

## **Chapter 1**

# **INTRODUCTION**

Online Shopping is the process whereby customers directly buy the goods, services etc. From a seller interactively in real-time without an intermediary service over the internet. Online Shopping is the process of buying goods and services from merchants who sell on the internet.

Since the emergence of the World Wide Web, merchants have sought to sell their products to people who surf the internet. Shoppers can visit the web stores from the comfort of their homes and shop as they sit in front of the computer. Consumers buy a variety of items from online stores. In fact people can purchase just about anything from companies that provide their products online. Furniture, Electronic appliances, musical instruments, accessories are just few of the hundreds of products customers can buy from an online store.

Many people choose to shopping online because of convenience, it allows you to browse through endless possibilities and even offers merchandise that are unavailable in stores. Additionally, unlike a store, online shopping has friendly customer service representatives, available 24/7 to assist you with locating purchasing and shipping your merchandised product.

## **1.1 Definitions**

### **MYSQL:**

MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various web-based software applications. With its proven performance, reliability, and ease-of-use, MySQL has become the leading database choice for web-based applications, used by high profile web properties including Facebook, Twitter, YouTube, etc.

### **PHP:**

PHP is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. PHP code may be embedded into HTML or HTML5 markup, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server software combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

### **HTML:**

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

**CSS:**

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. CSS is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

**JAVASCRIPT:**

JavaScript is a cross-platform, object-oriented scripting language. It is a small and lightweight language. Inside a host environment (for example, a web browser), JavaScript can be connected to the objects of its environment to provide programmatic control over them. As a multi-paradigm language, JavaScript supports event-driven, functional, and imperative (including object-oriented and prototype-based) programming styles. It has an API for working with text, arrays, dates, regular expressions, and basic manipulation of the DOM, but the language itself does not include any I/O, such as networking, storage, or graphics facilities, relying for these upon the host environment in which it is embedded.

## PROJECT REQUIREMENTS

A Software Requirements Specification (SRS) is a complete description of the behavior of the system to be developed. It includes the functional and nonfunctional requirement for the software to be developed. The functional requirements includes what the software should do and non-functional requirement include the constraint on the design or implementation. Requirements must be measurable, testable, related to identified needs or opportunities, and defined to a level of detail sufficient for the system design.

Software requirement specification will contain states what the software will do. When the software has to do directly perceived by its users – either human users or other software systems. The common understanding between the user and the developer is captured in the requirements document. The writing of software requirement specification reduces development effort, as careful review of the document can reveal omissions, misunderstandings, and inconsistencies early in the development cycle when these problems are easier to correct. The SRS discusses the product but not the project that developed it; hence the SRS serves as a basis for later enhancement of the finished product. The SRS may need to be altered, but it does provide a foundation for continued production evaluation.

### 2.1 Operating Environment:

Our proposed system will work on any system that has the ability to run the latest version of the Google Chrome Browser.

#### 2.1.1 Hardware Requirements

**Table 2.1 Hardware Requirements**

Hardware	Description
Processor	Intel 5GHz,64 bit processor
Ram	2GB
Hard Disk	10GB

#### 2.1.2 Software Requirements

**Table 2.2 Software Requirements**

Software	Description
Operating System	WINDOWS
Programming Language	PHP, JS, HTML, CSS

Web Hosting	APACHE
Database	MYSQL

## 2.2 FUNCTIONAL REQUIREMENTS

These are the statements of services which, system should provide, how the system should react for particular inputs and how the system should behave in particular situations.

They are:-

- System should be accessible from anywhere in the world.
- Should provide easy user interfaces.
- Should provide interface for the customers to check the Home page
- Admin, Customers should have separate account with associated functionalities.
- Should integrate almost all the customers available in the admin .
- System should provide interface for the Admin to view/add/remove products .
- System should provide interface for the Admin to view orders made by customers .
- Should provide interface for the admin to manage and keep the system running.

## 2.3 Non Functional Requirements

### Accessibility:

Accessibility can be viewed as the “ability to access” and benefit from a system. Help text for the modules is provided wherever necessary, which guides the user into being able to access the functionalities of the modules.

### Availability :

These are the statements of services which, system should provide, how the system should react for particular inputs and how the system should behave in particular situations. The modules are available to the users at all times.

### Compatibility:

As the system requires just the latest Google Chrome Browser, so it can be run on any operating system.

### Performance:

Since the web application does not require any critical procedure, the system performance only depends on the server’s capacity to serve the client(s).

### Reliability:

Reliability is the ability of the system to perform and maintain its functions in routine, hostile and unexpected circumstances.

### Portability:

Since the app just requires latest Chrome browser

### Usability :

A system like the one proposed in this project is very helpful for Online Shopping .

### Security:

Since the web app can be accessed by only the authorized users and since each of the user type has a different level of access, the system is secure.

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**Chapter 3**

## **Literature Survey**

### **Existing System:**

In the existing system all transactions, dealings of products, purchasing of products were done manually which is time consuming. Reports are prepared manually as and when needed. Maintaining of reports is very tedious task. To buy any product, the user has to collect information about it either by visiting the shop or asking people which is better one. There is no computer system for handling payments. All calculations are performed manually which may not be accurate always. Maintaining the record is really a tedious task.

In order to overcome the demerits mentioned above, E-commerce websites, or better known as online shopping came into existence. This is a fast gaining ground as it is an accepted and a used business paradigm. More and more business houses are implementing website providing functionality for performing commercial transactions on the web.

### **Proposed System:**

In our project we aim at the implementation of similar kind of ecommerce system, wherein, we look at it through two different perspectives, the admin's view and the customer's view.

The customer, would be able to see all the products displayed in the website, search for any particular product and also see their descriptions. If the user wishes to buy the product, he/she would add them to a cart.

Shopping cart is a very important feature used in E-commerce to assist people making purchases any products online. Shopping cart has been developed to allow business growth larger and faster.

Once the user is done with addition of products to the cart, he could proceed to the checkout page, with different pay-options and obtain the products.

In the project, Admin is the manager who can add and remove products and he/she can also view the feedback provided by the customer in the feedback page and hence work towards any improvement. The Admin would also be able to view the orders made by customers.

## **Chapter 4**

### **Problem Statement**

E-commerce provides an easy way to sell products to a large customer base. However, there is a lot of competition among multiple e-commerce sites. When users land on an e-commerce site, they expect to find what they are looking for quickly and easily.

Also, users are not sure about the brands or the actual products they want to purchase. They have a very broad idea about what they want to buy. Many customers nowadays search for their products on Google rather than visiting specific e-commerce sites. They believe that Google will take them to the e-commerce sites that have their product.

The purpose of any e-commerce website is to help customers narrow down their broad ideas and enable them to finalize the products they want to purchase. For example suppose a customer is need in purchasing a laptop his or her for a laptop should list laptop brands, operating system, processing core, memory and all other features as facets. As the customer selects more and more features or options from the facets provided, the search narrows down to small list of laptops that suits to his or her needs.

## Chapter 5

## System Design

## Schema Table:

**CUSTOMER**

Title	First Name	Last Name	Gender	<u>Email ID</u>	Password	Phone No	Address	City	Country	DOB
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**MANAGER**

<u>User Name</u>	Password
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**ITEMS**

Category	Subcategory	Image	<u>Product Name</u>	Price	Description	Date
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**CATEGORY**

<u>Category ID</u>	Category
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**SUBCATEGORY**

Category ID	Subcategory
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**CART**

Product Name	Quantity	Price
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**FEEDBACK**

Name	Phone No	Email ID	Subcategory	Message
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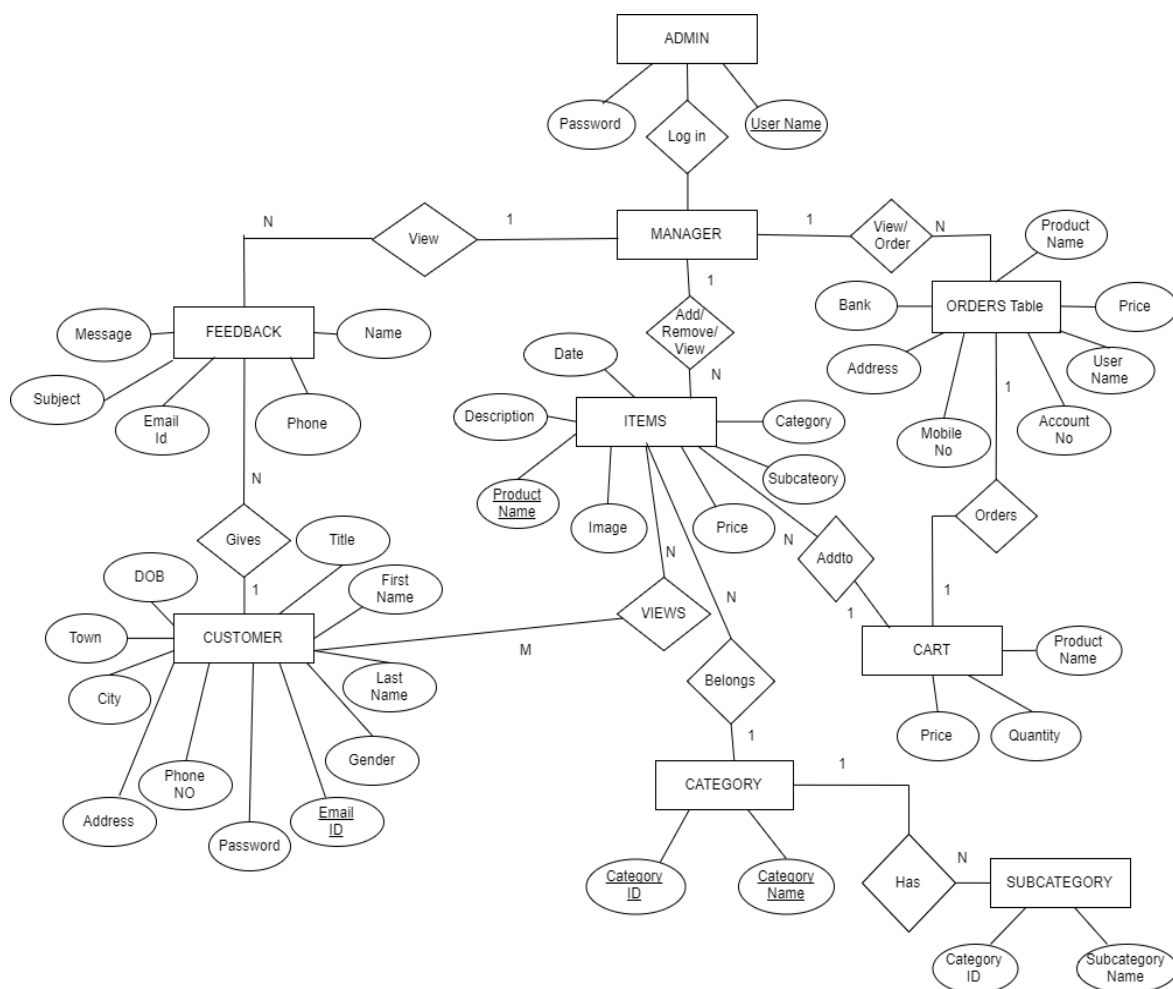
**TRASH**

Category	Subcategory	Image	Product Name	Price	Description	Date
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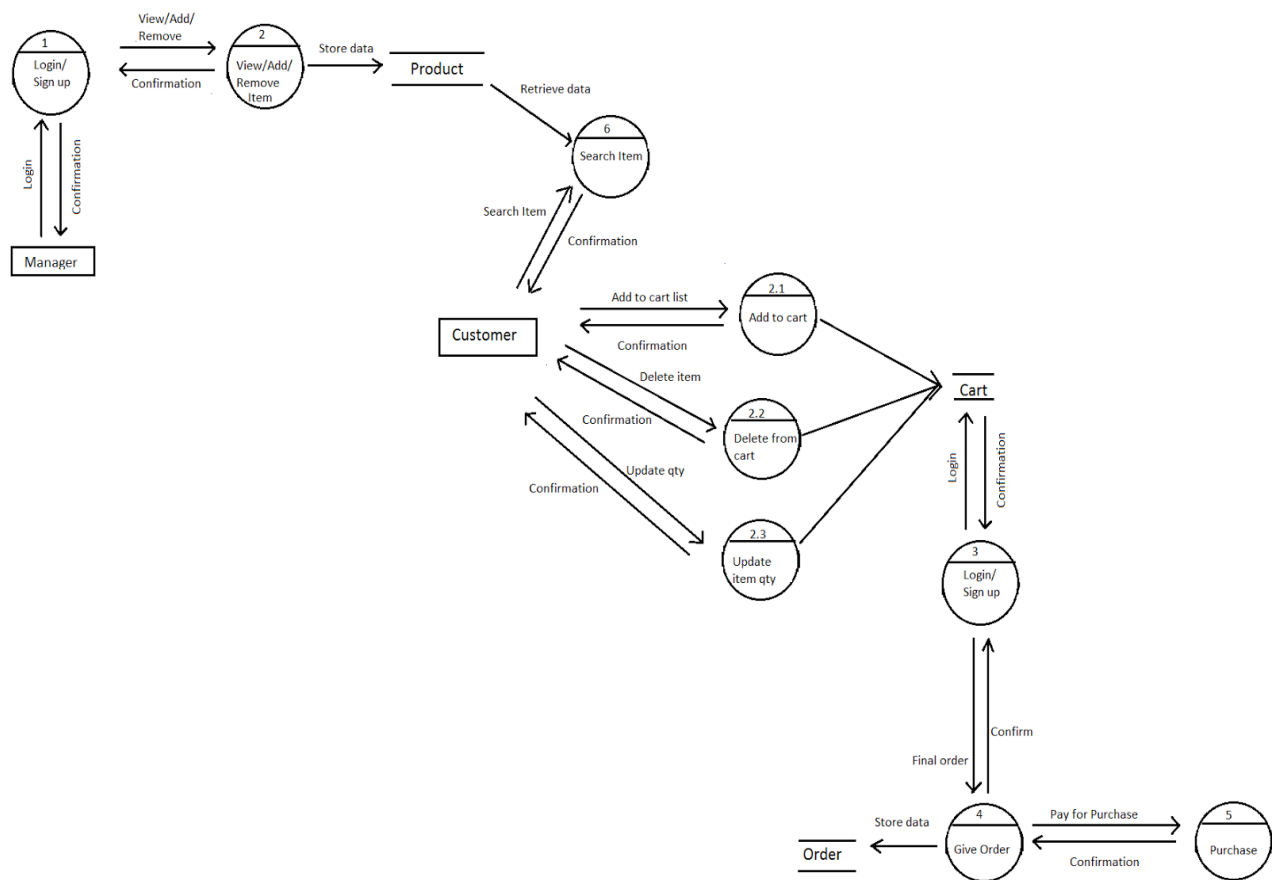
**ORDERS**

Product Name	Price	User Name	Account No	Mobile No	Address	Bank
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Fig: 5.1 Schema Diagram

**E-R Diagram:****Fig: 5.2 E-R Diagram**



**Data Flow Model:****Fig: 5.3 Data-Flow Diagram**

## 5.4 Database Tables

### List of Tables

The following is the list of tables that we are used in the database

**Table 5.1 cart**

Field	Type	Null	Default
ProductName( <i>Primary</i> )	varchar(30)	No	
Quantity	int	Yes	Null
Price	int	Yes	Null

**Table 5.2 customer**

Field	Type	Null	Default
Title	varchar(6)	No	
Fname	varchar(30)	No	
Lname	varchar(30)	No	
Gender	varchar(30)	No	
Email-id( <i>Primary</i> )	varchar(50)	No	
Password	varchar(30)	No	
Phone	varchar(20)	No	
Address	varchar(300)	No	
City	varchar(30)	No	
Country	varchar(30)	No	
DoB	varchar(30)	No	

**Table 5.3 category**

Field	Type	Null	Default
Category-id( <i>Primary</i> )	varchar(30)	No	
Category( <i>Primary</i> )	varchar(30)	No	

**Table 5.4 FeedBack**

Field	Type	Null	Default
Name	varchar(30)	No	
Phone	varchar(30)	No	
Email-id	varchar(30)	No	
Subcategory	varchar(30)	No	
Message	varchar(30)	No	

**Table 5.5 Admin**

Field	Type	Null	Default
Name( <i>Primary</i> )	varchar(30)	No	
Password	varchar(30)	No	

**Table 5.6 Items**

Field	Type	Null	Default
Category	varchar(40)	No	
Subcategory	varchar(40)	No	

Image	varchar(30)	No	
ItemName	varchar(30)	No	
Price	varchar(30)	No	
Description	varchar(300)	No	
Date	varchar(30)	No	

**Table 5.9 SubCategory**

Field	Type	Null	Default
Category-id	varchar(30)	No	
Subcategory	varchar(50)	No	

**Table 5.7 Orders**

Field	Type	Null	Default
ItemName	varchar(30)	No	
ItemPrice	varchar(30)	No	
UserName	varchar(30)	No	
Account-No	varchar(30)	No	
Mobile-no	varchar(30)	No	
Address	varchar(300)	No	
Bank	varchar(30)	No	
City	varchar(30)	No	
Order-No	varchar(30)	No	

**Table 5.8 Register**

Field	Type	Null	Default
Title	varchar(6)	No	
FirstName	varchar(30)	No	
LastName	varchar(30)	No	
Gender	varchar(30)	No	
Email-id( <i>Primary</i> )	varchar(50)	No	
Password	varchar(30)	No	
Phone-No	varchar(20)	No	
Address	varchar(300)	No	
City	varchar(30)	No	
Country	varchar(30)	No	
Date of Birth	varchar(30)	No	

**Table 5.10 Trash**

Field	Type	Null	Default
Category	varchar(50)		
Subcategory	varchar(50)		
Image	varchar(60)		

ItemName	varchar(30)		
Price	varchar(30)		
Description	varchar(300)		
Date	varchar(30)		

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**Chapter 6****IMPLEMENTATION**

The term implementation has different meanings, ranging from the conversion of a basic application to a compatible replacement of a computer system. Implementation is used here to mean the process of converting a new or revised system into an operational one. During the implementation stage we convert the detailed code in a programming language. If the implementation stage is not carefully planned and controlled, it can cause great chaos. Thus it can be considered to be the most crucial stage in achieving the user confidence that the new system will work effectively

**6.1 Programming Language Selection**

We have selected PHP as the Programming Language for the implementation of the system. The advantages of using PHP are as follows:

**Easy:**

This server side scripting language is extremely easy to learn, as compared to other languages. Also, if you are familiar with the syntax of C or Perl, you will learn PHP easily and quickly; all thanks to easy to understand syntax!

**Control:**

While other languages need long scripts, PHP can do the same work in a few lines of code; having the maximum control over the websites. Also, whenever you want to make changes, you can edit it easily.

**Cost efficient:**

As you know, PHP is open source, it is free of cost. You need not buy expensive software for it. Your website will be developed in the minimal cost.

**Efficient:**

As you know you can enhance the performance of the website built in PHP, as it is scalable when writing the code as well as reliable too when you need to deal with a lot of web pages.

**Access to support:**

As PHP is being used by a huge number of people, a large community is formed. So, you need not worry if you get stuck somewhere. You will easily get the support from them.

**Platform independent:**

Whether it is Windows, MacOS, Linux or UNIX; it supports all the major web browsers.

**Supports all servers:**

PHP also supports all the major web servers; be it Apache or Microsoft IIS. It also supports Netscape and personal web server.

**Speedy:**

PHP uses its own memory, so the workload of the server and loading time gets reduced automatically, which results into the faster processing speed. So, it reduces the development time when it comes to the web apps like eCommerce or CRM.

**Secured:**

It is one of the most secured way of developing websites and web applications; as it has got a security layer to protect against viruses and threats.

**Proven and trusted:**

As it has been used for over 2 decades by millions of people, its capabilities have been tested and proven and thus trusted by most developers.

**6.2 System Modules:**

We divide this complete system into two modules: *Admin* and *Customer*. These modules are further divided into sub-modules.

The *Admin* module is responsible for view/addition/deletion of products. He/she can also view the orders and feedback provided by customer.

The *Customer* module is further divided into sub modules like Product view, Cart, Login, Signup and Order submission.

**6.3 Triggers in MySQL**

The MySQL trigger is a database object that is associated with a table. It will be activated when a defined action is executed for the table. The trigger can be executed when you run one of the following MySQL statements on the table: *INSERT*, *UPDATE* and *DELETE* and it can be invoked before or after the event.. For example, rows can be inserted by INSERT or LOAD DATA statements, and an insert trigger activates for each inserted row. A trigger can be set to activate either before or after the trigger event. For example, you can have a trigger activate before each row that is inserted into a table or after each row that is updated.

The four main types of triggers are:

- 1.Row Level Trigger: This gets executed before or after *any column value of a row* changes
- 2.Column Level Trigger: This gets executed before or after the *specified column* changes
- 3.For Each Row Type: This trigger gets executed once for each row of the result set affected by an insert/update/delete
- 4.For Each Statement Type: This trigger gets executed only once for the entire result set, but also fires each time the statement is executed.

In our project we have used trigger to execute a stored procedure. The *orders* table is updated when the user makes an order, and hence the cart is to be emptied at the same time. We use triggers to execute a stored procedure that empties the *cart* table when the user submits the order.



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Code snippet:

```
create trigger DeleteFromCart after insert on order for each row
begin
call Procedure1();
end;
```

#### Advantages of trigger:

- Triggers can be used as an alternative method for implementing referential integrity constraints.
- It controls on which updates are allowed in a database
- Triggers are used for calling stored procedures.
- When a change happens in a database, a trigger can adjust the change to the entire database.
- By using triggers, business rules and transactions are easy to store in database and can be used consistently even if there are future updates to the database.

#### Disadvantages of trigger:

Programmers don't have full control: Since business rules are hidden, programmers don't have full control over the database. BY this, a program can generate several actions.

- Programmers don't have full control: Since business rules are hidden, programmers don't have full control over the database. BY this, a program can generate several actions.
- Decrease in performance of the database: By the complex nature of the database programs take more time to execute and there can be hidden performance downtimes.
- Increase in complexity: Triggers increase the complexity of a database as they have hard coded rules already implemented.

## 6.4 Stored procedure in MySQL

A stored procedure is a segment of declarative SQL statements stored inside the database catalog. A stored procedure can be invoked by triggers, other stored procedures, and applications such as Java, Python and PHP.

The four characteristics of a procedure are:

- **Language:**For portability purposes; the default value is SQL.
- **Deterministic** : If the procedure always returns the same results, given the same input. This is for replication and logging purposes. The default value is NOT DETERMINISTIC.

- **SQL Security** : At call time, check privileges of the user. INVOKER is the user who calls the procedure. DEFINER is the creator of the procedure. The default value is DEFINER.
- **Comment** : For documentation purposes; the default value is ""

In our project we have used stored procedure to truncate *cart* table on insertion of data into *orders* table. A trigger calls this stored procedure in our project.

*Code Snippet:*

```
create procedure Procedure1( )
```

```
begin
```

```
delete from cart;
```

```
end $
```

( Here : \$-delimiter)

#### **Advantages of stored procedure:**

- MySQL stored procedures are compiled on demand. They help increase the performance of the applications. Once created, stored procedures are compiled and stored in the database. If an application uses a stored procedure multiple times in a single connection, the compiled version is used, otherwise, the stored procedure works like a query.
- Stored procedures help reduce the traffic between application and database server because instead of sending multiple lengthy SQL statements, the application has to send only name and parameters of the stored procedure.
- Stored procedures are reusable and transparent to any applications. Stored procedures expose the database interface to all applications so that developers don't have to develop functions that are already supported in stored procedures.
- Stored procedures are secure. The database administrator can grant appropriate permissions to applications that access stored procedures in the database without giving any permissions on the underlying database tables.

#### **Disadvantages of stored procedure:**

- If you use many stored procedures, the memory usage of every connection that is using those stored procedures will increase substantially. In addition, if you overuse a large number of logical operations inside stored procedures, the CPU usage will also increase because the database server is not well-designed for logical operations.

- Stored procedure's constructs are not designed for developing complex and flexible business logic.
- It is difficult to debug stored procedures. Only a few database management systems allow you to debug stored procedures. Unfortunately, MySQL does not provide facilities for debugging stored procedures.
- It is not easy to develop and maintain stored procedures. Developing and maintaining stored procedures are often required a specialized skill set that not all application developers possess. This may lead to problems in both application development and maintenance phases

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**Chapter 7**

## TESTING

The completion of a system is achieved only after it has been thoroughly tested. Though this gives a feel the project is completed, there cannot be any project without going through out this stage. Hence in this stage it is decided whether the project can undergo the real time environment execution without any breakdowns, therefore a package can be rejected even at this stage. Test techniques include the process of executing a program or application with the intent of finding software bugs (errors or other defects), and verifying that the software product is fit for use.

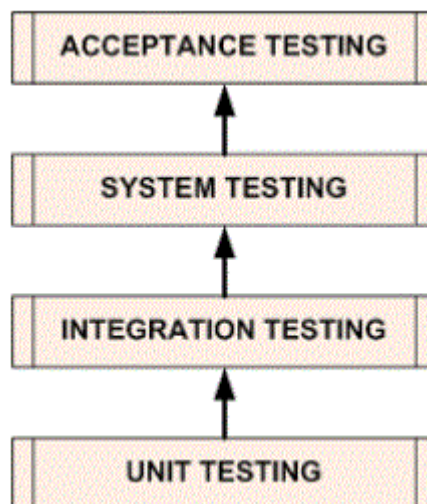
The application developed in this project is realized into two main modules namely:

1. Admin
2. Customer

Each of these modules are composed of smaller sub modules. Each of these sub modules were developed and tested independently. Once the sub modules successfully cleared the test cases, they were integrated to form modules which in turn was integrated to obtain the entire application.

### 7.1 LEVELS OF TESTING

The following are the main levels of testing:



**Fig:.... Levels of testing**

#### 7.1.1 Unit testing:

A level of the software testing process where individual units/components of a software/system are tested. The purpose is to validate that each unit of the software performs as designed. During the implementation of the system each module of the system was tested separately to uncover errors within its boundaries.

### 7.1.2 Integration testing:

Integration is a systematic technique for the constructing the program structure while conducting tests to uncover errors associated with interfacing. The objective is to take unit tested and module and build a program structure that has been dictated by design.

### 7.1.3 System testing:

Testing is a set of activities that can be planned in advance and conducted systematically. The proposed system is tested in parallel with software that consists of its own phases of analysis, implementation, testing and maintenance. Following are the tests conducted on the system

### 7.1.4 Acceptance testing:

The software has been tested with the realistic data given by the client and produced fruitful results. The client satisfying all the requirements specified by them has also developed the software within the time limitation specified. A demonstration has been given to the client and the end user giving all the operational features.

## 7.2 Test Environment

All the testing was done on the latest version of Google Chrome. The system was tested rigorously with various sets of data and also looked for various exceptions and handled them.

## 7.3 Unit Testing of Main Modules

The two main modules in this application are: Admin and Customer. The testing of these modules is described in the following sections.

### 7.3.1 Unit Testing of Admin Module

This is available only to the Admin. We executed the following test cases for testing this module:

Table 7.1: Unit Test Case 1

Test Case ID	Unit Test Case 1
Description	View Products in the database
Input	Specify category and subcategory of the product
Expected output	Tabular column consisting of all the products belonging to the specified category and subcategory
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 2

Test Case ID	Unit Test Case 2
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Description	Add Products into the database
Input	Product Details
Expected output	Notification specifying successful Addition of products
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 3

Test Case ID	Unit Test Case 3
Description	Removal of Products from the database
Input	Select the Product to be deleted
Expected output	Notification specifying successful deletion of products
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 4

Test Case ID	Unit Test Case 4
Description	Obtain orders made by Customers
Input	Button Click
Expected output	Tabular column displaying orders made by customers
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 5

Test Case ID	Unit Test Case 5
Description	View feedback of Customers
Input	Button click
Expected output	Tabular column displaying feedbacks of customers
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

All the above tests were successful. The behavior of this module was as expected.

### 7.3.2 Unit Testing of Customer Module

This is available only to the Customer. We executed the following test cases for testing this module:

Table 7.1: Unit Test Case 6

Test Case ID	Unit Test Case 6
Description	Sign up of Customer
Input	Customer details
Expected output	Notification of successful signup in case of no anomalies. Alert message specifying existence of user account, in case of repeated sign up
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 7

Test Case ID	Unit Test Case 7
Description	View trending Products and its details
Input	Link Click from home page
Expected output	Page denoting detailed description of the trending product
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 8

Test Case ID	Unit Test Case 8
Description	View various Categories, Subcategories and their products
Input	Button Click
Expected output	Product pages pertaining to particular category and subcategory

Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 9

Test Case ID	Unit Test Case 9
Description	Detailed Description of particular product
Input	Button click
Expected output	Product page having its detailed description
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 10

Test Case ID	Unit Test Case 10
Description	Obtain Product page using Search option
Input	Product name
Expected output	Product page having its detailed description
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 11

Test Case ID	Unit Test Case 11
Description	Addition of products to cart
Input	Specifying quantity and Button click
Expected output	Addition to cart with specified quantity
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 12



Test Case ID	Unit Test Case 12
Description	Alter the quantity of products in cart
Input	Specifying quantity and Button click
Expected output	Alert message denoting successful updation of quantity
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 13

Test Case ID	Unit Test Case 13
Description	Removal of products from cart
Input	Check box
Expected output	Alert message denoting successful deletion of product from cart
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 14

Test Case ID	Unit Test Case 14
Description	Feedback
Input	Details pertaining to feedback
Expected output	Message denoting successful input of feedback
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 15

Test Case ID	Unit Test Case 15
Description	Login on checkout from cart page
Input	Button Click and Login details
Expected output	Message denoting successful login in case of proper input

	Alert message in case of improper input
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

Table 7.1: Unit Test Case 16

Test Case ID	Unit Test Case 16
Description	View Checkout page and order number on successful order submission
Input	Details pertaining to ordering products and Button click
Expected output	Message denoting successful order submission along with order number
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

All the above tests were successful. The behavior of this module was as expected.

### Trigger Implementation:

Table 7.1: Unit Test Case 17

Test Case ID	Unit Test Case 17
Description	Trigger Action on INSERT into ORDER table
Input	Order details submission
Expected output	Updation of order table and trigger action resulting in CART table being emptied
Actual Result/Remarks	Got the expected output
Passed (?)	Yes

## Chapter 8

## RESULTS



Fig.8.1a welcome page

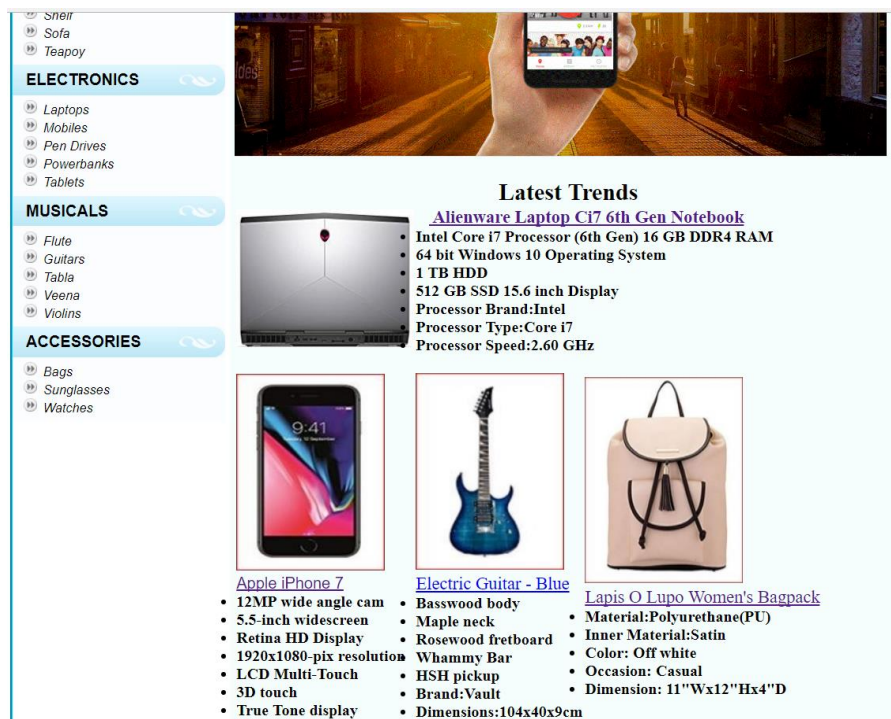


Fig.8.1b welcome page



Fig 8.2 Products Page



Fig8.4 Details page



Fig 8.5 Cart page

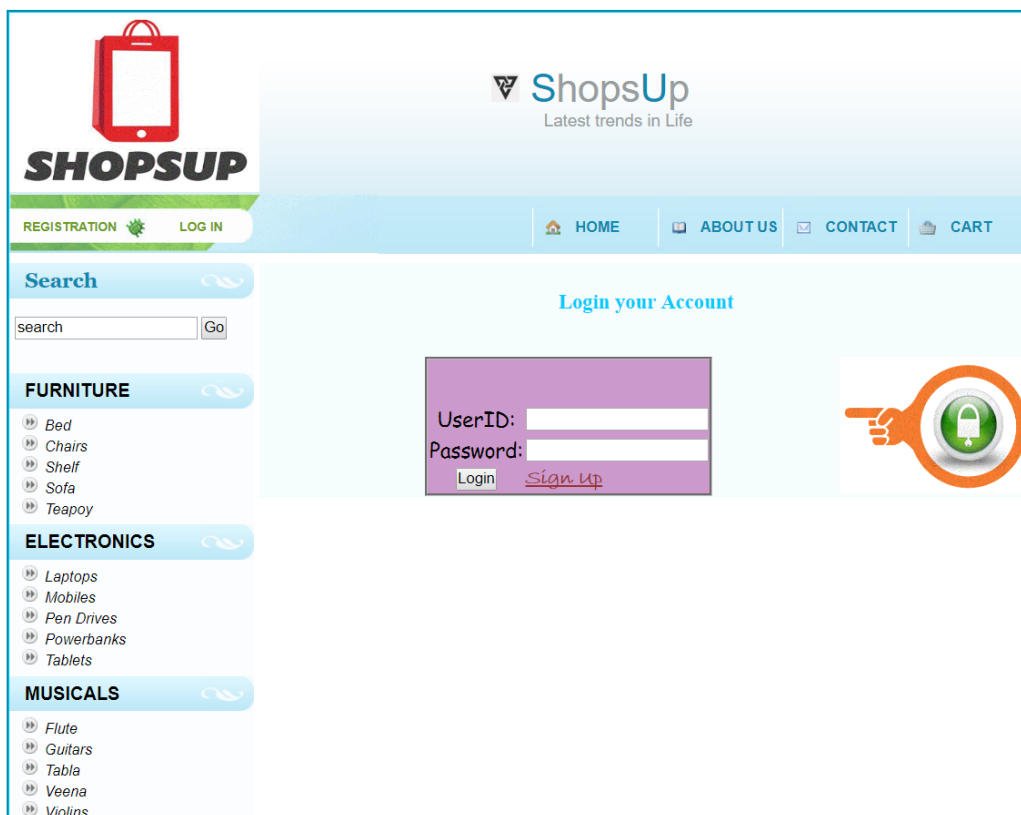


Fig.8.6 Login page

Welcome Ms. Priya

Order Form

Product Names:	Dell Vostro 3468 Laptop
Price:	35880
User Name:	Priya
Account No:	12345
Mobile no:	07204253729
Address:	#253,#3rd cross,Whitefield
Bank:	SBI
City:	Bangalore
<input type="button" value="send"/>	

Fig:8.7 Order form

ThankYou for Shopping With Us

Your order is sent successfully!!!

Your order no. is:462

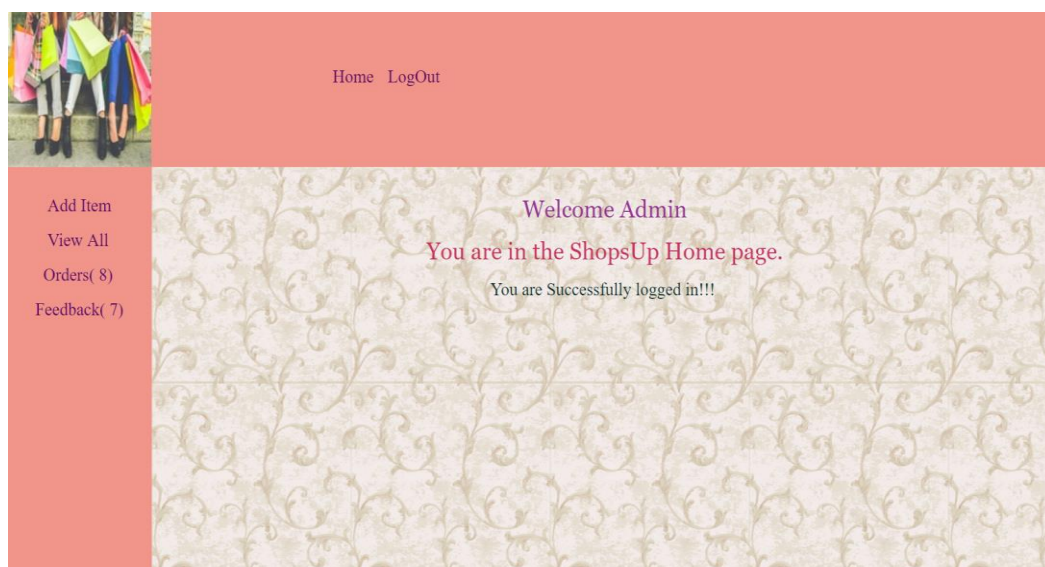


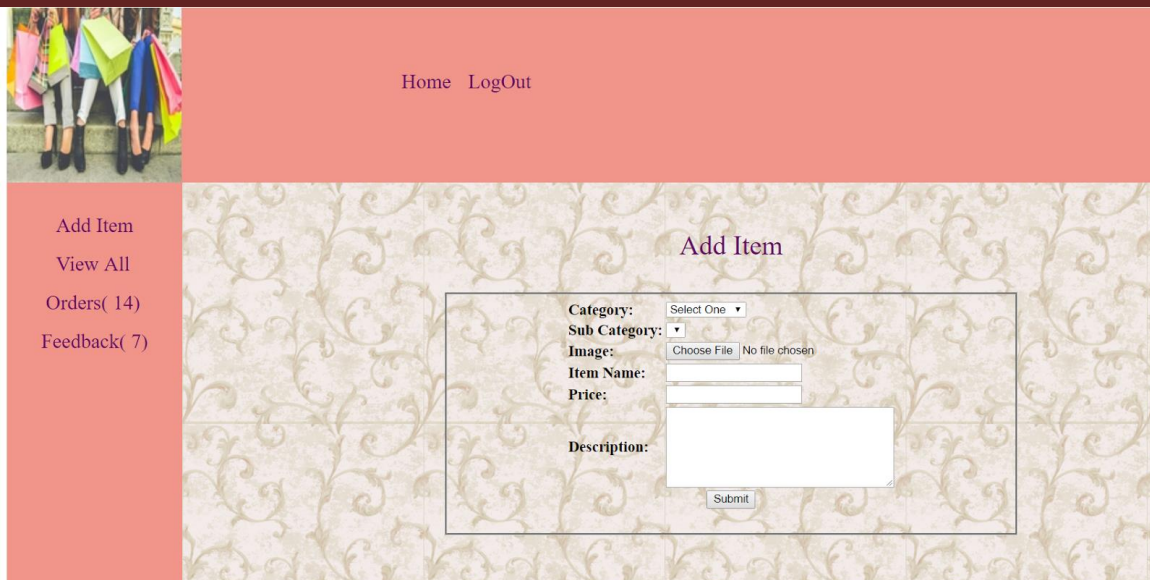
Fig:8.8 Order success





The image shows a login form titled "ADMINISTRATOR LOGIN" centered on a wood-grain background. The form is a white rectangle containing two input fields: "UserName:" and "Password:". Below these fields is a "Login" button. The form is enclosed in a thin black border.

**Fig:8.9 Admin login****Fig:8.10 Admin Home page**



The screenshot shows the 'Add Item' page of an online shopping management system. The page has a red header with 'Home' and 'LogOut' links. A sidebar on the left contains links: 'Add Item', 'View All', 'Orders( 14)', and 'Feedback( 7)'. The main content area has a beige floral background and is titled 'Add Item'. It contains a form with the following fields: 'Category:' with a dropdown menu showing 'Select One'; 'Sub Category:' with a dropdown menu; 'Image:' with a 'Choose File' button and 'No file chosen' text; 'Item Name:' with a text input field; 'Price:' with a text input field; 'Description:' with a large text area; and a 'Submit' button at the bottom.

Fig:8.11 Add Item page



The screenshot shows the 'View products' page of the online shopping management system. The page has a red header with 'Home' and 'LogOut' links. A sidebar on the left contains links: 'Add Item', 'View All', 'Orders( 8)', and 'Feedback( 7)'. The main content area has a beige floral background and displays a list of products in a table format. The table has two columns: 'Item' and 'Description'. The first product is an Alienware Laptop with a price of Rs 189000 and a description: 'Intel Core i7 Processor (6th Gen) 16 GB DDR4 RAM 64 bit Windows 10 Operating System 1 TB HDD 512 GB SSD 15.6 inch Display'. The second product is a Dell Inspiron 15-3567 Laptop with a price of Rs 29590 and a description: '15.6-inch Laptop (Core i3 6th Gen -6006U/4GB /1TB Integrated Graphics) comes with Ubuntu OS'. Both products have a 'Delete' button next to their descriptions.

Item	Description
	<p>Item No:Alienware Laptop Price:Rs 189000 Description:Intel Core i7 Processor (6th Gen) 16 GB DDR4 RAM 64 bit Windows 10 Operating System 1 TB HDD 512 GB SSD 15.6 inch Display</p> <p><input type="checkbox"/> Delete</p>
	<p>Item No:Dell Inspiron 15-3567 Laptop Price:Rs 29590 Description:15.6-inch Laptop (Core i3 6th Gen -6006U/4GB /1TB Integrated Graphics) comes with Ubuntu OS</p> <p><input type="checkbox"/> Delete</p>

Fig:8.12 View products



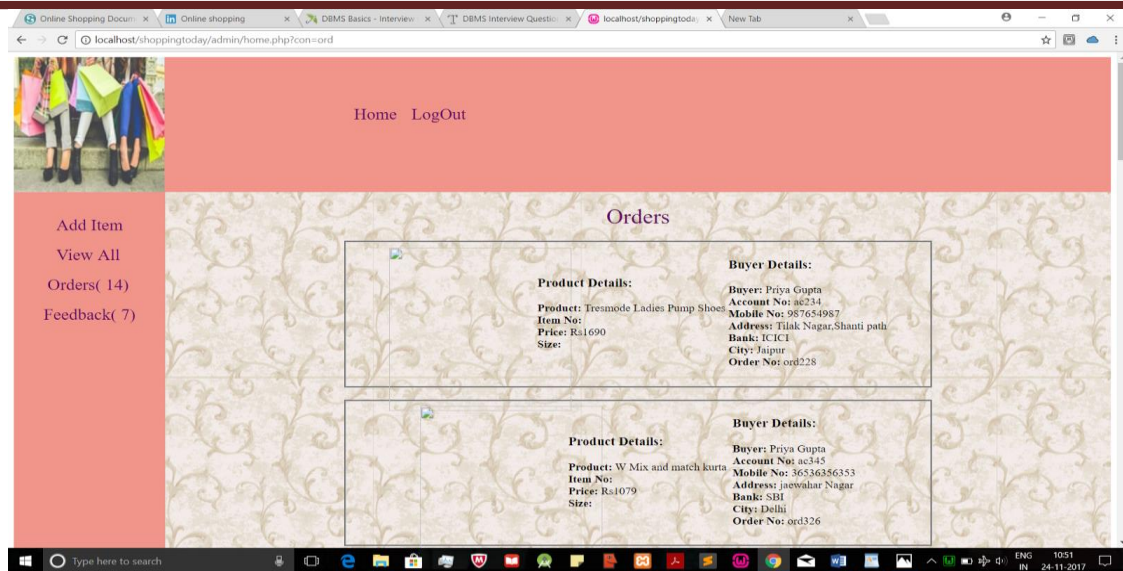


Fig:8.13 Orderview page



Fig:8.14 Feedback View

## Chapter 9

### Conclusion

The Internet has become a major resource in modern business, thus online shopping has gained significance not only from the entrepreneur's but also from the customer's point of view. For the entrepreneur, electronic shopping generates new business opportunities and for the customer, it makes comparative shopping possible. As per a survey, most consumers of online stores are impulsive and usually make a decision to stay on a site within the first few seconds. "Website design is like a shop interior". If the shop looks poor or like hundreds of other shops the customer is most likely to skip to the other site. Hence we have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much as possible.

In this project, the user is provided with an E-commerce website that can be used to buy products online. PHP was the language used to build this application. MYSQL Server was used as back-end database since it is one of the most popular open source databases and it provides fast data access, easy installation and simplicity. A good E-commerce website must accompany cart feature and a good shopping cart design must be accompanied with user-friendly shopping cart application logic. It should be convenient for the customer to view the contents of the cart and to be able to add or remove items from the cart. The shopping cart in this project provides a number of features that are designed to make the customer more comfortable. Another important feature of our project is through the administrator's view of the project wherein he/she would be able to view/add/remove items from the database. The admin will also be able to view the orders made and feedback given by the customers and hence would make efforts to improve the services provided.

#### **Future enhancements:**

- As the system is scalable, more modules can be added as and when required.
- It can be browser independent so that the site can be opened in any browser.
- The admin of the website could be given more functionalities like, looking at a specific customer's profile, the goods that have to be reordered etc.
- Multiple carts can be allowed.
- Network auditing, security etc can be further implemented

Further the system may be utilized in various other type of auditing operations such as workflow based applications.

## REFERENCES

- [1] Database systems Models, Languages, Design and Application Programming, RamezElmasri and Shamkant B. Navathe, 7th Edition, 2017, Pearson.
- [2] Database management systems, Ramakrishnan, and Gehrke, 3rd Edition, 2014, McGraw Hill
- [3] <http://www.php.net>
- [4] <http://www.tutorialspoint.com/php>
- [5] <https://stackoverflow.com>
- [6] <http://www.tutorialspoint.com/php>
- [7] <https://www.tutorialrepublic.com/php-tutorial>
- [7] <https://www.w3schools.com/html/default.asp>
- [8] <https://www.w3schools.com/css/default.asp>
- [9] <https://www.w3schools.com/js/default.asp>

