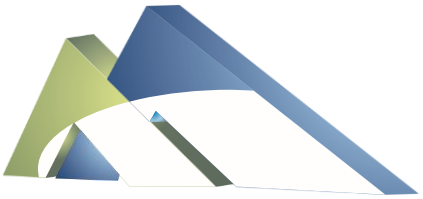
Online Sales and Inventory Management for Electronic Store

Prepared At



Mekhia Solutions Private Limited
New Vadaj, Ahmedabad - 380013

By

Sameer Makwana
09BCE026

COMPUTER SCIENCE & ENGINEERING

Ahmedabad - 382481

MAY 2013

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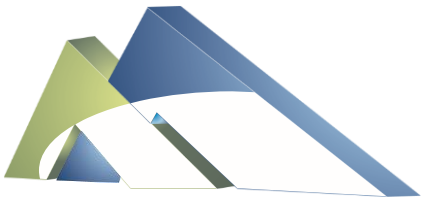

Mekhia Solutions Private Limited
New Vadaj, Ahmedabad - 380013

Submitted in fulfillment of the requirements

For the degree of

Bachelor of Technology in Computer Engineering

By

Sameer Makwana
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Guided By
Prof. Malaram Kumhar
COMPUTER SCIENCE & ENGINEERING

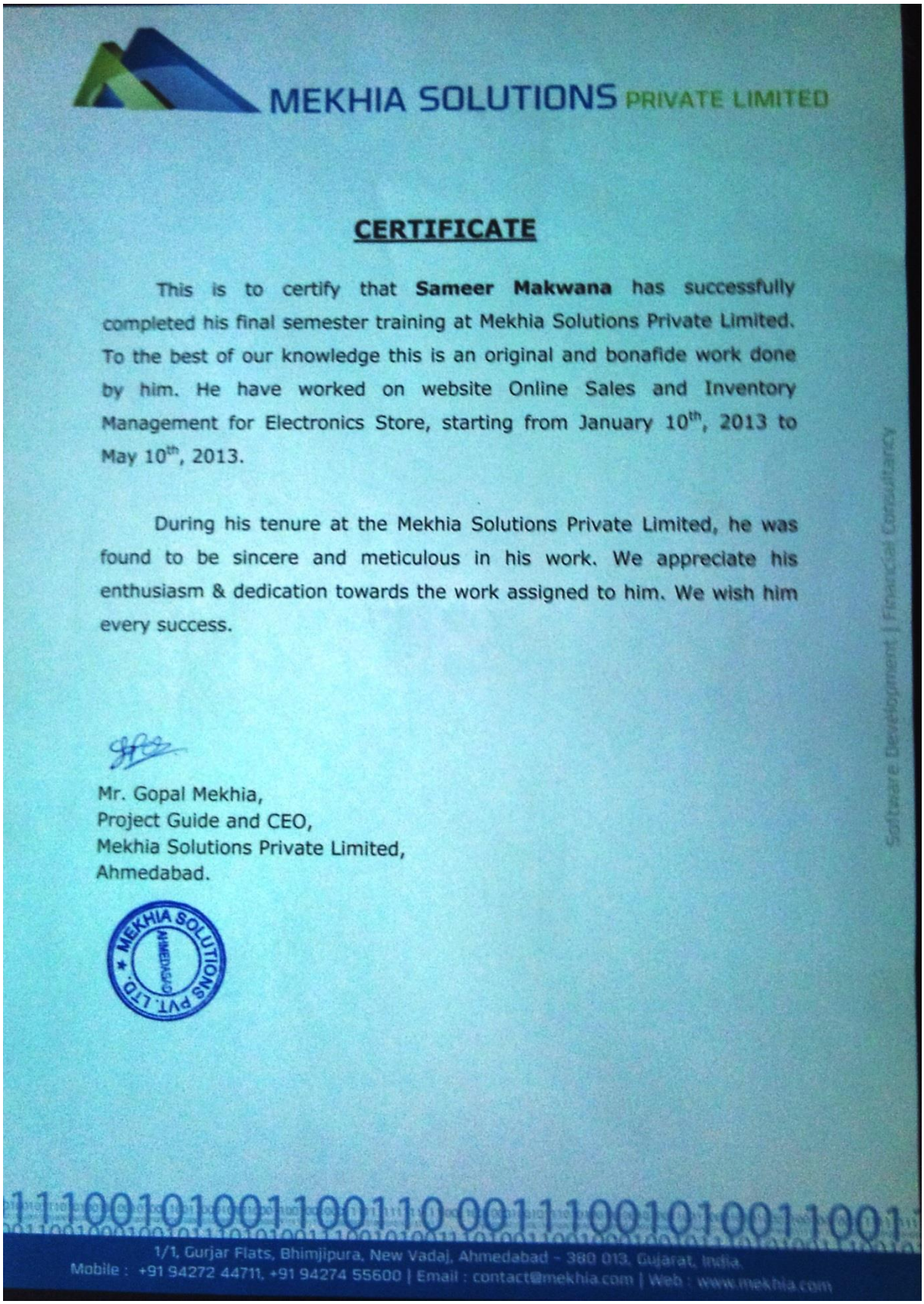
COMPUTER SCIENCE & ENGINEERING
Ahmedabad 382481
MAY 2013

CERTIFICATE

This is to certify that the Major Project entitled "Online Sales and Inventory Management for Electronic Store" submitted by Sameer Makwana (09BCE026) , towards the partial fulfillment of the requirements for the degree of Bachelor of Technology in Computer Engineering of Nirma University is the record of work carried out by him under my supervision and guidance. In my opinion, the submitted work has reached a level required for being accepted for examination. The results embodied in this Project work, to the best of my knowledge, haven't been submitted to any other university or institution for award of any degree or diploma.

Prof. Malaram Kumhar,
Assistant Professor,
Computer Science & Engineering,
Institute of Technology,
Nirma University,
Ahmedabad.

Prof. Sanjay Garg,
Professor and Head,
Computer Science & Engineering,
Institute of Technology,
Nirma University,
Ahmedabad .



MEKHIA SOLUTIONS PRIVATE LIMITED

CERTIFICATE

This is to certify that **Sameer Makwana** has successfully completed his final semester training at Mekhia Solutions Private Limited. To the best of our knowledge this is an original and bonafide work done by him. He have worked on website Online Sales and Inventory Management for Electronics Store, starting from January 10th, 2013 to May 10th, 2013.

During his tenure at the Mekhia Solutions Private Limited, he was found to be sincere and meticulous in his work. We appreciate his enthusiasm & dedication towards the work assigned to him. We wish him every success.

Mr. Gopal Mekhia,
Project Guide and CEO,
Mekhia Solutions Private Limited,
Ahmedabad.

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ACKNOWLEDGEMENT

It gives me great pleasure in expressing thanks and profound gratitude to I like to give my special thanks to **Prof. Malaram Kumhar**, Project guide, for his continual support throughout the project Work. I heartily thankful to his for his time to time suggestion and the clarity of the concepts of the topic that helped me a lot during this study.

I am also thankful to **Prof. Sanjay Garg**, Head, Department of CSE, IT and MCA Department, Institute of Technology, Nirma University, Ahmedabad for his continual kind words of encouragement and motivation throughout the Major Project. I am also thankful to **Dr. K. Kotecha**, Director, Institute of Technology for his kind support in all respect during my study.

I am thankful to all faculty members of Department of Computer Engineering, Nirma University, Ahmedabad for their special attention and suggestions towards the project work.

The blessings of God and my family members makes the way for completion of major project. I am very much grateful to them.

The friends, who always bear and motivate me throughout this course, I am thankful to them.

Sameer Makwana
09BCE026

ABSTRACT

Online sales is a very important feature used in e-commerce to assist people making purchases online. The Business-to-Customer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of an e-commerce site is to sell goods and services online.

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web site providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

Shopping Cart feature allows online shopping customers to "place" items in the cart. Upon "checkout" the software calculates as total for the order including shipping and handling postage, packing and taxes, if applicable. The Shopping Cart is very important feature used in e-commerce to assist people making purchases products online. It provides the user a catalog of different products available in the system. In order to purchase a shopping cart is provided to the user. The shopping cart application has been developed to allow business grows larger and faster. This site will let customers to view and order products online from any part of the world. Under this website many products and services can be ordered. The shopping cart is expanded permanently through new products and services in order to offer a product portfolio corresponding to the market.

CONTENTS

CERTIFICATE **I**

ACKNOWLEDGEMENT **II**

ABSTRACT **III**

TABLE OF CONTENTS **IV**

LIST OF FIGURES **VII**

LIST OF TABLES **VIII**

1. INTRODUCTION **1**

1.1 ABOUT THE COMPANY. **1**

1.1.1 Introduction of the company. 2

1.1.2 Profile 2

1.1.3 Communication 7

1.2 THE SYSTEM. **8**

1.2.1 Definition of system. 8

1.2.2 Purpose and objectives. 8

1.2.3 About present system. 8

1.2.4 Proposed system. 9

1.3 PROJECT PROFILE. **9**

1.3.1 Project title. 9

1.3.2 Scope of project. 9

1.3.3 Model adapted 9

1.3.4 Project team. 10

1.3.5 Hardware/Software environment in company. 10

1.3.6 Project Progress Schedule 11

2. SYSTEM ANALYSIS. 13

2.1 FEASIBILITY STUDY. 13

2.1.1 Operational feasibility. 13

2.1.2 Technical feasibility. 13

2.1.3 Financial and Economical feasibility. 14

2.1.4 Legal Feasibility. 14

2.1.5 Time Feasibility. 14

2.2 REQUIRMENT ANALYSIS. 15

2.2.1 Facts-Finding Techniques. 15

2.2.1.1 Interview. 15

2.2.1.2 Questionnaire. 15

2.2.1.3 Record Review. 16

2.2.1.4 Observation. 16

2.3 CONTEXT DIAGRAM. 17

3. SYSTEM DESIGN. 18

3.1 Interfaces. 18

3.1.1 Administrative user interface 18

3.1.2 The operational or generic user interface 18

3.1.3 Modules 18

3.2 Diagram. 22

3.2.1 UML Diagrams 22

3.2.2 Class Diagrams 27

3.2.3 Activity Diagrams 28

3.2.4 Process Diagrams 32

4. USER MANUALS 33

4.1 Menu Screens along with Description **33**

5. TESTING. **45**

6. FUTURE ENHANCEMENT. **46**

7. APPENDIX **47**

7.1 Tools used. **47**

8. SUMMARY AND CONCLUSION **49**

9. BIBLIOGRAPHY. **50**

List of Figures

1.1 Waterfall Model 10

2.1 Context Diagram 17

3.1 Category 22

3.2 Product 23

3.3 User 24

3.4 Bill 25

3.5 Online Shopping 26

3.6 Class Diagram 27

3.6 Login Activity 28

3.7 Registration Activity Diagram 29

3.8 Admin Activity Diagram 30

3.9 User Activity Diagram 31

3.10 Process Diagram 32

4.1 User Interface 33

4.2 Shopping Cart 34

4.3 Login form 35

4.4 Registration form 36

4.5 Shipping and Payment form 37

4.6 Shipping and Payment confirm 38

4.7 Category Management 39

4.8 Product Management 40

4.9 List of Registered Users 41

4.10 List of Order 43

4.11 Order Details 44

List of Tables

Table 1 Project Progress Schedule 11

Table2 Test Cases 45

Chapter 1

INTRODUCTION

1.1 ABOUT THE COMPANY.

1.1.1 Introduction of the company.

Mekhia Solutions Pvt. Ltd. is an India based software outsourcing company as well as Financial Consultancy Company established in 2011.

Under software development we focuses on highly qualitative, timely delivered and cost effective offshore software development. With a rich and varied experience in providing off-shore software development and project management capabilities and stringent quality stan-dards ensure us to develop solutions that give your business an edge over your competitors. Our global software outsourcing model makes sure we deliver maximum targeted result to you.

Under Financial Consultancy, we offer end to end solutions in a wide spectrum of services, including Assurance Services, Accounting, Auditing &Payroll Outsourcing Services, Business Tax Planning and Financial Planning Services, Company Formation and Business Setup Services, Project Financing Services etc.

Mekhia Solutions Pvt Ltd (MSPL) is Software development & Financial consultancy service providing company, always keeping its services up-to-date with the latest trends on the market, providing its customers all over the world with high-end-class and easily extensible internet products. Solutions we offer the range from creating custom web Applications and developing business applications of any complexity.
With our in-depth knowledge and industry experience on various technical Applications, customized business solutions and a broad range of IT services. Our strategic initiatives have helped our clients globally. Technology service offerings include Application development, Software Development, E-commerce, Financial Services, and Rich Internet Application among others.

Using our proven, customizable software development project management clients have realized the benefits of cost-effective, flawless, and timely project completion.

1.1.2 Profile

IT Services

iPhone Apps:

iPhone web app development occupies a huge market share. Being no. 1 in smart phone and tablet market, world is now ready to embrace iPhone web development. **If you have a website or an E commerce store, iPhone web development is a must for your business expansion.**

iPhone owns services beyond the smart phone-level. It has always been a comfort and fun, and according to the recent statistics, iPhone outshone its global rivals with skyrocketing shipment growth and a surge in the market share. iPhone is again on the top position supplying more gadgets than ever. And in a current scenario, can you survive without creating a powerful website for this platform?

You name it and you find it on an iPhone; and therefore, it is obvious that by its size iPhone web development needs special design approach, different that regular web app development. MSPL (iPhone developer in India) possesses that extra talent sought for development. Our team is specialized in building engaging, intuitive, compelling and interactive iPhone web applications.

With us, you acquire a quick development and timely delivery as we use cutting-edge technology. MSPL helps you save cost. **Our applications establish quick connection to various online databases to your iPhone, without interruptions**. MSPL holds a specialized service that offers a complete website compatibility with various Apple or iPhone devices.

The development opportunities that have sprouted and taken root after the widespread recognition of the iPhone are far and many. **Acquisition of iPhone web application development license has cemented our position as competent developers.** Clients hire iPhone web app developers from MSPL owning to its high pedestal.

Some of our **iPhone web development** services are as follows:

- Communication iPhone Web App Development
- Business iPhone Web App Development
- Shopping carts/product catalogue web app
- Utility Web App
- Gaming applications
- Multimedia applications
- Entertainment iPhone Web Development
- Apps for value conversions

Android apps:

World's most popular operating system, Android, is set to break records as the most sold device operating system. **Owned by Google, Android offers multitude of features that no other operating system is capable of delivering.** After its popularity in smart phone market, Android is now popular for its tablets, and **Android 3.0 tablet app development and ICS 4.0** is a trend adopted by many developers.

Developing an engaging, intuitive and compelling Android 3.0 tablet app is a matter of experience and a foresight to understand market. MSPL is custom Android tablet application programming company, which creates value for your application in the market. **To create a buzz in the market, it is necessary to develop application at the right time, which engages individuals.** And therefore, MSPL is your destination for app development for Android tablets/Phone.

Android Tablet 3.0 app development & ICS 4.0 is booming at a high rate. More than 450,000 applications have been developed for Android. MSPL possesses experienced hands in developing tablets application for Android. **We build a whole range of rich, innovative and cost-effective applications that can run on the Android Platform.** We believe in approaching Android tablet/phone application development in a proactive and high-caliber manner.

Utilizing the complex Android SDK platform, our highly qualified Android application developers explore the unlimited possibilities of Android through its comprehensive set of Android tablet applications development tools. Owning a vast familiarity in creating Android applications, our Android tablet application development services include the following:

Migrating Android mobile app to run efficiently on tablet device

- Android Enterprise app development
- Gaming application development
- Finance Android Application Development
- Entertainment Android App Development
- Banking and Investment Application
- Lifestyle, Travel, healthcare and shopping related application
- Audio/Video Streaming Application
- Map navigation, news & weather forecaster
- Security application

- Tools, themes and various utility applications and many more

Customized Software Development:

MSPL offers a wide range of **custom IT programming services**. We have outstanding experience in custom database development, desktop and distributed application design as well as various custom software components and web-project programming.

We take all stages of the software development process seriously. Our primary goal is to **meet all out customer needs and requirements** as quickly as possible — that's why our feedback standard requires us to answer any client's question or request within 24 hours. This also includes daily, weekly and monthly reports on the project development status.

We believe that our **high quality service** provides a sound basis for a successful customer relationship. We consider the testing stage of the product to be one of the most important parts of the development process and we strive to exclude any errors before the product release milestone.

MSPL does its best to provide you with custom software solutions that will help you to keep one **step ahead your competitors** by continuously improving your IT-based business solutions. We use the latest software development platforms and tools to achieve this. We also employ the latest project management techniques and software engineering practices.

We offer a wide range of **custom web and software programming services** in a variety of application areas. Please click on the links below to see samples:

- Custom e-commerce Solutions (B2B and B2C)
- Database Business Applications
- Distributed (client-server) applications
- Custom components and libraries (ActiveX controls, plug-ins, etc…)
- Internet/Intranet Applications
- Websites and web-tools

Financial services

At **MSPL**, We offer end to end solutions in a wide spectrum of services, including – Assurance Services, Accounting & Payroll Outsourcing Services, Business Tax Planning and Financial Planning Services, Company Formation and Business Setup Services, Project Financing Services etc.

Our **Range of Professional Financial Services** include Accounting Services, Tax Advisory & Planning Services, NGO Services, Project Financing Services, Business Setup Services & Company Formation Services etc.

Rendering Financial Services require diligence, professional knowledge, experience, skills, honesty and integrity. Our dedicated team of Experienced & Skilled Professionals and our work environment and ethics ensure compliance with all the requirements for rendering the best professional services to our esteemed clientele.

Our Dedication towards work, Professional work ethics and Ready to Take on any Challenge Attitude helps us to conquer any kind of difficulties and render the best Professional Services to fulfill our client's requirements. We leave no stones unturned to ensure Total Customer Satisfaction of our clients.

We provide following services to our valued clients:

TAXATION SERVICES:

1. Direct Taxes (Income Tax)

- Preparation of all type of tax returns for Individuals, Firms, NRI's, Foreign Nationals, Companies etc.
- Representing clients and appearing before various authorities which includes Assessing Officer, Appellate Authorities.

2. Indirect Taxes

- VAT / Sales Tax
- Professional Tax
- Excise Valuations
- Custom Duty Valuations & Duty Drawbacks

3. Tax Assistance

- Obtaining Permanent Account Number (PAN)
- Tax Deduction Account Number (TAN)
- Services related to TDS/ Withholding taxes
- Tax Planning — Personal and Corporate.
- Filing of e-Income tax and e-TDS returns

4. Other Services

- Procuring registration for firms, Companies & Other bodies.
- Filing returns of Income Tax, Service Tax, TDS.
- Maintaining statutory records & registers.
- Representing scrutiny, assessment, inspections.
- Compiling records & returns for assessment during scrutiny.
- Representing notices, hearings, appeals, inspections.
- Liaison with the department.
- Digital Signature Certificate

OUTSOURCING SERVICES:

1. **Accounts Outsourcing**

- Book Keeping, Payment Processing and Bank Reconciliation Services.
- Monthly Management reporting.
- Formulating accounting systems and procedures.
- Preparation of Periodic Financial Statements and Analysis of Profit & Loss Account.

2. **Payroll Outsourcing**

- Preparation of Monthly Payroll.
- Calculation of Individual Tax Liability of each Employee.
- Calculation and Deduction of Provident Fund (PF) & Employee State Insurance (ESI).
- Filing of Quarterly e-TDS returns.
- Preparation of Form 16 for employees.

FINANCIAL SERVICES:

1. **Financial Services**

- Cash Flow Planning and Management
- Identifying Financing Alternatives

- Analyzing Financial Capacity
- Accounting Procedures Documentation
- Forecasts and Projections of CMA Data
- Investment Planning
- Business Banking
- Industrial Credit

2. Corporate Matters

- Formation of Private / Public Limited Company.
- Drafting of memorandum and article of association of companies.
- Conversion of a private company into a public company or LLP.
- Changing the name of company.
- Change of registered office.
- Alteration of main object of the company.
- Inclusion of new business in the memorandum of the company.
- Statutory meeting and statutory report.
- Appointment of directors and their remuneration.
- Holding and subsidiary company.
- Inter corporate investments.

1.1.3 Communication.

The project was undertaken at Mekhia Solutions Private Limited and it can be contacted at the following:-

1/1 Gurjar Flats,

Bhimjipura Cross Roads,

New Vadaj,

Ahmedabad-380013

Gujarat,

India.

Phone No:- +91 9427455600

1.2 THE SYSTEM.

1.2.1 Definition of system.

The above system is an e-commerce based website for the online sales of the electronic goods. It involves the processing of the various datas related to the electronic goods Which helps for the selling of the goods and better marketing.

1.2.2 Purpose and objectives.

The main aim of developing Sales and Inventory management system for electronic store is to provide an easy way not only to automate all functionalities of a span hardware office's, but also to provide full functional reports to top management of company with the finest of details about every aspect of Inventory ,Sales, Billing and Service details.

This project is aimed at developing an online Sales and Inventory Management System (SIMS) for an electronic store. This system can be used to store the details of the inventory, update the inventory based on the sale details, produce receipts for sales, generate sales and inventory reports periodically etc.

This is one integrated system that contains both the user component (used by salespersons, sales managers inventory managers etc.) and the admin component (used by the administrators for performing admin level functions such as adding new items to the inventory, changing the price of an item etc.).

1.2.3 About present system.

- It is limited to a single system.
- It is less user-friendly.
- It is having lots of manual work (Manual system does not mean that you are working with pen and paper, it also include working on spread sheets and other simple software's).
- The present system is very less secure.
- It is unable to generate different kinds of report.
- User must go to shop and order products.
- It is difficult to identify the required product.
- Description of the product obtained only on manually.

- Accuracy not guaranteed.
- Not in reach of distant users.

1.2.4 Proposed system.

The development of the new system contains the following activities, which try to automate the entire process keeping in view of the database integration approach.

- User friendliness is provided in the application with various controls.
- The system makes the overall project management much easier and flexible.
- It can be accessed over the Internet.
- Various classes have been used to provide file upload and mail features.
- There is no risk of data mismanagement at any level while the project development is under process.
- Report generation feature is provided which would be very useful.
- Billing becomes easy.

1.2 PROJECT PROFILE.

1.3.1 Project title.

Online Sales and Inventory Management for electronic Store

1.3.2 Scope of project.

The proposed system is an e-commerce based website. The main aim of the e-commerce based application is to sale products and services online. All the users which have access to this website comes under there scope.

1.3.3 Model

WATER FALL MODEL was being chosen because all requirements were known beforehand and the objective of our software development is the computerization/automation of an already existing manual working system.

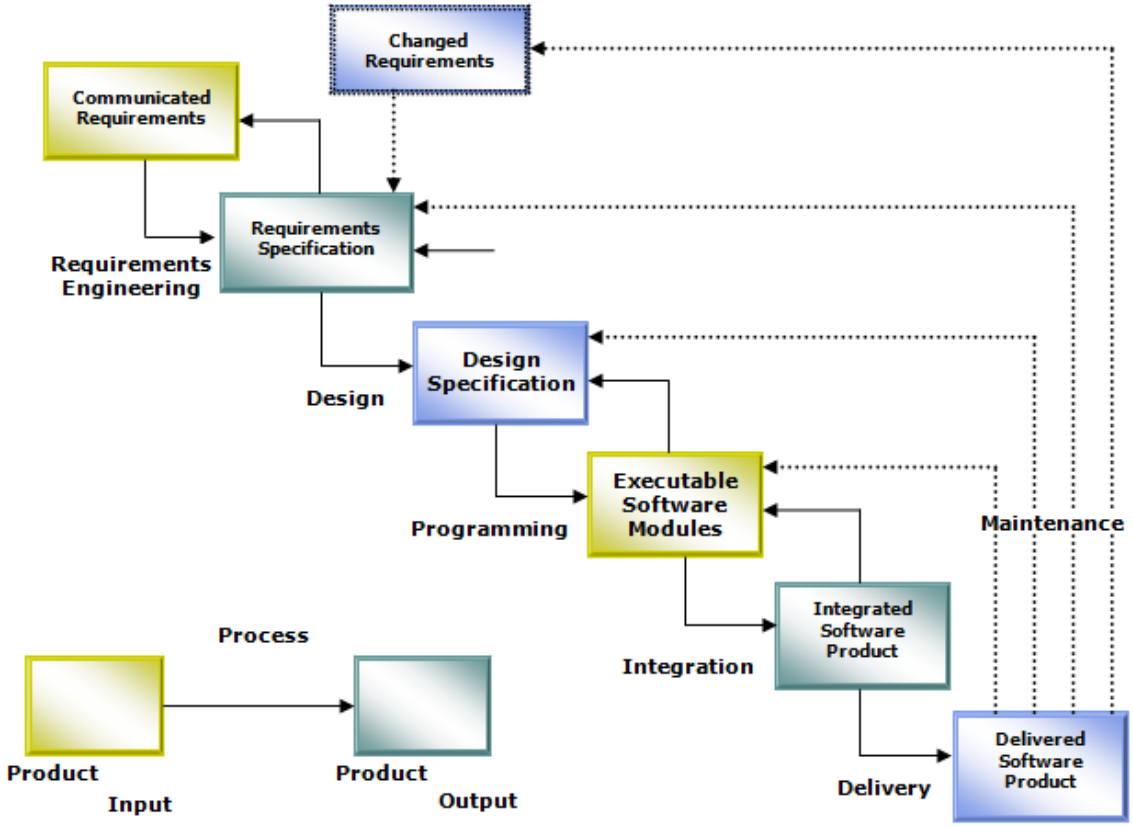


Fig 1.1 Waterfall Model

1.3.4 Project team.

External Project Guide : Mr. Gopal Mekhia

Internal Project Guide : Prof. Malaram Kumhar

Team Members : Sameer Makwana

1.3.5 Hardware/Software environment in company.

Hardware

Hard Disk : 150 GB

RAM : 3 GB

Processor : Intel Core2Duo 1.80 GHz

Software

OS: Windows 7

Apache Server

MySQL Database

PHP

1.3.6 Project Progress Schedule

No.	Milestone Name	Milestone Description	Timeline	Remarks
1	Requirements Specification	Complete specification of the system (with appropriate assumptions) including the database design (for storing the items details). A document detailing the same should be written and a presentation on that be made.	1-2	Attempt should be made to add some more relevant functionalities other than those that are listed in this document. And, attempt should be made to present an overall view of the system which makes sense for the users of the system.
2	Technology familiarization	Understanding of the technology needed to implement the project.	3-4	The presentation should be from the point of view of being able to apply it to the project, rather than from a theoretical perspective.
3	High-level and Detailed Design	Listing down all possible scenarios (like searching for an item, producing a bill, cancelling a bill, notifying about items that are out of stock, adding a new user, adding a new item etc.) and then coming up with flow-charts or pseudo code to handle the scenario.	5-7	The scenarios should map to the requirement specification (i.e., for each requirement that is specified, a corresponding scenario should be there).
4	Implementation of the front-end of the system	Implementation of the main screen giving the login, screen that follows the login giving various options, screens for sales persons/ sales manager/ inventory manager and the administrator for the various functions etc.	7-9	During this milestone period, it would be a good idea for the team (or one person from the team) to start working on a test-plan for the entire system. This test-plan can be updated as and when new

				scenarios come to mind. The test scenarios can be grouped under the respective user who would be associated with it (producing a bill, for example, can be grouped under ‘sales persons’ test cases)
5	Integrating the front-end with the database	The front-end developed in the earlier milestone will now be able to update the sales/inventory database. Other features like report generation etc. should be functional at this stage. In short, the system should be ready for integration testing.	10-12	
6	Integration Testing	The system should be thoroughly tested by running all the test cases written for the system (from milestone 5).	13-14	Another 2 weeks should be there to handle any issues found during testing of the system. After that, the final demo can be arranged.
7	Final Review	Issues found during the previous milestone are fixed and the system is ready for the final review.	15-16	During the final review of the project, it should be checked that all the requirements specified during milestone number 1 are fulfilled (or appropriate reasons given for not fulfilling the same)

Table 1. Project Progress Schedule

Chapter 2

SYSTEM ANALYSIS

2.1 FEASIBILITY STUDY.

2.1.1 Operational feasibility.

Proposed projects are beneficial only if they can be turned out into information system. That will meet the organization's operating requirements. Operational feasibility aspects of the project are to be taken as an important part of the project implementation. Some of the important issues raised are to test the operational feasibility of a project includes the following: -

- Is there sufficient support for the management from the users?
- Will the system be used and work properly if it is being developed and implemented?
- Will there be any resistance from the user that will undermine the possible application benefits?

This system is targeted to be in accordance with the above-mentioned issues. Beforehand, the management issues and user requirements have been taken into consideration. So there is no question of resistance from the users that can undermine the possible application benefits.

The well-planned design would ensure the optimal utilization of the computer resources and would help in the improvement of performance status.

2.1.2 Technical feasibility.

The technical issue usually raised during the feasibility stage of the investigation includes the following:

- Does the necessary technology exist to do what is suggested?
- Do the proposed equipment's have the technical capacity to hold the data required to use the new system?
- Will the proposed system provide adequate response to inquiries, regardless of the number or location of users?
- Can the system be upgraded if developed?

- Are there technical guarantees of accuracy, reliability, ease of access and data security?

Earlier no system existed to cater to the needs of 'Secure Infrastructure Implementation System'. The current system developed is technically feasible. It is a web based user interface. Thus it provides an easy access to the users. The database's purpose is to create, establish and maintain a workflow among various entities in order to facilitate all concerned users in their various capacities or roles. Permission to the users would be granted based on the roles specified. Therefore, it provides the technical guarantee of accuracy, reliability and security. The software and hard requirements for the development of this project are not many and are available as free as open source. The work for the project is done with the current equipment and existing software technology. Necessary bandwidth exists for providing a fast feedback to the users irrespective of the number of users using the system.

2.1.3 Financial and Economical feasibility.

A system can be developed technically and that will be used if installed must still be a good investment for the organization. In the economical feasibility, the development cost in creating the system is evaluated against the ultimate benefit derived from the new systems. Financial benefits must equal or exceed the costs. The system is economically feasible. It does not require any addition hardware or software. Since the interface for this system is developed using the existing resources and technologies available at Mekhia Solutions and private limited, there is nominal expenditure and economical feasibility for certain.

2.1.4 Legal feasibility

The Proposed System should be such that the System do not misguide or gives wrong information to user. The System should give proper information and should be reliable source of information to user.

2.1.5 Time feasibility

The Proposed System is a Desktop Application so it will take some duration of time to satisfy the objective of completing the System (Application). The duration that is allocated to develop the System is quite feasible in respect to time. 4 months is enough to develop System.

2.2 REQUIRMENT ANALYSIS.

2.2.1 Facts finding techniques

The client in most cases is not sure of what exactly is desired and has a poor understanding of the computing environment

- Inception of the Project
- Basic Elicitation
  - Problems of Scope
  - Problems of Understanding
  - Problems of Volatility
- Elaboration
- Negotiation
- Specification
- Validation
- Management (Continuous)
- The following techniques are present unambiguously throughout the project and possess enormous power with regard to requirement gathering.

2.2.1.1 Interview.

The requirement analysis phase begins after the inception of the project. The first phase of interviews is mainly a kind of informal discussions with the client. In this phase the analysts who are the evangelists in the process of requirement elicitation generally do the following:

- Ask a set of Informal Context Free Questions regarding the system.
- Talk through with the client to know his intention with regard to the project.
- Define a business case for the idea along with the performance of certain kind of market analysis.
- Identify a working description of the projects scope. The later phases of interviews involve the following kind of facets:

- Discussion on the Division of the entire thing into manageable and doable modules.
- Module wise interviews with the various personnel involved.
- Certain kind of debatable presentations which may be clubbed with brainstorming or prototyping sessions. This mode of requirement gathering is the one that provides the maximum amount of information regarding the project and hence is used very effectively. This mode can turn into all various forms ranging from strict one room interviews to large debatable discussions.

2.2.1.2 Questionnaire

This mode of requirement elicitation is generally employed during change management and while laying out basic system explanations. Questionnaires used in the project are framed keeping into mind the following things:

- Amount and the kind of information to be extracted through this channel.
- The kind of stake holder to whom the questionnaire is addressed.
- The reusability and abstractness of these questionnaires.

2.2.1.3 Record Review

- The records analyzed by me were mainly the following:
- Software Design Document This gave me the actual requirements of the GUI plus the backend logic right till statement of logical queries which may be employed in some or the other form. It also incorporated the sample GUI so that any changes to the prototypes submitted earlier can be checked and tracked.
- Technical SRS (with Business Analysis) this was a typical SRS that gave me the specific requirements along with the Business rules that need to be employed.
- Class Diagrams the class diagram made me understand the entire architecture that was employed and allowed me to extend it in my system.

2.2.1.4 Observation

This is also the method employed very widely in the project being developed. The developers working onsite generally engage in the observation of the following things:

- Work Environment of the organization.
- The technical expertise of the employees of the organization.

- The volume of customers entertained.
- The kind of system expected.
- The resistance in the organization due while the organization gets the system installed.
- The usage of any of the available systems.

During the continuous management phase that starts once the system is installed and is running the observation regarding system usage, system inconveniences and system benefits is carried out.

2.3 CONTEXT DIAGRAM.

Fig 2.1 Context Diagram

Chapter 3

SYSTEM DESIGN

3.1 INTERFACES.

In the flexibility of the uses the interface has been developed a graphics concept in mind, associated through a browser interface. The GUI'S at the top level have been categorized as

1. Administrative user interface
2. The operational or generic user interface

3.1.1 Administrative user interface

The administrative user interface concentrates on the consistent information that is practically, part of the organizational activities and which needs proper authentication for the data collection. The interfaces help the administrations with all the transactional states like Data insertion, Data deletion and Data updating along with the extensive data search capabilities.

3.1.2 The operational or generic user interface

The operational or generic user interface helps the users upon the system in transactions through the existing data and required services. The operational user interface also helps the ordinary users in managing their own information helps the ordinary users in managing their own information in a customized manner as per the assisted flexibilities.

3.1.3 Number of Modules

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

1. Administrator
2. Users
3. Search
4. Reports

Administrator

The administrator is the super user of this application. Admin only access to enter into this admin page. Admin had all privileges to give authenticate to user and gives privileges that

which portion they can access. The administrator has all the information about all the users and about all products.

This module is divided into different sub-modules.

1. Manage Category
2. Manage Products
3. Manage Users
4. Manage Orders History
5. Reports

1. Manage Category:

a) Add Category:

The shopping cart project contains different kind of products. The products can be classified into different categories. Admin can add new category into the existing system.

b) Edit Category:

Based on the market analysis admin can update a category. He can change the category of a particular product.

c) Delete Category:

Admin has privilege to delete a category from the existing system.

d) View Category:

All existing categories can view by the administrator. The administrator can keep track on categories.

2. Manage Products:

a) Add Products:

The shopping cart project contains different kind of products. The products can be classified into different categories. Admin can add new products into the existing system and he can map with the category.

b) Edit Products:

Based on the market position admin will modify the product details like price, quantity, packing etc.

c) Delete Products:

Administrator can delete the products based on the category.

d) View Products:

Administrator can view the product details. He can watch the products prices and contents of the products.

3. Manage Users:

a) View Users:

Admin can view the user details which are registered in his system. Because he must know how many users entered his site and purchase products. So he can keep track on user's information.

b) Edit Users:

Admin has privileges to edit particular user information, which is requested by the users.

c) Delete Users:

Administrator has a right to delete user information without intimation.

4. Manage Order History:

a) View the Order History:

Administrator can view the Order History which is generated by the user. He can verify the products and their prices.

b) Generate Bill For History:

Administrator generates the bill for order list which is prepared by the users.

c) Set Status:

Admin can set the status for the Order list which is given by the user. The status can be different types as follows.

- Shifted
- Delivered
- Cancelled
- Rejected

USERS:-

1) View Products:

User can view the list of products based on their categories. A detailed description of a particular product can be displayed to the user, products details, manufactured by, price and date of manufacture etc…

2) Select Order Products:

After verifying the products details users select some required products.

3) Generate Order Products:

Whenever user completes his selection of product, he can add these selected products into shopping cart, for this he must be an authenticated person. If he is not an authenticated person his selected products should not add into shopping cart. Then he needs to register himself. If he is registered person he can directly generates the Order Products.

4) Registration:

A registered user only can purchase products from online. So that if a user want to purchase products he must be fill his registration form and must obtain a valid user name and password which is provided by the administrator.

5) View Shopping Cart:

If a user generates an Order List after that he may watch which products selected by himself, mode of delivery etc… The user can also view previous shopping cart which is generated by him.

6) Billing:

After submit his shopping cart user must pay his bill which is generated by the administrator. The mode of billing is Credit Card only. User gives his proper information about credit card then only he can get shopping cart, otherwise his order of shopping cart will be rejected.

Reports:-

Reports can be generated by the admin for various purposes. Based on the reports admin take decisions of the system. Different kinds of reports can be generated they are

1) Shopping Trends

These reports based on which product is selected by large no users. What is favorite product under which category it contains like that...

2) Items Ordered on a given date/date range:

Admin will generate Orders lists which is selected by the users based on a selected date or particular date range.

3.2 Diagram.

3.2.1 UML Diagram

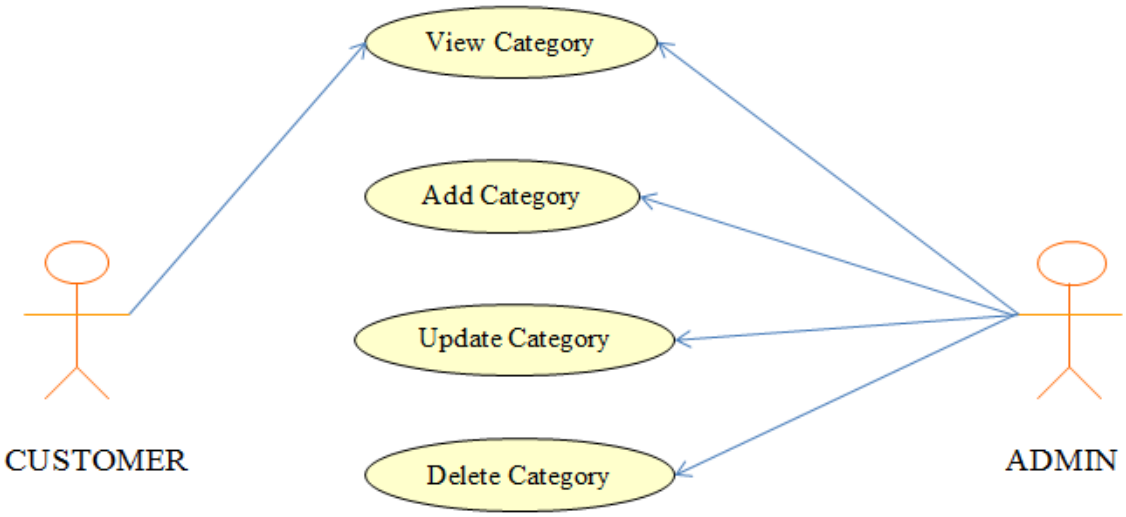


Fig 3.1 Category

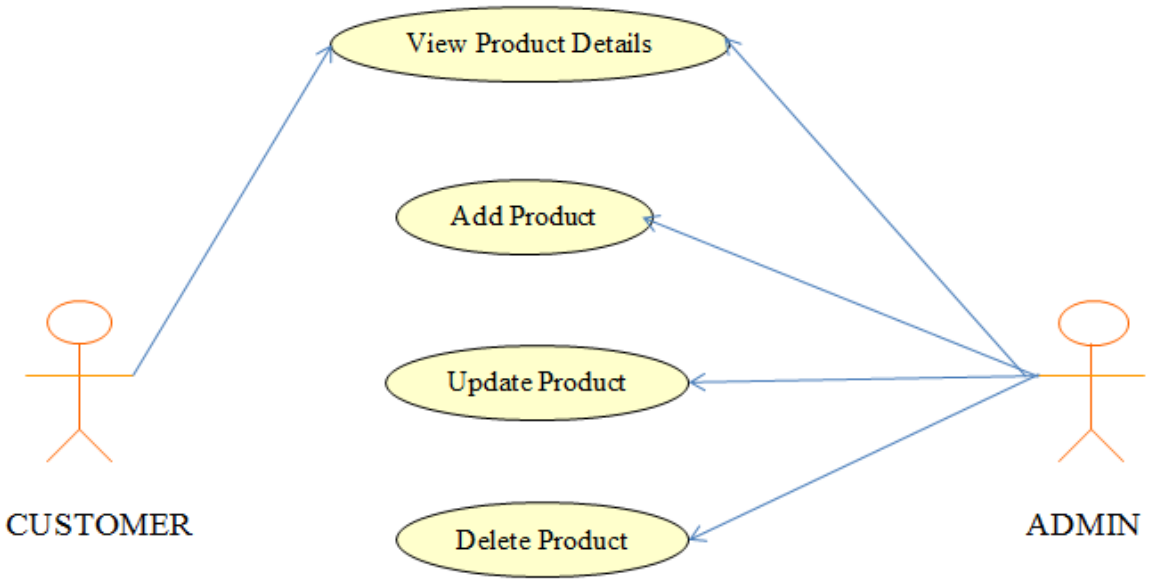


Fig 3.2 Product

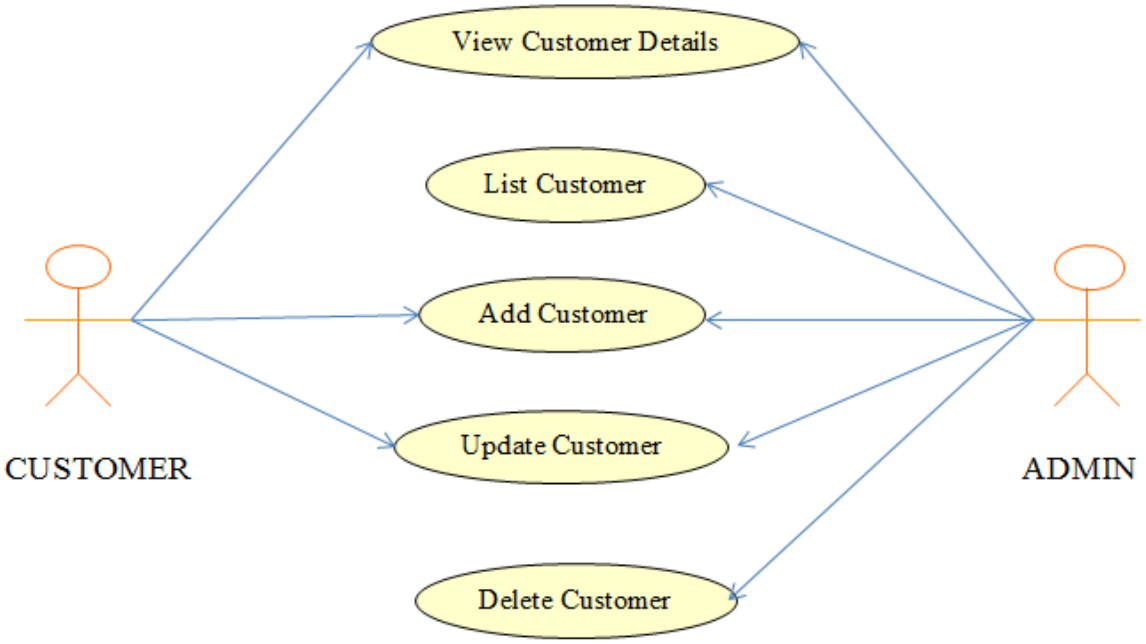

View Customer Details
List Customer
Add Customer
Update Customer
Delete Customer
CUSTOMER
ADMIN

Fig 3.3 User

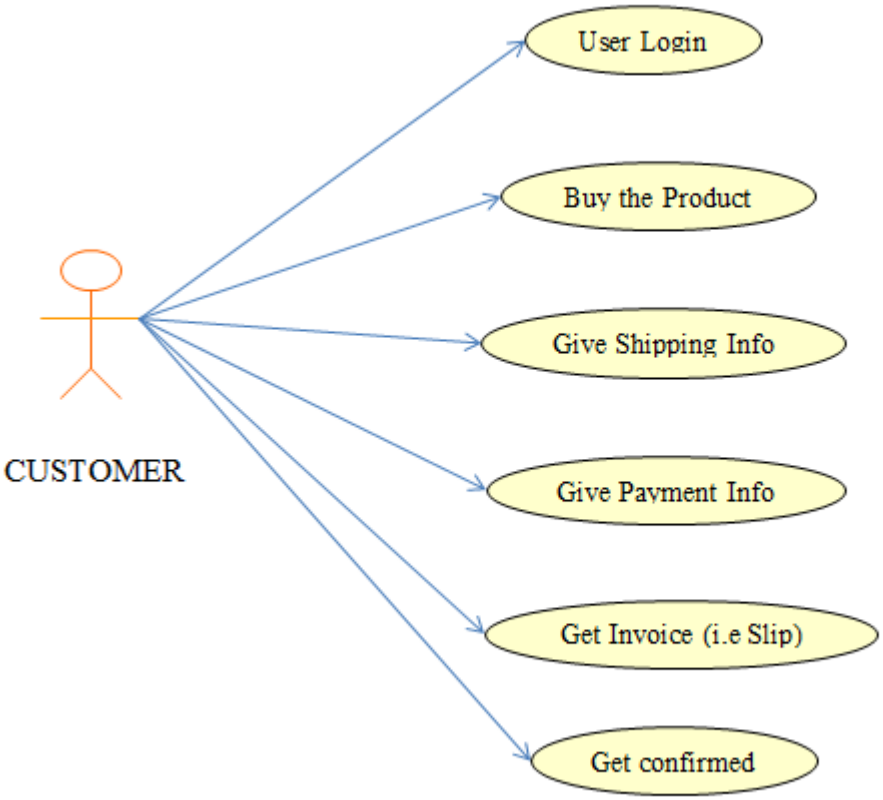

User Login
Buy the Product
Give Shipping Info
Give Payment Info
Get Invoice (i.e Slip)
Get confirmed
CUSTOMER

Fig 3.4 Bill

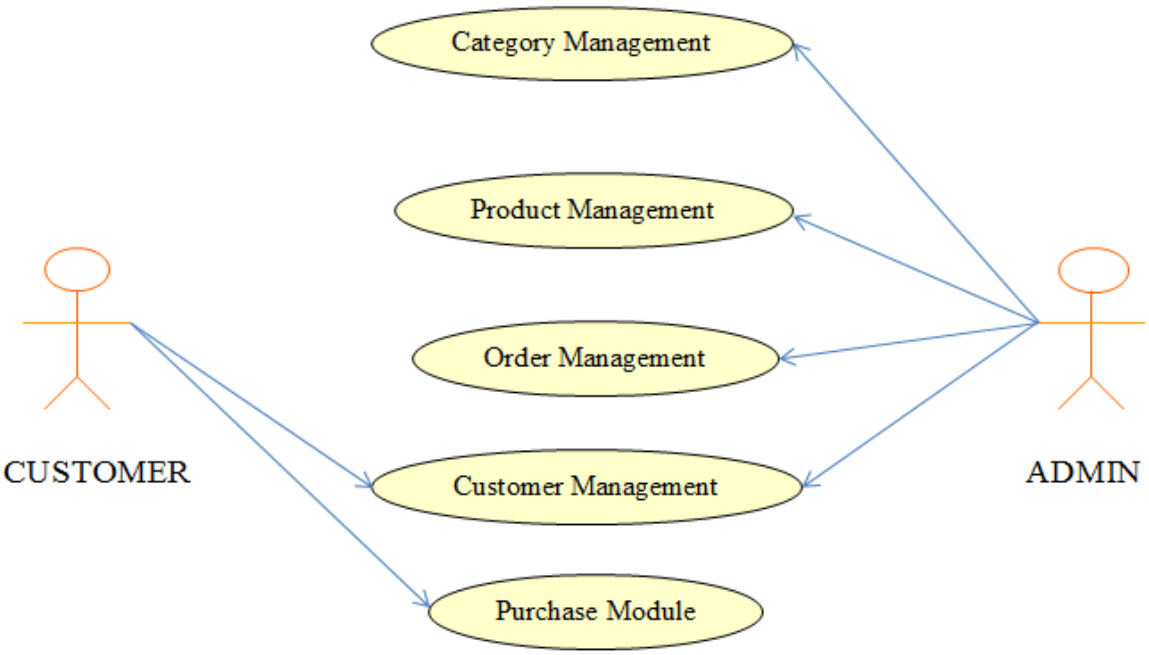


Fig 3.5 Online Shopping

3.2.2 Class Diagram

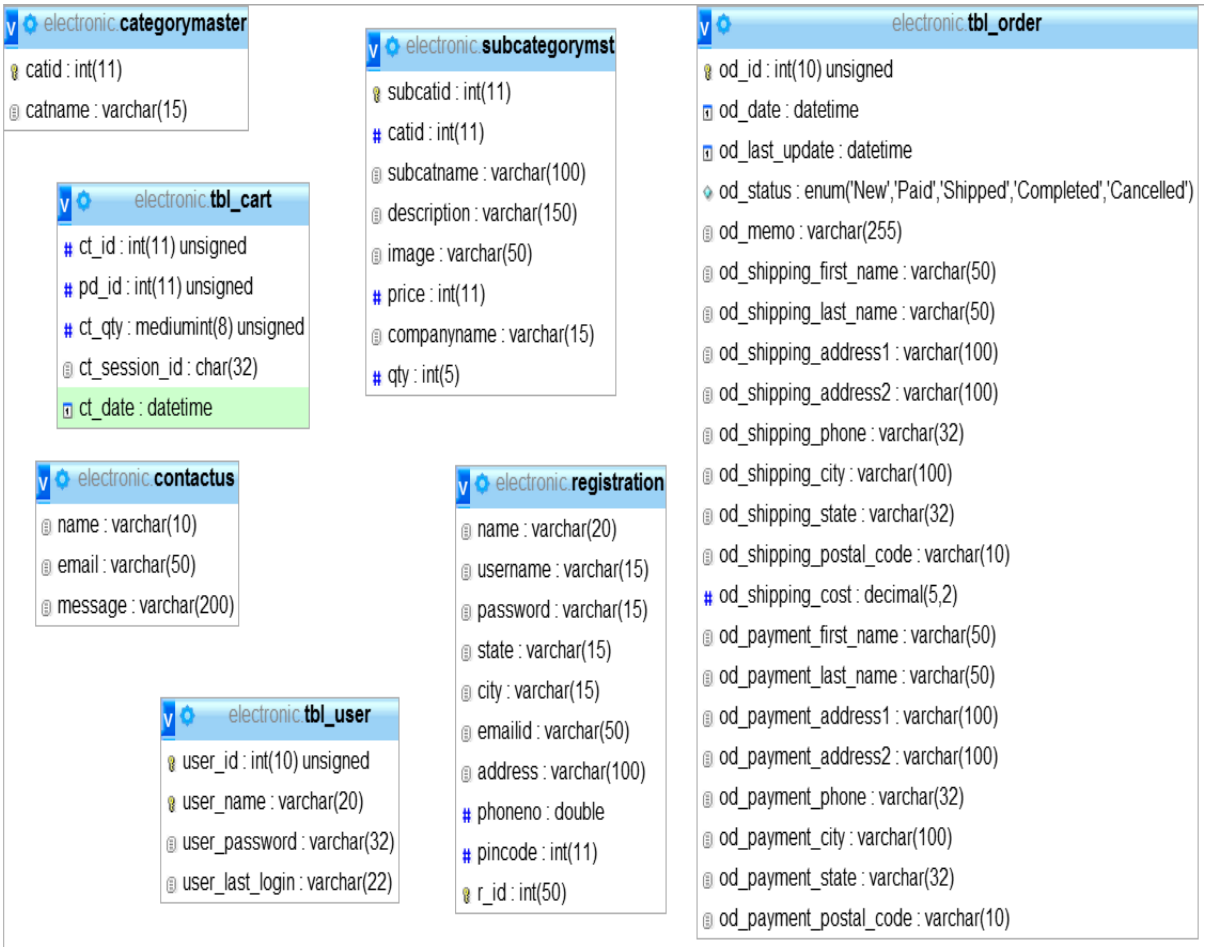


Fig 3.6 Class Diagram

3.2.3 Activity Diagrams

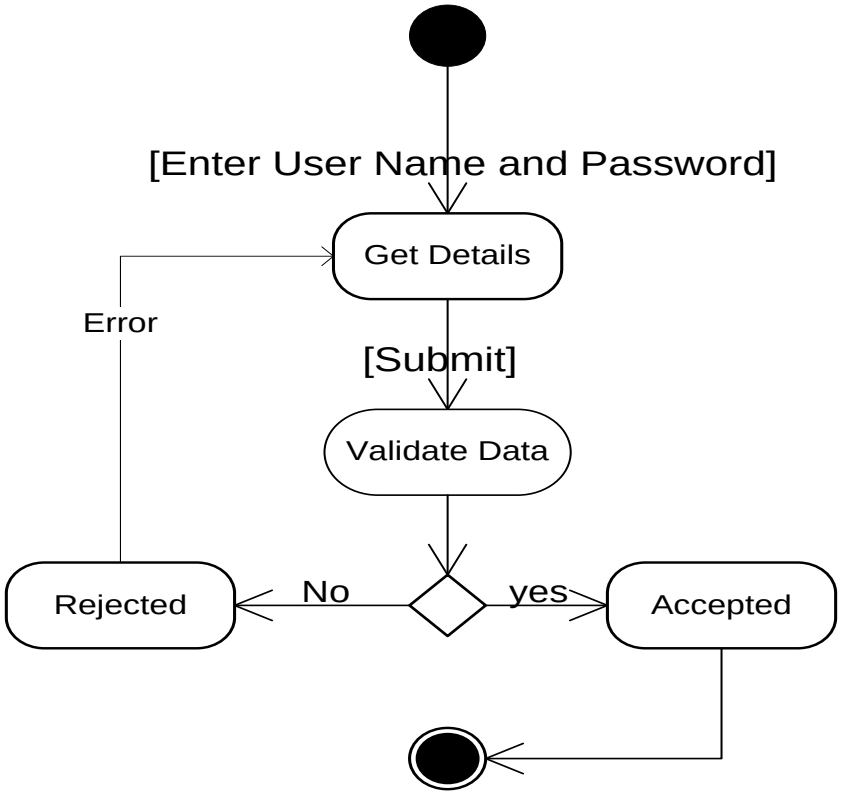


Fig 3.6 Login Activity:

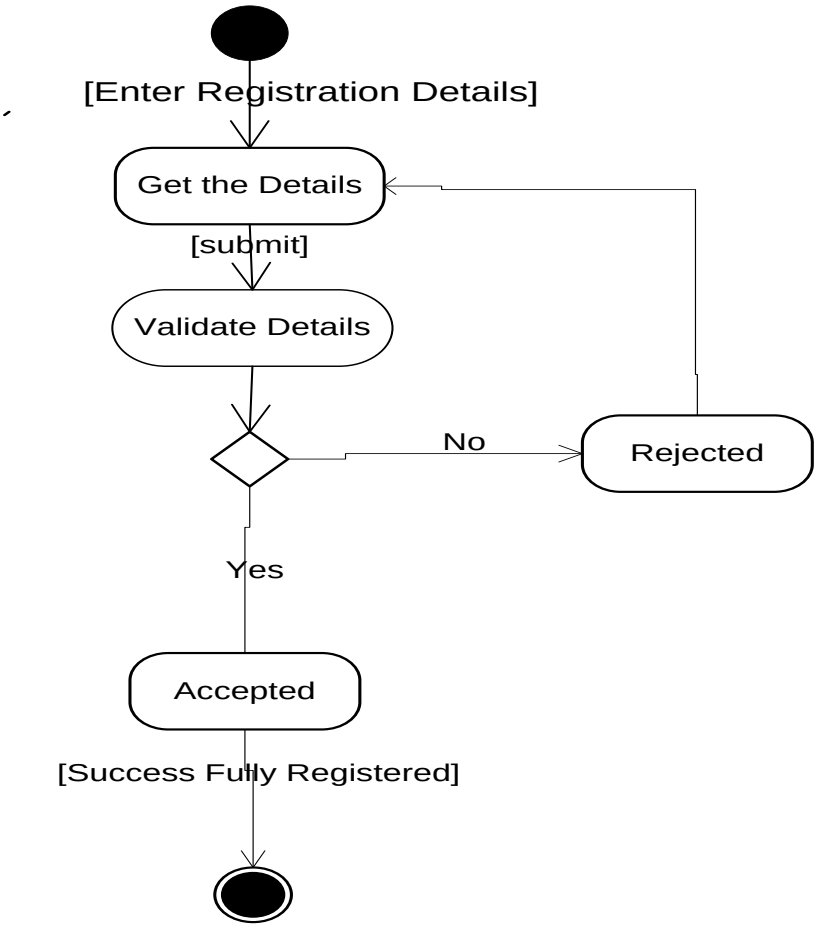


Fig 3.7 Registration Activity Diagram:

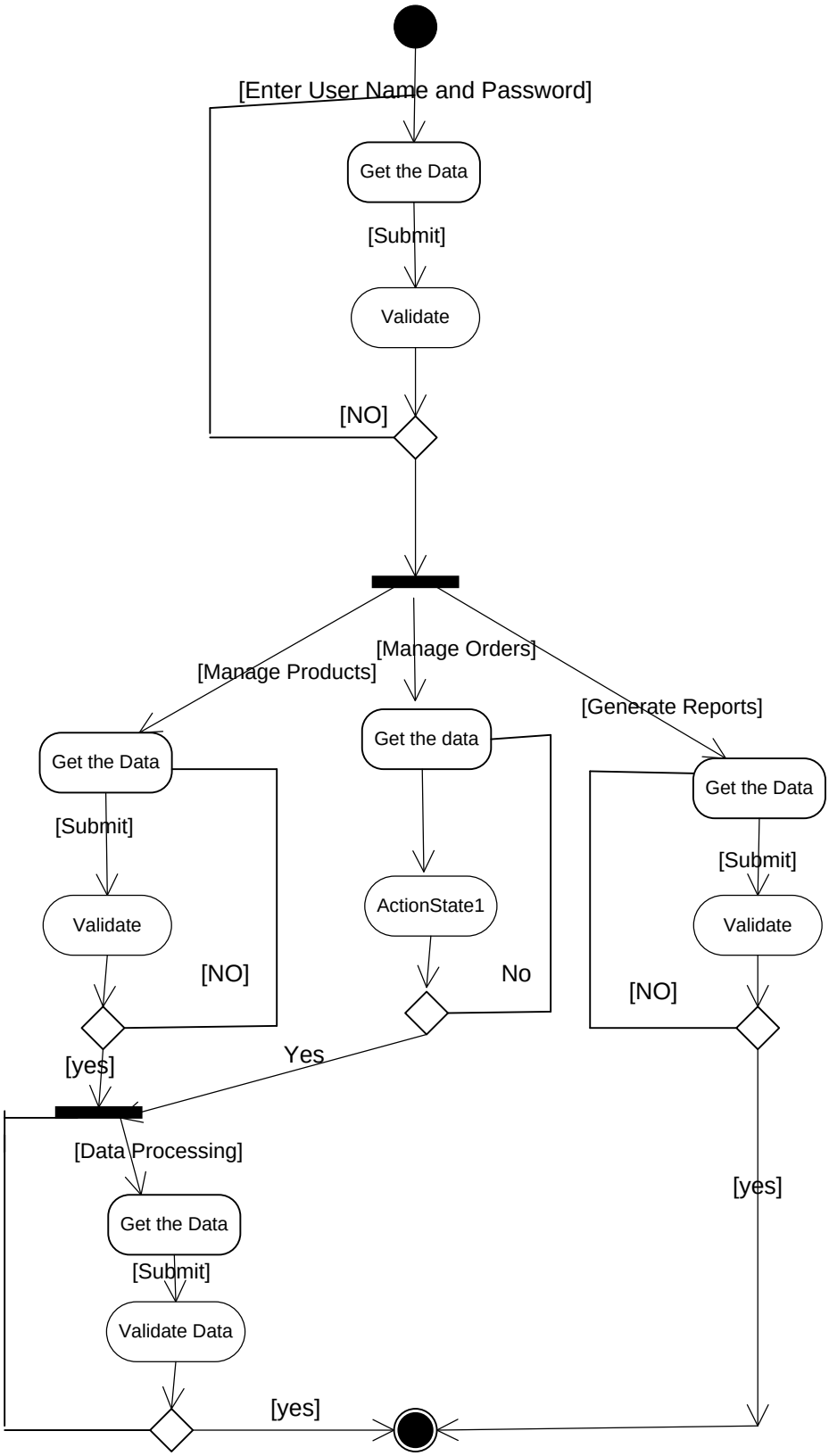


Fig 3.8 Admin Activity Diagram

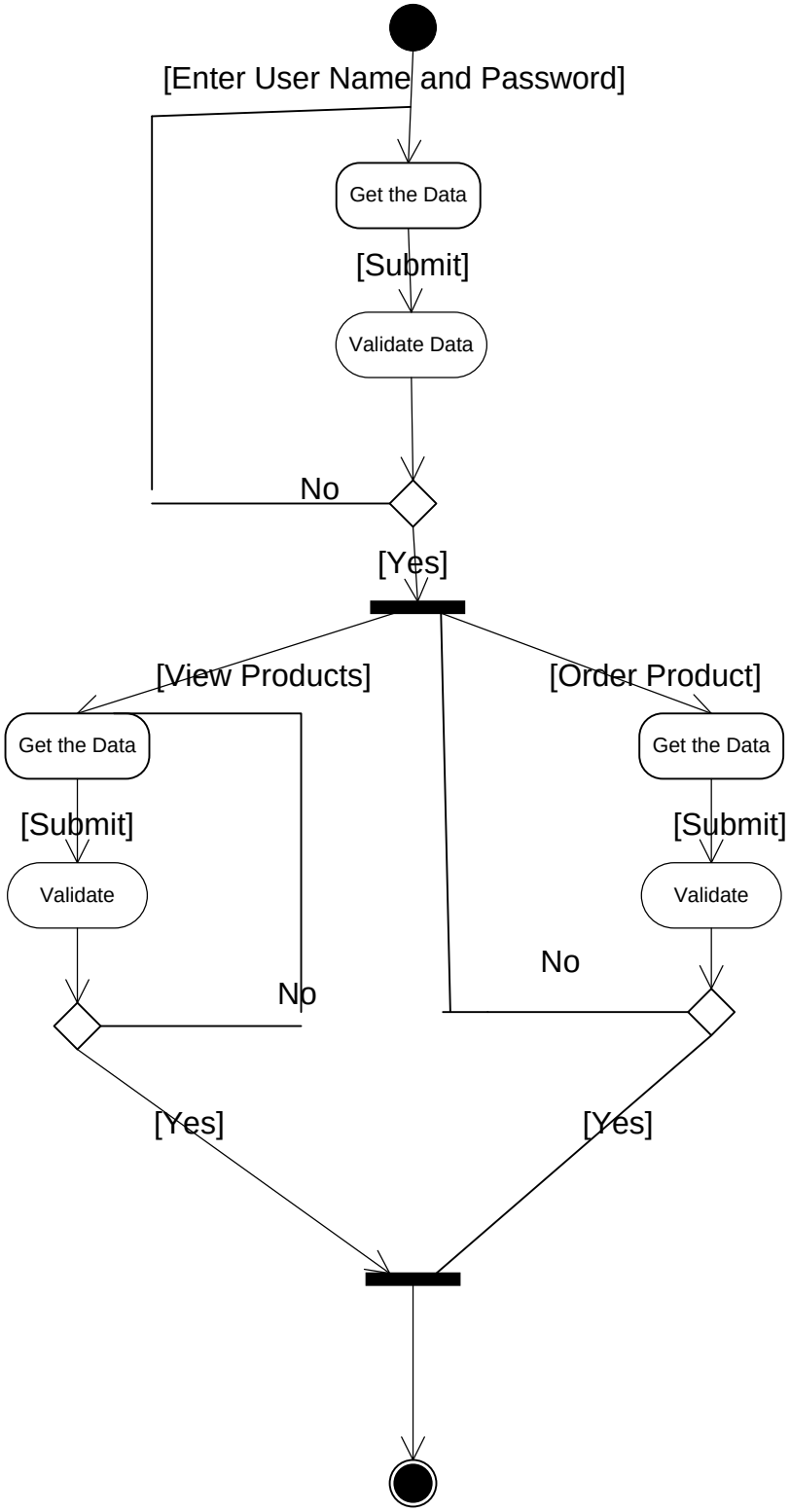


Fig 3.9 User Activity Diagram

3.2.4 Process Diagram

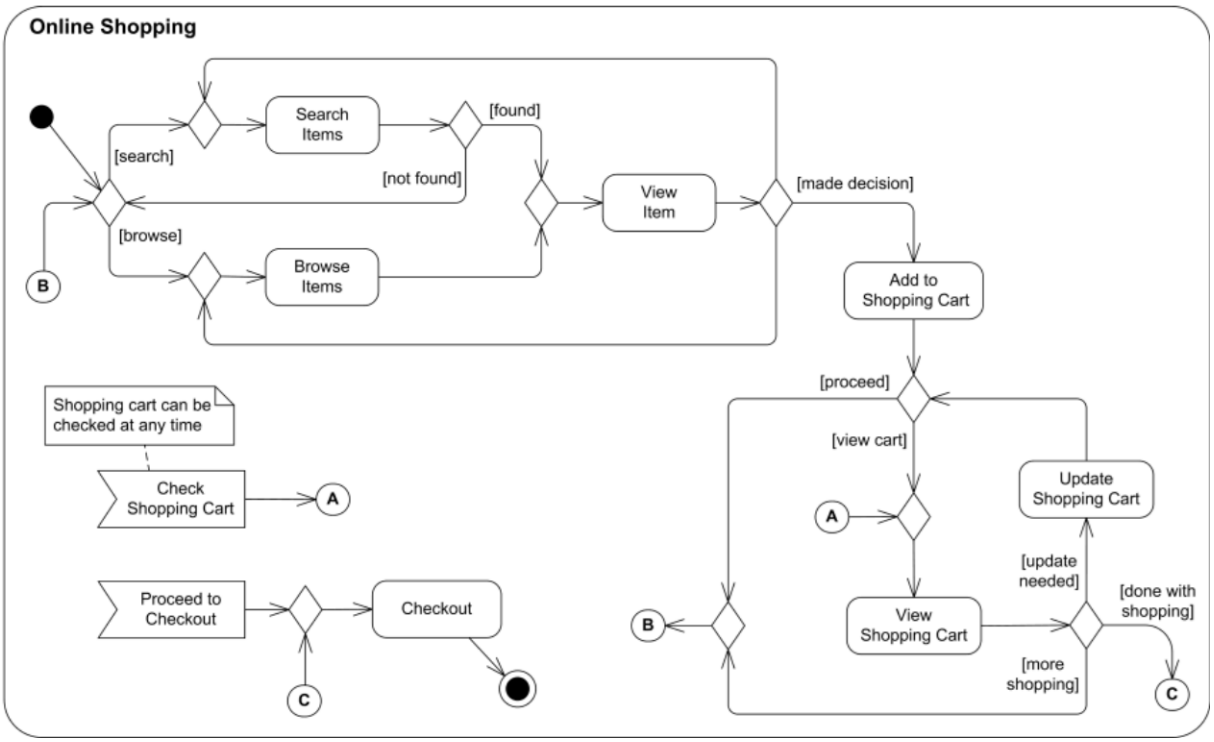


Fig 3.10 Process Diagram

Chapter 4

USER MANUALS

4.1 Menu Screens along with Description

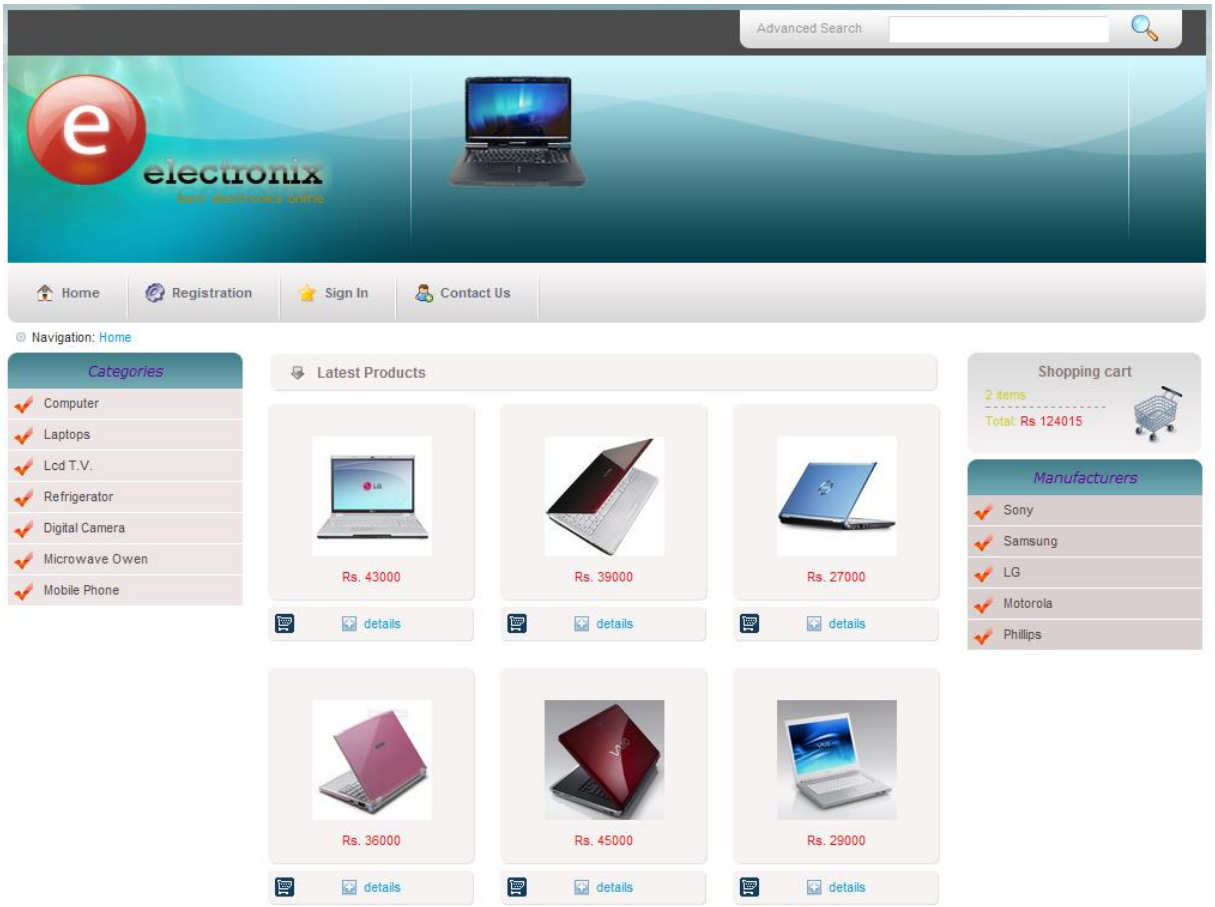


Fig 4.1 User Interface

Description: This is the user page where user can browse the various products based on the category.

Item		Unit Price	Quantity	Total	
	Samsung-1080 hd	Rs. 79000	1	Rs.79000	Delete
	sony-vaio-cr	Rs. 45000	1	Rs.45000	Delete
			Sub-total	Rs. 124000	
			Shipping	Rs. 15	
			Total	Rs.124015	
					Update Cart

<< Continue Shopping | Place Order >>

Fig 4.2 Shopping Cart

Description: This is the shopping cart page where list of products selected by the user is displayed.

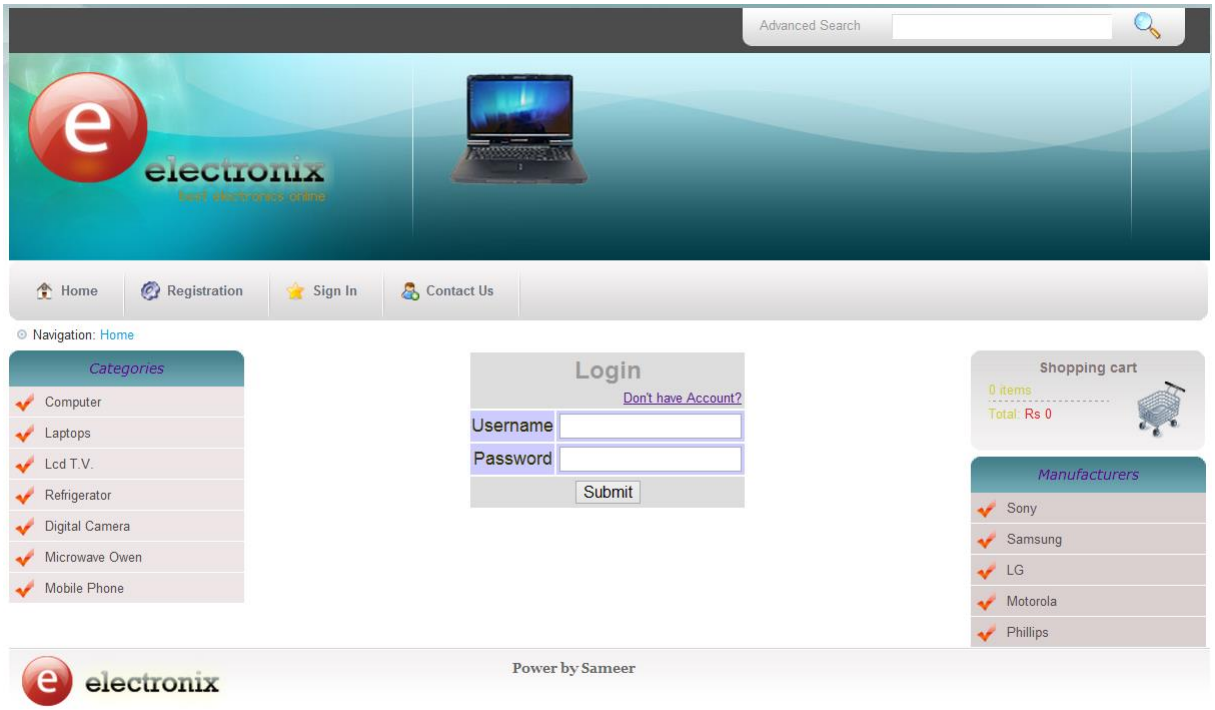


Fig 4.3 Login form

Description: This is the sign in page where users can sign in to place order of the selected item. For signing in user must be the registered user.

Fig 4.4 Registration form

Description: This is the registration form where user can register themselves so later they can sign in and order products

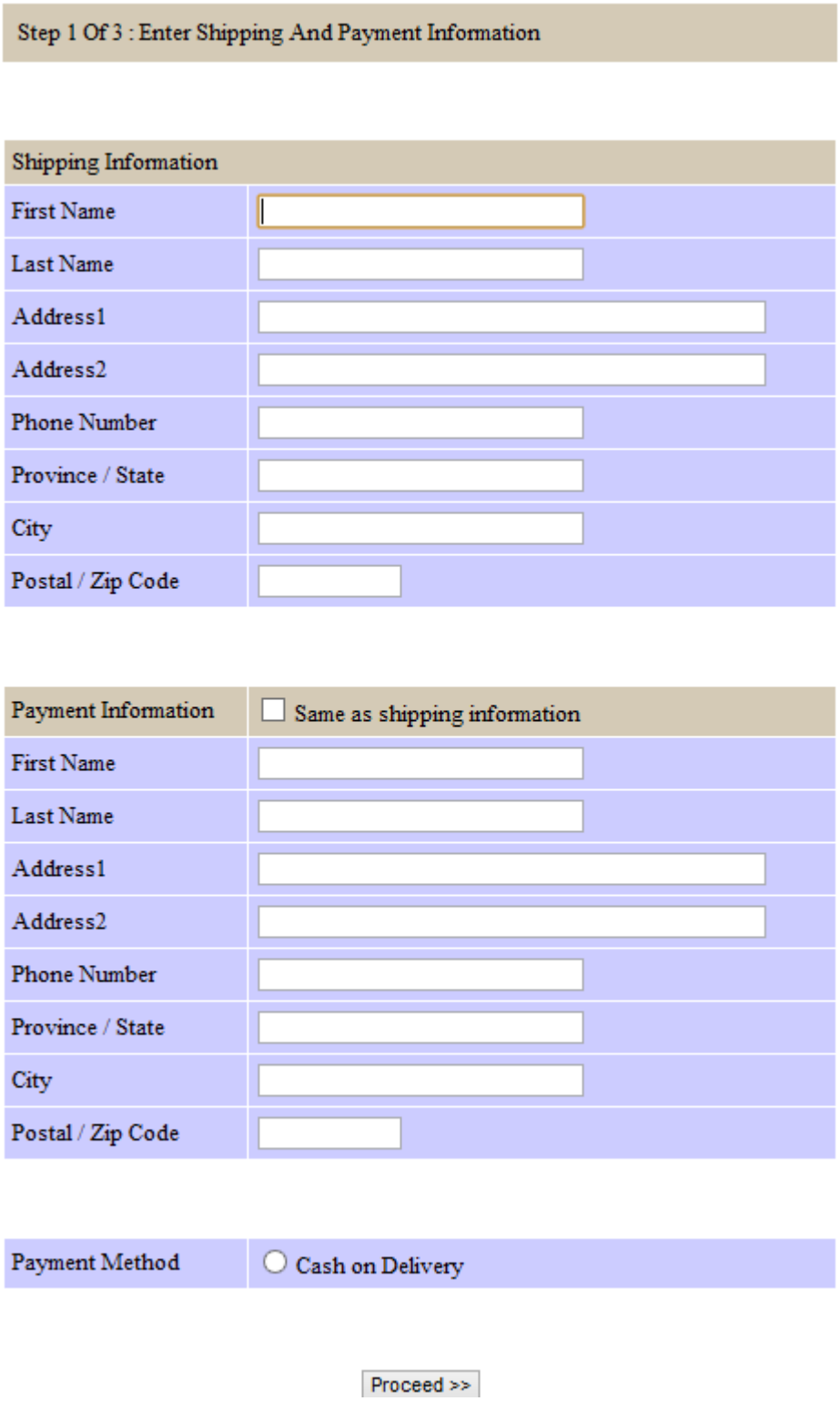
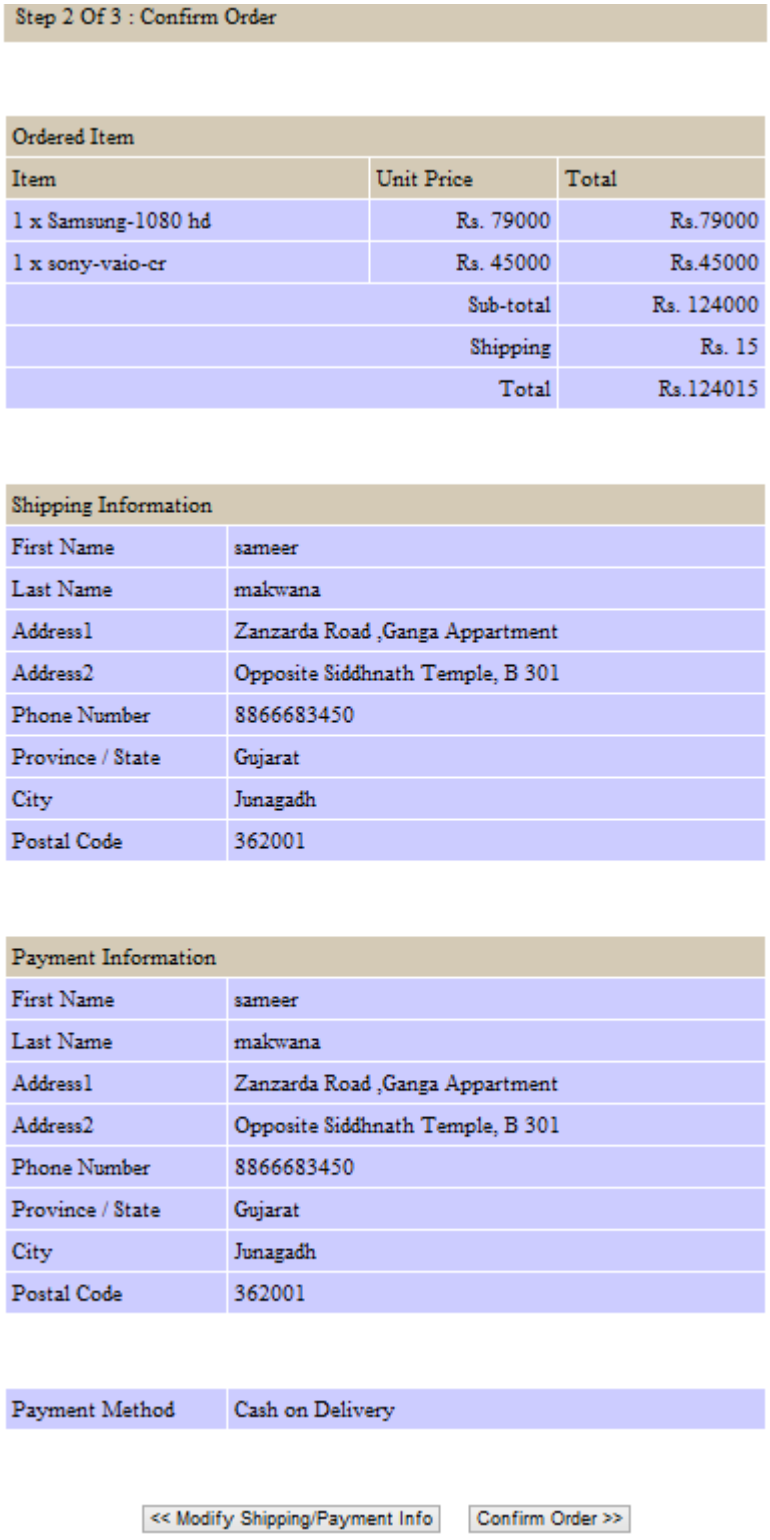


Fig 4.5 Shipping and Payment form

Description: This is the shipping and Payment form where users can enter his shipping and the payment information. He can select the payment type.



Step 2 Of 3 : Confirm Order

Ordered Item		
Item	Unit Price	Total
1 x Samsung-1080 hd	Rs. 79000	Rs.79000
1 x sony-vaio-cr	Rs. 45000	Rs.45000
	Sub-total	Rs. 124000
	Shipping	Rs. 15
	Total	Rs.124015

Shipping Information	
First Name	sameer
Last Name	makwana
Address1	Zanzarda Road ,Ganga Appartment
Address2	Opposite Siddhnath Temple, B 301
Phone Number	8866683450
Province / State	Gujarat
City	Junagadh
Postal Code	362001

Payment Information	
First Name	sameer
Last Name	makwana
Address1	Zanzarda Road ,Ganga Appartment
Address2	Opposite Siddhnath Temple, B 301
Phone Number	8866683450
Province / State	Gujarat
City	Junagadh
Postal Code	362001

Payment Method	Cash on Delivery

Fig 4.6 Shipping and Payment confirm

Description: This is the shipping and Payment confirms form where users can confirm his shipping and the payment information and the ordered items.

Fig 4.7 Category Management

Description: This is the admin category form where various categories can be inserted updated, deleted.

Fig 4.8 Product Management

Description: This is the admin product form where various products can be inserted, updated, deleted.

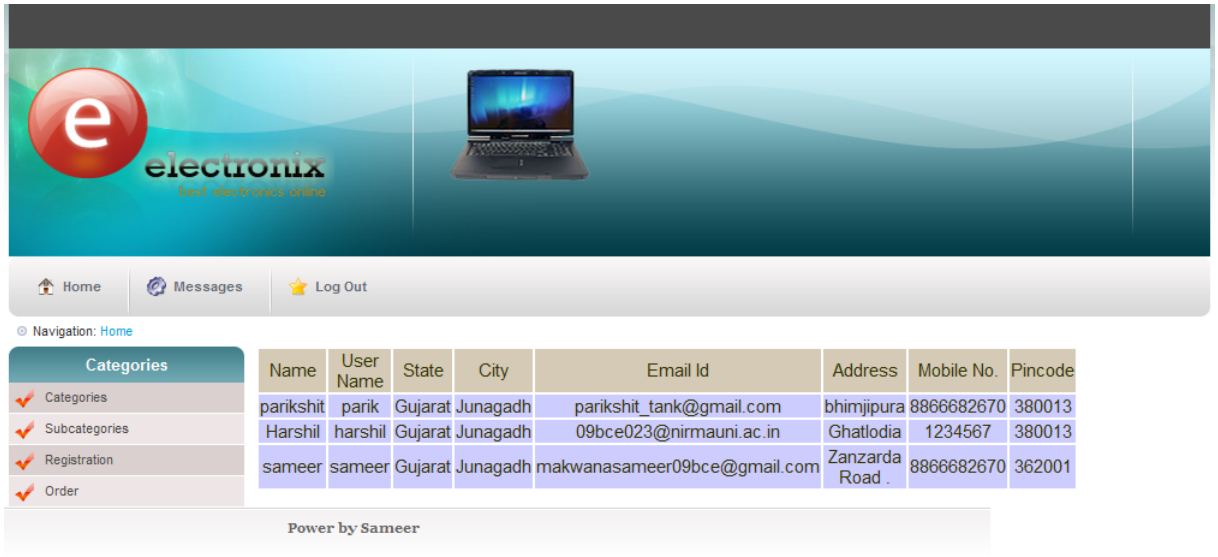


Fig 4.9 List of Registered Users

Description: Here the admin can see the list of all the registered users.

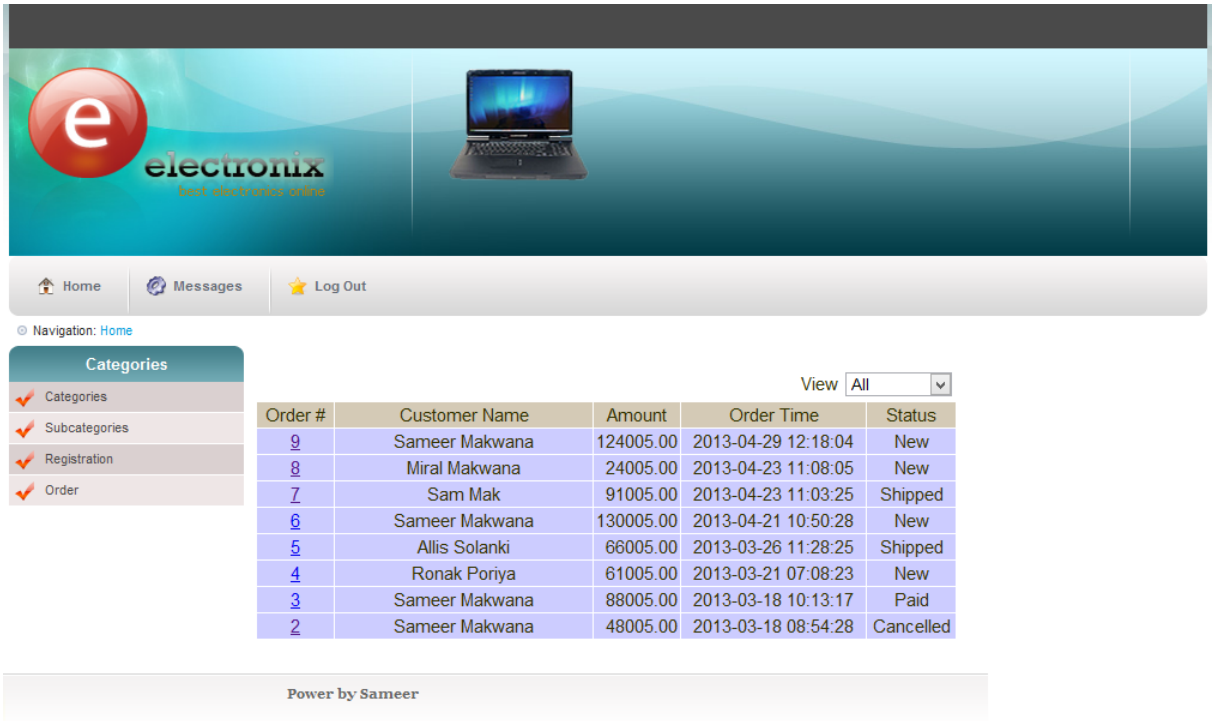


Fig 4.10 List of Order

Description: Here the admin can see the list of various orders placed by the various users.

Fig 4.11 Order Details

Description: This page contains the detailed information about the ordered products.

Chapter 5

TESTING

Sr. No	Test Case Description	Input	Expected Behavior	Observed behavior	Test Result
1	Can New User Register?	Personal Info of User	User should Be registered on DTIS server	User is Registered only If desired Id does Not collide with Existing Ids	Success
2	Can User Login?	Loginld + password	User should Be login	User is login only When Login Id & password is valid	Success
3	Can User Logout?	Logout Button	User should log out.	User Logged out	Success
4	Can User Add Products to Cart	Cart Button	User should be able to Add products	Added products will be displayed	Success
5	Can User Delete Products from cart	Delete Button	User should be able to delete products	Deleted records will not be displayed	Success
6	Can User Update Products in cart	Update Button	User should be able to update products	Updated records will be displayed	Success
7	Can User browse products according to category	Category module	User should be able to browse products	Result of browsed category will be displayed.	Success
8	Can user order products	Place Order	User should be able to place order	Result of the ordered invoice displayed	Success

9	Can User Read information available on the site.	Click the link	User should be able to Read information	Information will be displayed.	Success
10	Can Admin insert,update,delete category	Insert,update, delete buttons	Insert ,update, delete category	Action performed	Success
11	Can Admin insert,update,delete products	Insert,update, delete buttons	Insert ,update, delete products	Action performed	Success
12	Can admin change order status	Status menu	Change status	Status changed	Success

Table 2. Test Cases

Chapter 6

FUTURE ENHANCEMENT

There are some limitations for the current system to which solutions can be provided as a future development:

1. The system is not configured for comparison of the multiple items at this time. The above functionality can be incorporated; so that user can compare the various items description and then add to the cart the more specific items he may have chosen.

2. The Website is not accessible to everyone. It can be deployed on a web server so that everybody who is connected to the Internet can use it.

3. Credit Card validation is not done. Third party proprietary software can be used for validation check.

4. Payment Gateway can be incorporated, till now cash on delivery is only kept.

5. The Administrator of the web site can be given more functionalities, like looking at a specific customer's profile.

Chapter 7

APPENDIX

7.1 Tools used.

Xampp Server (apache server, php 5.0, MySQL database)

Xampp Server:

- XAMPPs are packages of independently-created programs installed on computers that use a Microsoft Windows operating system.
- XAMPP is the package, Whose acronym formed from the initials of:
- Microsoft Windows (the operating system)
- Apache (web server)
- MySQL (open-source database)
- One of PHP, Perl or Python (scripting language)
- PHP is a server side scripting language that can manipulate information held in a database and generate web pages dynamically each time content is requested by a browser.
- Other programs may also be included in a package, such as phpMyAdmin which provides a graphical user interface for the MySQL database manager, or the alternative scripting languages Python or Perl. On the other hand we have LAMP which is same as XAMPP but for Linux operating system and MAMP for MAC.

PHP

- PHP is a general-purpose scripting language originally designed for web development to produce dynamic web pages. For this purpose, PHP code is embedded into the HTML source document and interpreted by a web server with a PHP processor module, which generates the web page document. It also has evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP can be deployed on most web servers and as a standalone interpreter, on almost every operating system and platform free of charge. PHP is installed on more than 20 million websites and 1 million web servers.

MySQL Database

- MySQL is a relational database management system (RDBMS) that runs as a server providing multi-user access to a number of databases. It is named after developer Michael Widenius' daughter, my. The SQL phrase stands for Structured Query Language.

- The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation.

Chapter 8

SUMMARY AND CONCLUSION

8.1 Summary

Summary of activities carried out during major project training at Mekhia Solutions Private Limited can be listed as below:

- Initial Learning about the technologies and the tools.
- Requirement Analysis of the project.
- Project Design including GUI related design.
- Project Development (Coding).
- Testing of the project.
- Quality Related Work
- Final Documentation.

8.2 Conclusion

Throughout the process, I obtained the experience of working in a large organization and it was a great learning experience. This organization has widened my horizons of knowledge to a very large extent. Till now I was exposed to a small side of practical learning and with this project I have attained a lot of understanding from the practical point of view. This project will always remain an integral part of my resume and I hope my wonderful experience here would provide a boost to my career as well.

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