

ATMIYA UNIVERSITY
RAJKOT



A Report On

ECOMMERCE PLATFORM

Under subject of

MAJOR PROJECT

B.TECH Semester – VII

(Computer Engineering)

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Academic Year

(2022-23)

CANDIDATE'S DECLARATION

We hereby declare that the work presented in this project entitled “**ECOMMERCE PLATFORM**” submitted towards completion of project in **7th Semester** of B. Tech. (Computer Engineering) is an authentic record of our original work carried out under the guidance of “**Prof. NIRALI BORAD**”.

We have not submitted the matter embodied in this project for the award of any other degree.

Semester: 7th

Place: Rajkot

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ATMIYA UNIVERSITY RAJKOT



CERTIFICATE

Date:

This is to certify that the “**ECOMMERCE PLATFORM**” has been carried out by **JOBANPUTRA SHAILEE** under my guidance in fulfillment of the subject Major Project in **COMPUTER ENGINEERING** (7th Semester) of Atmiya University, Rajkot during the academic year 2022-23.

Prof. Nirali Borad
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Prof. Tosal M. Bhalodia
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ATMIYA UNIVERSITY RAJKOT



CERTIFICATE

Date:

This is to certify that the “**ECOMMERCE PLATFORM**” has been carried out by **CHUDASAMA HETVI** under my guidance in fulfillment of the subject Major Project in **COMPUTER ENGINEERING** (7th Semester) of Atmiya University, Rajkot during the academic year 2022-23

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JOBANPUTRA SHAILEE (190002043)

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ABSTRACT

Now a days the life style of the people is different. People feel uncomfortable and time consuming for going crowded markets. So, E-Shopping is a boon as it saves lot of time. Online shopping is a process whereby consumers directly buy goods, services etc. from a seller without an intermediary service over the Internet. Shoppers can visit web stores from the comfort of their house and shop as by sitting in front of the computer. Online stores are usually available 24 hours a day and many consumers have internet access both at work and at home. So it is very convenient for them to shop Online. One of the most enticing factors about online shopping, particularly during holiday season is, it alleviates the need to wait in long lines or search from a store for a particular item. Variety of goods are available in online. So the researcher want to know the preference of the consumers. So fifty respondents were met and data were collected regarding their preference towards shopping online.

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CHAPTER – 1

INTRODUCTION

1.1 Purpose

Convenience

When you shop online, you want to use a store that you are familiar with. Maybe you have this store in your city, or maybe you have invested in it. For example, you trust a CVS store because you get your prescriptions there. You might know about or own some . You will feel comfortable shopping at this store online.

When shopping online, you will not have to plan a trip to your nearest shopping center. All the information is available to you. You can proceed to do shopping within a short period. The process is carried out in a matter of minutes, saving you money and time.

Better prices

You are assured of the best prices online. The completion online is stiff, and many people are looking for ways to offer the best deals to beat the competition. The ability to compare several sellers then decide on the best makes it easy to get the best deals. You can always get the best deals after you choose to go for online shopping.

More variety

You are not restricted to a few varieties when doing shopping online. There are thousands of products from different manufacturers for you to pick the best. It will be easy to locate great deals after you decide to do the shopping online. Many people who offer the products online have several varieties to allow you to choose from.

Easy price comparisons

You can easily compare the prices online then decide to buy from the best. There is no traveling involved that can make your price comparison process hectic. When you compare several sellers, it becomes easy to locate the best.

1.2. Scope

Purchasing and selling products and services over the internet without the need of going physically to the market is what online shopping all about. Online shopping is just like a retail store shopping that we do by going to the market, but it is done through the internet. Online shopping has made shopping painless and added more fun. Online stores offer product description, pictures, comparisons, price and much more. Few examples of these are Amazon.com, ebay.com, framt.com and the benefits of online shopping is that by having direct access to consumer ,the online stores can offer products that cater to the needs of consumer ,cookies can be used for tracking the customer selection over the internet or what is of their interest when they visit the site again . Online shopping makes use of digital technology for managing the flow of information, products, and payment between consumer, site owners and suppliers. Online shopping can be either B2B (business to business) or B2C (business to consumer) .

1.1 Technology and tool

1.Front End Hypertext Markup Language (HTML)

HTML is the standard markup language for creating web pages and web applications, Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web. With Cascading Style

Cascading Style Sheets (CSS)

CSS is a style sheet language used for describing the presentation of a document written in a mark-up language like HTML.CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

2.Back End

PHP

Our main programming technology is PHP. We constantly improve on our architecture to keep up with latest technology and advancements. Our

experienced team is capable of providing customized solutions as well as integrating with any third-party resources

SOL

This is a relational open-source relational database management system (RDBMS). It has easy query structure so user can manipulate data easily. Used to store database for web applications. MySQL is a central component of the widely used LAMP open source web application software stack. LAMP is an acronym for "Linux, Apache, MySQL, Perl/PHP/Python. Free-software-open source projects that require a full-featured database management system often use MySQL.

CHAPTER – 2

Project Management

2.1 Project Planning

Software project plan can be viewed as the following:

1) Within the organization: How the project is to be implemented? What are various constraints (time, cost, staff)? What is market strategy?

2) With respect to the customer: Weekly or timely meetings with the customer with presentation on status reports. Customer's feedback is also taken and further modification and developments are done. Project milestones and deliverables are also presented to the customer.

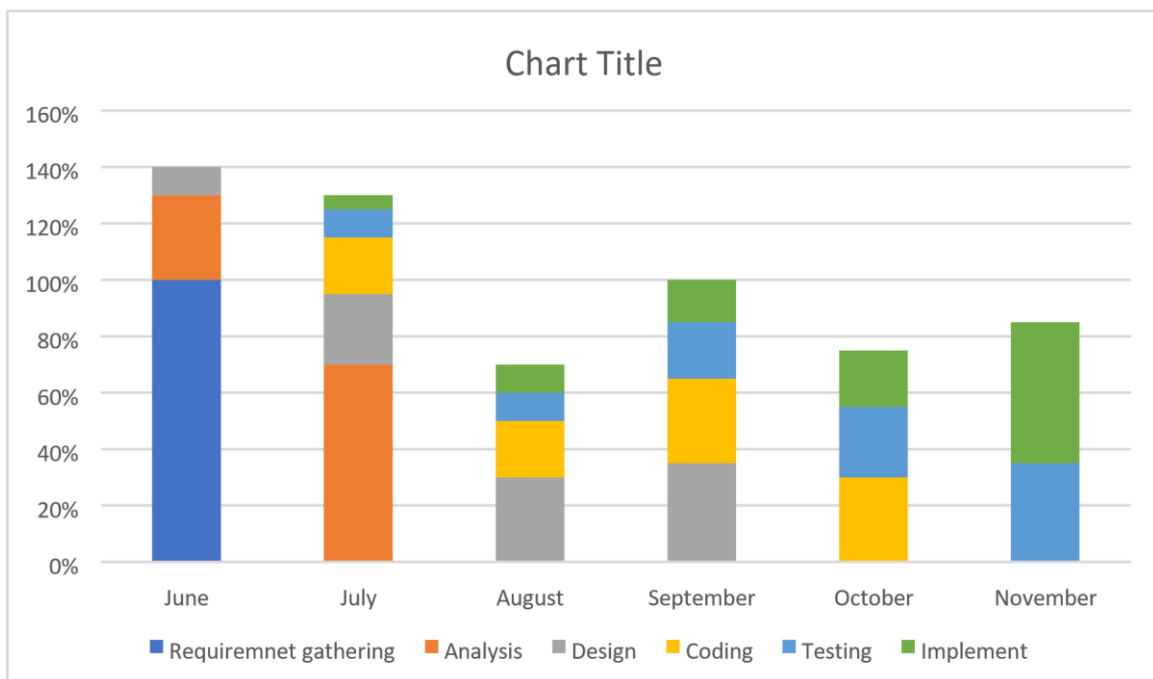
For a successful software project, the following steps can be followed:

- **Select a project** ○ Identifying project's aims and objectives ○ Understanding requirements and specification ○ Methods of analysis, design and implementation ○ Testing techniques ○ Documentation
- **Project milestones and deliverables**
- **Budget allocation** ○ Exceeding limits within control

- **Project Estimates**
 - Cost
 - Time
 - Size of code
 - Duration
- **Resource Allocation**
 - Hardware.
 - Software
 - Previous relevant project information
 - Digital Library
- **Risk Management.**
 - Risk avoidance
 - Risk detection

2.2 Project Scheduling

2.2.1 Char of Scheduling



2.3 Risk Management

2.3.1 Risk Identification

1. Managing the perishable products.
2. Cost of Delivery.
3. Delivery Driver Issues
4. Shortage of clothes

2.3.2 Risk Analysis

1. Functional risk

The functional risk describes that the user can neither check the quality nor the functionality of the product itself when buying online. This sounds totally trivial now, but nevertheless it is an enormous hurdle for visitors of your online shop. No matter if you sell your own products or if you are a reseller. At the end of the day, many of the internet users know how much money and effort is invested in quality campaigns, product photos and marketing per se. Just google "online shopping fail" or "aliexpress fail" and you'll see how far apart the promised can be from the actual product delivered.

2. Personal risk

Personal risk is mainly about the misuse of personal data, for example the unauthorized disclosure of the e-mail address. Personal risk played a greater role before the European Data Protection Regulation (GDPR) came into force than it does today, but in times of cookies and advertising mails it is still not to be despised.

3. Temporal risk

Shop visitors may perceive the risk that their ordered goods won't reach them on time – or only with considerably long delivery times. This risk may sound trivial as well. But especially in uncertain situations like the current corona crisis, many online shoppers ask themselves: When will I actually receive my goods? Will I receive my order now much later?

4. Financial risk

For potential buyers - and in the theory of eCommerce - the financial risk is considered the risk with the greatest influence on the purchase decision. The financial risk includes all thoughts and concerns of the customer about what happens to the money paid in the event of a return or complaint. Will I be stuck

with the costs? Will I get my money back? Is the shop even safe? Should I really leave my credit card information here?

Please think back to your online purchases from sellers that you may not have known very well. But you really wanted to have the item offered there and at said online shop the price was simply the best.

Will I be stuck with the costs? Will I get my money back? Is the shop even safe? Should I really leave my credit card information here?

Please think back to your online purchases from sellers that you may not have known very well. But you really wanted to have the item offered there and at said online shop the price was simply the best.

CHAPTER – 3

System Requirements Study

3.1 Hardware and Software Requirements

3.1.1 Server-side hardware requirement

3.1.1.1 Server-side hardware requirement

Hardware	Pentium
Speed	1.1 GB
RAM	20 GB
Hard Disk	1 GB
Floppy Drive	1.44 MB
Key Board	Standard Windows Keyboard
Mouse	Two or Three Button Mouse
Monitor	SVGA

3.1.2 Software requirement

3.1.2.1 Software requirement

Server type	Unix based or Window Based
Services required	<ul style="list-style-type: none">• Operating System : Window• Server : Apache• Database : phpMyAdmin• IDE : Sublime text• Web Server : Wamp• Technology : php• Web Technology : HTML,CSS

3.1.3 Client-Side requirement

3.1.3.1 Client-Side requirement

Device	Pc, Laptop or Mobile
Internet Connection	Stable internet connection
Web Browser	Chrome, Edge, Fire fox etc.
Payment option	COD, Net banking

3.2 Constraints

3.2.1 Hardware Limitation

3.2.1.1 Hardware Limitation

Device	Smartphone
---------------	------------

3.2.2 Reliability requirements

3.2.2.1 Reliability requirements

Device	Pc, Laptop or Mobile
Internet Connection	Stable internet connection
Web Browser	Chrome, Edge, Fire fox etc.

3.2.3 Safety and Security Consideration

- Everything must be up to date
- Web Firewall • Add https
- SIs Certificate

CHAPTER – 4

System Analysis

4.1 Study of Current System

- The present system, mainly focus on the delivery of food from restaurants.
- Also they prefer to order by visiting hotel and restaurant sites manually choosing the menu.
- These systems, generally acts as a mediator between the customer and the restaurants that provides food to the customer.
- Any disturbance between the restaurant and the management may affect the customer

4.2 Problem and Weaknesses of Current System

- Current systems don't provide you with the homemade food.
- In existing system for giving any orders users should visit hotels or restaurants to know about food items and then give order and pay advance.
- In this method time and manual work is required.
- Customer cannot customize Menu as per his choice.
- Maintaining critical information in the files and manuals is full of risk and a tedious process

4.3 Requirements of New System

4.3.1 User Requirements

4.3.1.1 User Requirements

Device	Pc, Laptop or Mobile
Internet Connection	Stable internet connection

Page

Web Browser	Chrome, Edge, Fire fox etc.
Payment option	COD, Net banking

4.3.2 System Requirements

4.3.2.1 System Requirements

OS	Windows or Android
Internet Connection	Stable internet connection
Web Browser	Chrome, Edge, Fire fox etc.

4.4 Feasibility Study

4.4.1 Does the system contribute to overall objectives of the organization?

We don't work under any organization for now.

4.4.2 Can the system be implemented using the current technology and within the given cost and schedule constraints

Yes

4.4.3 Can the system be integrated with other system which are already in place?

No, It cannot be integrated.

4.5 Feature Of New System

- In our system, Customer has to register his details so as to use our services.
- Our system mainly provides Breakfast, Lunch, Dinner.
- The menu of each is divided as per the respective timings.
- Customer will then be able to order food from the given menu.
- They can order altogether for a week also

4.6 Selection of Hardware and Software and Justification

1. Apache

- Open-source and free.
- Reliable, stable software.
- Frequently updated security patches.
- Flexible due to its module-based structure.
- Easy to configure, beginner-friendly.
- Cross-platform (works on both Unix and Windows servers).

2. Windows

- Ease of use.
- Available software.
- Backwards compatibility.
- Support for new hardware
- Compatibility with MS driven websites.

3. phpMyAdmin

- It has a user interface and you can run queries within the SQL
- You can paste queries into the SQL to test data output; from a simple 'Select * FROM tablename' to more advanced relational queries using various tables.

4. Sublime text

- Autocompletion, Syntax Highlight, Code Folding. From the general design, Atom and Sublime Text are very similar.
- Customizability.
- Fast and Stable.
- Powerful Search.
- Simultaneous Editing.
- Minimap.
- Screens, Panels.

5. Wamp

- It allows you to develop, upgrade components, perform any web development task and carefully test everything offline first, which reduces the risks of creating problems on the live server.

6. HTML

- HTML is Easy to Learn and Use. ...
- HTML is Free. ...
- HTML is supported by all Browsers. ...
- HTML is the Most Friendly Search Engine. ...
- HTML is Simple to Edit. ...
- HTML can Integrate Easily with Other Languages. ...
- HTML is Lightweight. ...
- HTML is Basic of all Programming Languages.

7. CSS

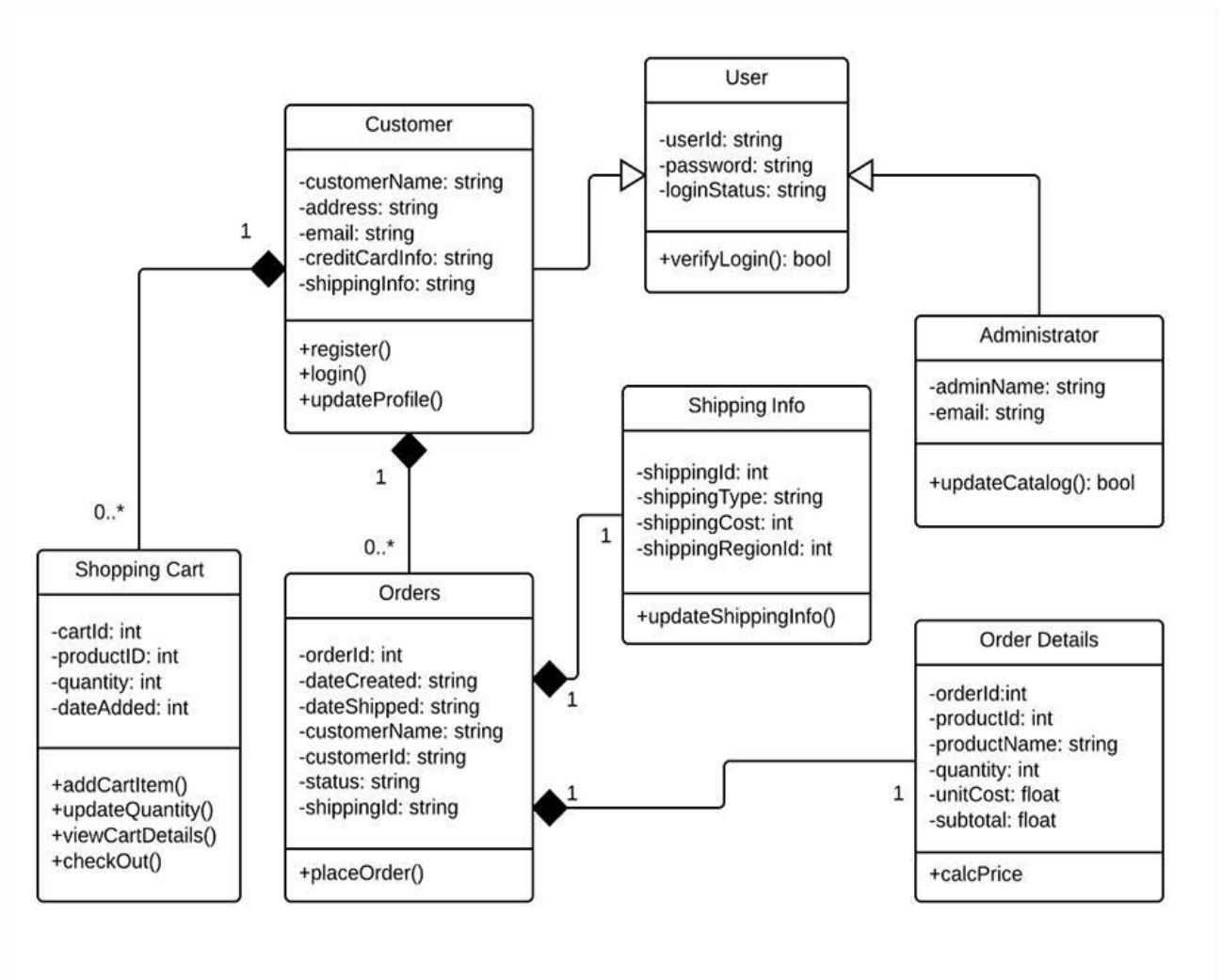
- increased website reach to different technologies used for accessing the Internet:
...
- Improved web page download times: ...
- Bandwidth savings: ...
- Cross-browser compatibility: ...
- Higher search engine rankings: ...
- Easier website management: ...
- Web page print friendly:

CHAPTER – 5

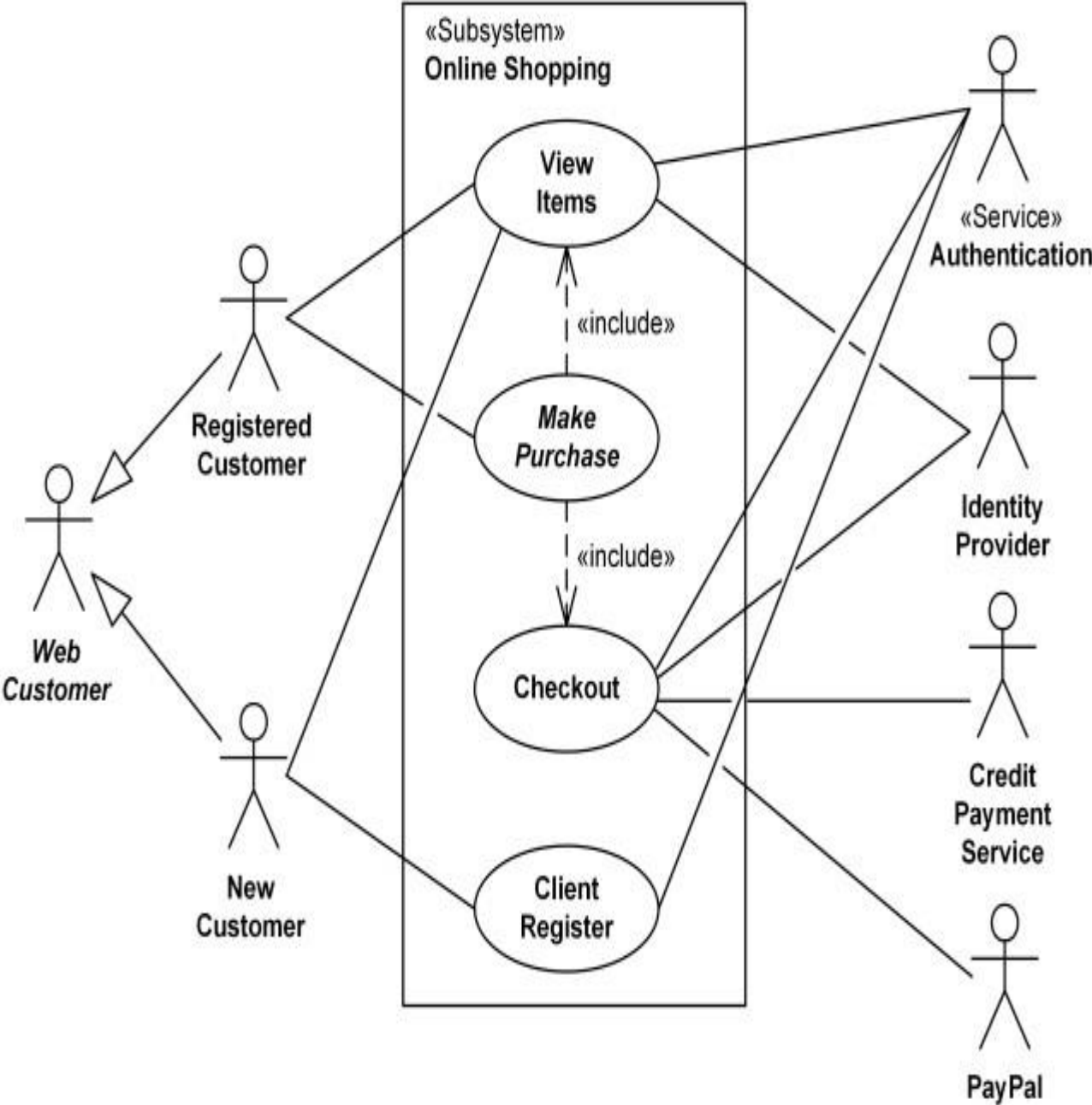
System Design

5.1 Interface Design

5.1.1 Class Diagram

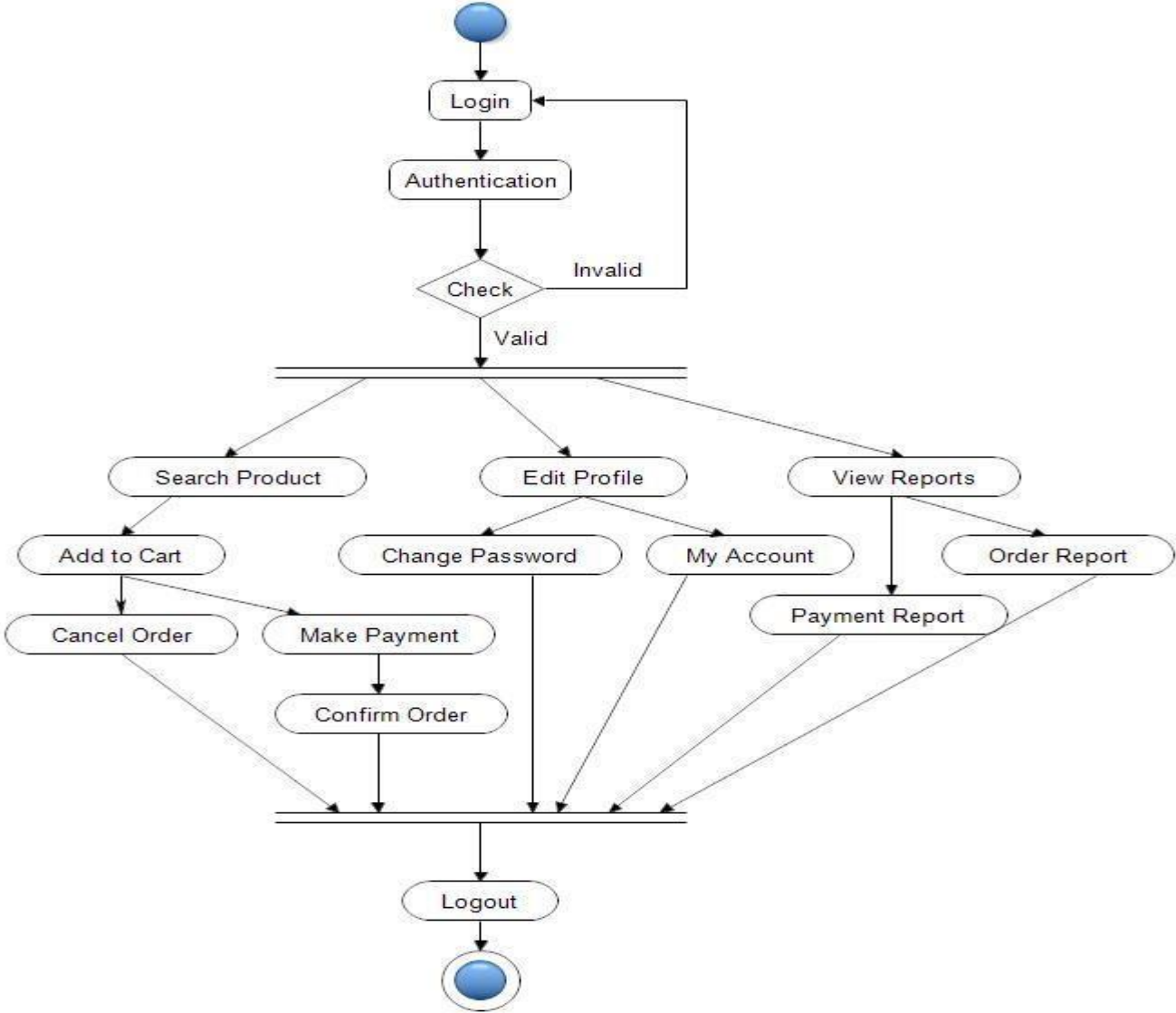


5.2.2 Use Case Diagram

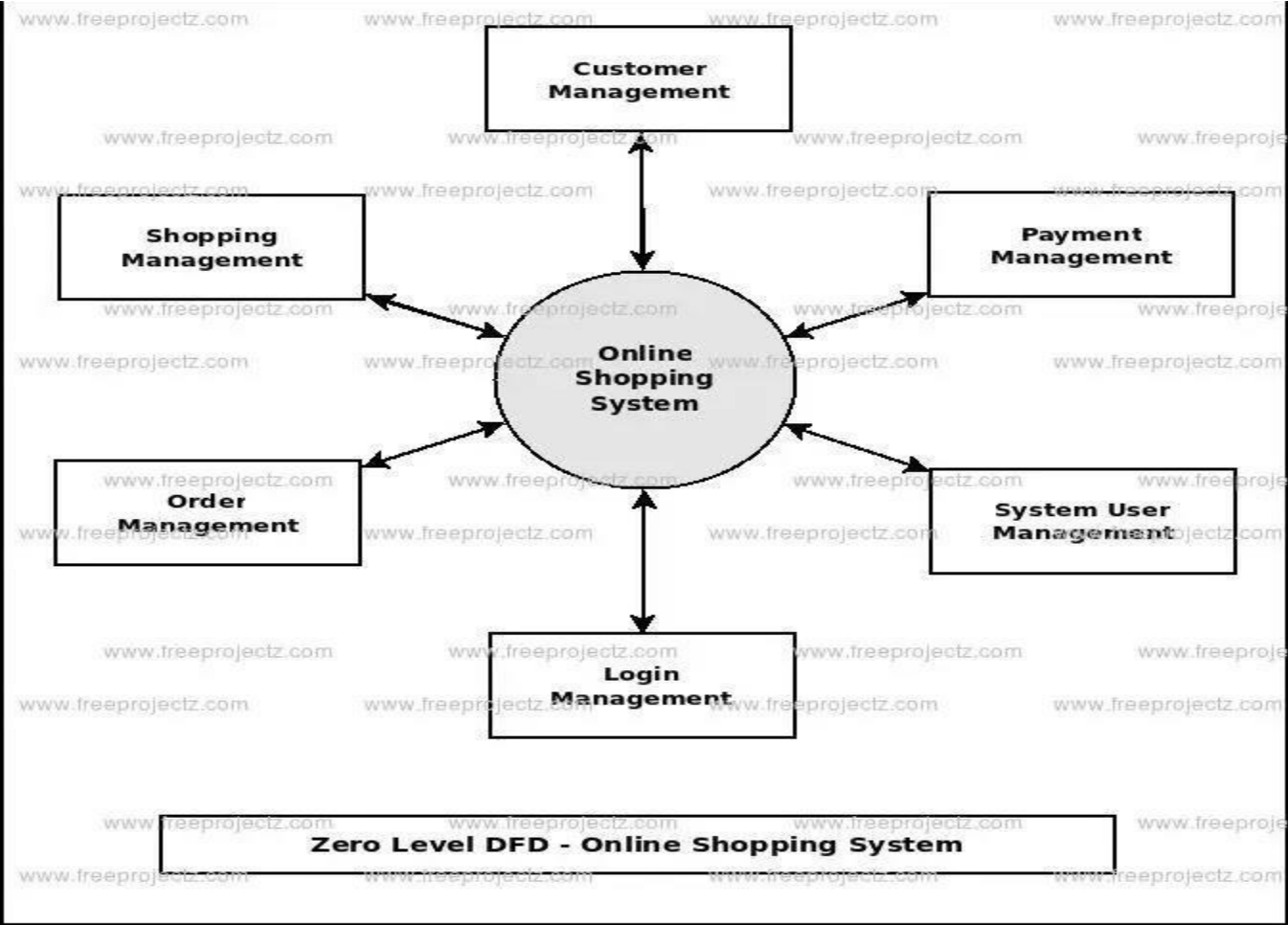


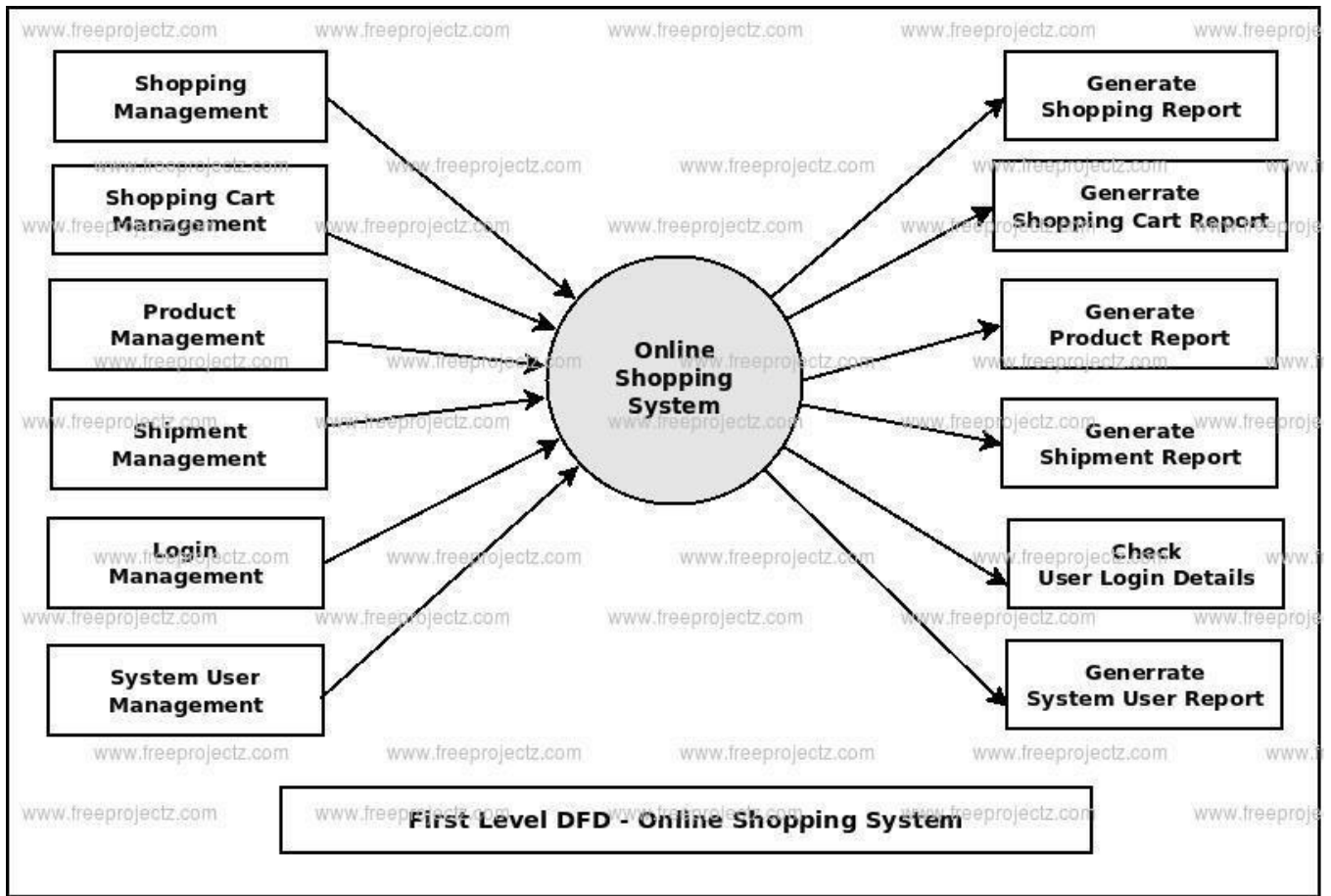
5.2.3 Activity Diagram

Activity Diagram for User Side



5.2.4 Data Flow Diagram





CHAPTER – 6

CodeImplementation

6.1 Implementation Environment

Sublime Text

It is a commercial source code editor. It natively supports many programming languages and markup languages. Users can expand its functionality with plugins, typically community-built and maintained under free-software licenses. To facilitate plugins, Sublime Text features a Python API.

phpMyAdmin

It is a free software tool written in PHP, intended to handle the administration of MySQL over the Web. phpMyAdmin supports a wide range of operations on MySQL and MariaDB. Frequently used operations (managing databases, tables, columns, relations, indexes, users, permissions, etc) can be performed via the user interface, while you still have the ability to directly execute any SQL statement.

6.2 Program/Module Specification

- Registration Module: Used for registering.
- Confirm Order Module: Used for Confirming Order
- Menu Category Module: Used for choosing menu
- Cart module: Used for adding multiple items
- Reset password Module: Used for resetting the passwords
- Employment module: Used for getting employment/job
- Order Module: Used for Order information
- Login Module: Used for login
- Help module: Used for sending queries asked
- Feedback module: Used for sending feedbacks

-
- Recipe module: Used for viewing the recipes
 - Logout module: Used for logging out

6.3 Coding Standards

The code can be easily understood and proper consistency is maintained.

The finished program code should look like that it has been written by a single developer, in a single session.

Coding standards help avoid common coding errors, improve the readability of code, and simplify modification.

Anyone will be able to understand a section of code and modify it, if needed, without regard to when it was written or by whom.

CHAPTER – 7 Testing

7.1 Testing Strategy

Black Box Testing:

This method enables the software engineer to devise sets of input techniques that fully exercise all functional requirements for a program, black box testing tests the input, the output and the external data, it checks whether the input data is correct and whether we are getting the desired output.

Alpha Testing:

Acceptance testing is also sometimes called alpha testing. Be spoke systems are developed for a single customer. The alpha testing proceeds until the system developer and the customer agree that the provided system is an acceptable implementation of the system requirements.

Beta Testing:

On the other hand, when a system isto be marked as a software product another process called beta testing is often conducted. During bela lesting, a system is delivered among a number of potential users who agree to use it. The customers then report problems to the

White-box testing:

White-box testing (also known as clear box testing, glass box testing, transparent box testing, and structural testing) is a method of software testing that tests internal structures or workings of an application, as opposed to its functionality (i.e. black-box testing). In white-box testing an internal perspective of the system, as well as programming skills, are used to design test cases. The tester chooses inputs to exercise paths through the code and determine the expected outputs. This is analogous to testing nodes in a circuit, e.g. in-circuit testing (ICT). Whitebox testing can be applied at the unit, integration and system levels of the software testing process.

7.2 Testing Method

7.2.1 Unit Testing

1. Test for the registration module

This form is used for registering the user's details. When the registration and all the details are done the user can now login.

2. Test For the login module

This form is used for log in of user of the system. In this we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask for username and password.

3. Test for the reset password module

When the user forgot his/her password, user can change the password with this form.

4. Test for help module

In this form user can send their queries or problems to us.

5. Test for Confirm order module

This form is confirming the order the last time. In user confirms order the order will be placed otherwise user will be redirected to menu.

6. Test for shop Category module

When user click on mens, mens list will be open, if he/she click on womens, womens list will be open.

7. Test for Feedback module

This form can be filled if the user wants to give us their feedback on our website.

8. Test for cart module

User can buy multiple items at a time by adding to cart and they can also see their total to pay.

9. Test for Order module

Used for placing the order and to see the grand total to pay the amount.

10. Test for employment module

User can get job/employment by filling the details asked.

11. Test for logout module

It is used to logout of the account.

7.2.2 Integration Testing all modules are working together properly and every data is transferred properly from one module to another module.

7.2.3 Validation Testing

- All the forms such as login, registration, reset password, confirm order, employment, etc. are validated and does not take invalid values.
- Each form can not accept blank value fields.
- Avoiding errors in data.
- Validation for user input.
- Functionality of the entire module/forms.
- Checking of the coding standards to be maintained during coding.
- Modifications done for the errors found during testing.
- Actual testing done manually.
- Integration of all the modules/forms in the system.
- Preparation of the test cases.
- Preparation of the possible test data with all the validation checks.
- Actual testing done manually.
- Recording of all reproduced errors.
- Prepared the test results scripts after rectification of the errors.
- Testing the module with all the possible test data.
- Testing of the functionality involving all type of calculations etc.
- Commenting standard in the source files.

7.3 Test Cases

7.3.1 Test Suite

CASE-1

Test Case ID : Testing_01				
Test Priority : High				
Module Name : User Login Screen				
Test Title : Verify login with valid email & password				
Description : Test the user login page				
Pre-Conditions : User has valid email & password				
Dependencies : Email and password must reside in database				
Step	Test Steps	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to login page	User should be able to login	User is navigated to login screen having appropriate form	Pass
2	Provide valid email & password		User will be logged in	Pass
3	Provide valid email & invalid/inappropriate/blank password		User will be failed to logged in	Fail
4	Provide invalid/blank email & valid password		User will be failed to logged in	Fail
5	Provide invalid email & password		User will be failed to logged in	Fail

CASE-2

Test Case ID : Testing_02				
Test Priority : Medium				
Module Name : User Registration Screen				
Test Title : Verify each details which user is entering in form fields				
Description : Test the user registration page				
Pre-Conditions : User has valid data in all required fields				
Dependencies : all details of user must reside in database				
Step	Test Steps	Expected Result	Actual Result	Status (Pass/Fail)
1	Navigate to <i>Register</i> Link to get registered	User should be able to register him/herself	User is navigated to register screen having appropriate form	Pass
2	Provide valid data in all form fields		User will be registered	Pass
3	Provide all fields blank only		User will be failed to get registered	Fail
4	Provide invalid data		User will be failed to get registered	Fail

CHAPTER – 8

Limitations and Future Enhancement

8.1 Limitations

- Application won't be able to send some notification about any report or any delivery System to owner or customer.
- Application will require the java, MySQL and three different system which should be connected to one network for using application to its full functionality.
- User won't able to change the skin or any functionality of application.
- User can only get the reports in some formats only.

8.2 Future Enhancement

- We will add more payment options like credit or debit card etc.
- More security like otps
- Application
- More places to order
- Verification of email
- Notification

CHAPTER – 9

Conclusion

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they had to incur the high cost of owning a brick and mortar store. At the end, it has been a win-win situation for both consumer and sellers.

CHAPTER – 10

References

Books

- HTML & CSS Design and Build Websites by Jon Duckett
- PHP Essentials by Julie C. Meloni
- PHP6 and MySQL by Steve Suehring, Tim Converse, Joyce Park
- Web Design Principles by Joel Shlar

Magazines

- Digit (Fastrack)
- Open Source for You
- DeveloperIQ
- Computer World