium Chloride	200	80	100	Salt
Sodium Chloride	10000	100	1000	Salt

[Back](#)