E-MARKETING WEBSITE

Minor Project Report

Submitted in partial fulfilment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

(Information Technology)

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Abstract

E-marketing, Internet marketing, Online marketing they refers to advertising and marketing attempts which they use emails and web as their strategy for business. This article describes about how start-up firms utilize networks has focused on direct effects of either the personal network around the entrepreneur or the formal collaboration network around the firm and includes different kinds of brands developing their products using e-marketing The new e- business development is developing an account, growing the business and expanding your services once you've established a client relationship The capability and willingness to develop manage and organize a business venture along with any of its risks in order to make a profit. Which is most obvious example of entrepreneurship is the starting of new e- businesses.

Acknowledgements

We are highly grateful to the Dr. Sehijpal Singh, Principal, Guru Nanak Dev Engineering College (GNDEC), Ludhiana, for providing this opportunity to carry out the minor project work in E-marketing website using Html,css, JavaScript,Python and Django. The constant guidance and encouragement received from Dr. Kulvinder singh mann Hod of IT Department, GNDEC Ludhiana has been of great help in carrying out the project work and is acknowledged with reverential thanks. We would like to express a deep sense of gratitude and thanks profusely to Project Guide Prof. Pradeep jaiswal without her wise counsel and able guidance, it would have been impossible to complete the project in this manner. We express gratitude to other faculty members of Information Technology Department of GNDEC for their intellectual support throughout the course of this work. Finally, WE are indebted to all whosoever have contributed in this report work.

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Declaration

I/We declare that this written submission represents my/our ideas in my/our own words and where others' ideas or words have been included, I/We have adequately cited and referenced the original sources. I/We declare that I/We have properly and accurately acknowledged all sources used in the production of this report. I/We also declare that I/We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I/We understand that any violation of the above will be a cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Chapter 1

Introduction

1.1 Introduction to Project

E-marketing term itself refers to sale and purchase through online, profits and loss advertising and promotion play a key role to employment innovation and competitive advantage. Business discontinue is an important element of economies on the other hand, entries to and exits from businesses are closely correlated. E-markets, trust between interaction partners (buying agents and selling agents) is essential for any transaction to be successful [1-18]. This is a simple way to buy things and widely spreading business in the business market. Field of marketing and consumer ethics has developed considerably over the past 25 years .[1]

1.1.1 Existing System

Presently recruitment is done manually. That is if a company or organization needs employees, they make an announcement through newspaper. People who are eligible send application to the organization or company. From these applications they are called for interviews or tests. After tests company has to do short listing manually. From these short-listed candidates, they are called for interviews. After interview short listed candidates are employed. So, it's all a time-consuming procedure.

1.1.2 Limitations of Existing System

Recruitment is done manually. These tasks are time consuming. It may take one month or long. People around the world cannot apply. Online Recruitment system very convenient because in the manual system there are lot of difficulties in conducting and managing a recruitment exam, short listing, maintaining staff etc.

1.1.3 Proposed System

Campus Recruitment is aimed at developing a web-based and central recruitment Process system for the HR Group for a company. Some features of this system will be creating vacancies, storing application data, interview process initiation and finally hiring of the applicant. This project Campus Recruitment System is an online website in which jobseekers can register themselves and then apply for job. People all around the world can apply and register. It has made all the process easy.

1.2 Objective of Project

The objective of this project is to create an e-commerce web portal with a content management system which would allow product information to be updated securely using mobile device. The web portal will have an online interface in the form of an e-commerce website that will allow users to buy goods from the merchants. The e-commerce portal will have the following key features:

1. An online shop that will allow online shoppers to buy wares from formal and informal merchants

2. A search engine on the website to allow customers to find specific types of merchandise

3. A secure online transaction system that will allow shoppers to purchase goods safely using their credit cards.

4. A database of merchandise with photos, product descriptions and stock information. This database will also contain all relevant merchant and customer information.

5. A data security system that will ensure that all data that is transmitted between the various system [1]

1.3 Feature of Project

1. User Friendly and mobile friendly website
2. Special offer and sell
3. user access anywhere from world
4. comparison between two products and also a related item on the store
5. online payment and cash on delivery is also available

Chapter 2

Technology

2.1 Introduction to Python

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with dynamic typing and dynamic binding make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python was conceived in the late 1880s, and its implementation began in December 1888 by Guido van Rossum at Centrum Wickenden Informatica (CWI) in the Netherlands as a successor to the ABC language (itself inspired by SETL) capable of exception handling and interfacing with the Amoeba operating system.

2.1.1 What can PYTHON do?

Python is a general-purpose programming language. Hence, you can use the programming language for developing both desktop and web applications. Also, you can use Python for developing complex scientific and numeric applications. Python is designed with features to facilitate data analysis and visualization.
Python reached version 1.0 in January 1884. The major new features included in this release were the functional programming tools lambda, map, filter and reduce. Van Rossum stated that "Python acquired lambda, reduce (), filter () and map (), courtesy of a Lisp hacker who missed them and submitted working patches".

2.1.2 Why Python?

1. Python works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc).

2. Python has a simple syntax similar to the English language.

3. Python has syntax that allows developers to write programs with fewer lines than some other programming languages.

4. Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.

5. Python can be treated in a procedural way, an object-orientated way or a functional way.

2.2 History of Django

2003 Started by Adrian Holovaty and Simon Willison as an internal project at the Lawrence Journal-World newspaper.
2005 Released July 2005 and named it Django, after the jazz guitarist Django Reinhardt.
2005 Mature enough to handle several high-traffic sites. Current Django is now an open-source project with contributors across the world.

2.2.1 Advantages of Django

Here are few advantages of using Django which can be listed out here
Object-Relational Mapping (ORM) Support -Django provides a bridge between the data model and the database engine, and supports a large set of database systems including MySQL, Oracle, Postgres, etc. Django also supports NoSQL database through Django-nonreal fork. For now, the only NoSQL databases supported are MongoDB and google app engine.
Multilingual Support Django supports multilingual websites through its built-in internationalization system. So, you can develop your website, which would support multiple languages.
Framework Support Django has built-in support for Ajax, RSS, Caching and various other frameworks.
Administration GUI Django provides a nice ready-to-use user interface for administrative activities.
Development Environment Django comes with a lightweight web server to facilitate end-to-end application development and testing.

2.3 HTML

The World Wide Web ("the Web," for short) is "Hypertext spanning the Internet." Hypertext is a special kind of computer document in which certain words act as links (or hyperlinks) that take you from one part of the document to another. The World Wide Web is like an extended kind of hypertext because when you click on a hyperlink, it may take you (a) to another point in the same document or file; (b) to another document/file on the same computer; or (c) to a document on another computer!

2.4 CSS

Cascading Style Sheets (CSS) are a method of web design that formats web page content according to a presentation style specified by the web page author. There are several advantages to using CS to format the presentation elements of a web page. CSS essentially separates document content from the manner in which it is presented, thus allowing for more fluid transitions between various browser platforms. CSS also provides for more precise control for spacing, alignment, and positioning of content without relying on the need for layout tables or frames. Font style, colour, and font size can all be manipulated using CSS as well.

2.4.1 The following are the advantages of CSS

CSS saves time You can write CSS once and then reuse the same sheet in multiple HTML pages. You can define a style for each HTML element and apply it to as many Web pages as you want.

Easy maintenance To make a global change, simply change the style, and all elements in all the web pages will be updated automatically.

Global web standards Now HTML attributes are being deprecated and it is being recommended to use CSS. So, it's a good idea to start using CSS in all the HTML pages to make them compatible with future browsers.

Platform Independence The Script offer consistent platform independence and can support latest browsers as well.

2.5 JAVASCRIPT

JavaScript is a dynamic computer programming language. It is lightweight and most commonly used as a part of web pages, whose implementations allow client-side script to interact with the user and make dynamic pages. It is an interpreted programming language with object-oriented capabilities.
JavaScript is a lightweight, interpreted programming language.
Designed for creating network-centric applications.
-Complementary to and integrated with Java.
-Complementary to and integrated with HTML.
-Open and cross-platform.

2.5.1 Advantages of JavaScript

Speed: Client-side JavaScript is very fast because it can be run immediately within the client-side browser. Unless outside resources are required, JavaScript is unhindered by network calls to a backend server. It also has no need to be compiled on the client side which gives it certain speed advantages (granted, adding some risk dependent on that quality of the code developed).
Simplicity: JavaScript is relatively simple to learn and implement.
Popularity: JavaScript is used everywhere in the web. The resources to learn JavaScript are numerous. Stack Overflow and GitHub have many projects that are using JavaScript and the language as a whole has gained a lot of traction in the industry in recent years especially.
Interoperability: JavaScript plays nicely with other languages and can be used in a huge variety of applications. Unlike PHP or SSI scripts, JavaScript can be inserted into any web page regardless of the file extension. JavaScript can also be used inside scripts written in other languages such as Perl and PHP.
Server Load: Being client-side reduces the demand on the website server.

2.6 BOOTSTRAP

Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website.

- It is absolutely free to download and use.
- It is a front-end framework used for easier and faster web development.
- It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many others.
- It can also use JavaScript plug-ins.
- It facilitates you to create responsive designs.

2.6.1 Advantages of Bootstrap

Speed of Development The speed of development is one of its major advantages. If you want to develop an application or a website promptly, it is imperative to consider using Bootstrap. It helps to save your coding effort by offering less CSS functionality and pre-built blocks of code rather than structuring code from the scratch.

Responsiveness According to CISCO's predictions, global mobile data traffic will increase approximately 11-fold between 2013 and 2018. These statistics point to the need for a responsive website in varied kinds of mobile devices.

Bootstrap is equipped with responsive layout and 12-column grid system that help dynamically adjust the website to a suitable screen resolution. The 'responsive utility classes' feature of Bootstrap enables you to hide / show a certain section of content for a particular screen size.

Customizable Bootstrap facilitates abundant customization and helps developers in designing tailor made websites, according to their specifications.

[2] [3]

Chapter 3

Methodology

3.1 Software Development Life Cycle (SDLC)

System development life cycle is a process of developing software on the basis of the requirement of the end user to develop efficient and good quality software. There are various software development approaches defined and designed which are used during development process of software, these approaches are also referred as “Software Development Process Models” (e.g., Waterfall model, incremental model, V-model, iterative model, etc.). Each process model follows a particular life cycle in order to ensure success in process of software development.

3.2 System development

life cycle model describes the phases of the software cycle and the order in which those phases are executed. Each phase produces deliverables required by the next phase in the life cycle. Requirements are translated into design. Code is produced according to the design which is called development phase. After coding and development, the testing verifies the deliverable of the implementation phase against requirements.

Figure 3.1: A software development process is the process of dividing software development work into distinct phases to improve design, product management, and project management. It is also known as a software development life cycle. The methodology may include the pre-definition of specific deliverables and artifacts that are created and completed by a project team to develop or maintain an application.

Most modern development processes can be vaguely described as agile. Other methodologies include waterfall, prototyping, iterative and incremental development, spiral development, rapid application development, and extreme programming.

Some people consider a life-cycle "model" a more general term for a category of methodologies and a software development "process" a more specific term to refer to a specific process chosen by a specific organization. For example, there are many specific software development processes that fit the spiral life-cycle model. The field is often considered a subset of the systems development life cycle.

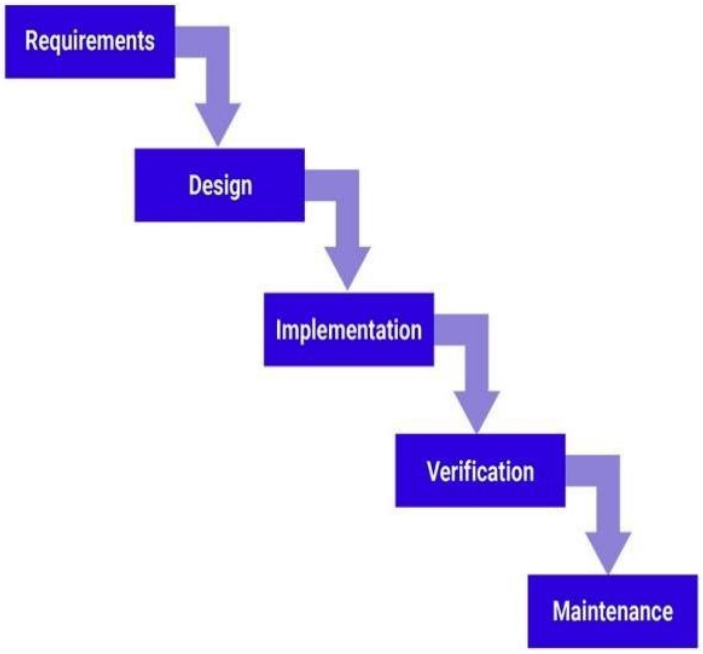


Figure 3.2:

3.3 Hardware and Software Requirements

3.3.1 Hardware Requirements

- Processor : Pentium 4 or above
- Processor Speed: 2.00 GHz CPU
- RAM : 1 GB 0r above
- Hard disk utilization : 300 MB or above

3.3.2 Software Requirements

- Front End : HTML,CSS,Bootstrap,Java Script,J Query
- Back End : Python
- Framework : Django
- Operation System : Windows or any equivalent
- Application Server : WSGI Server

Chapter 4

Module of The Project

4.1 Candidate Module

[2pt] A candidate can register himself/herself, after registration; he/she will be directed to homepage. Here, they can update his profile, change password and see the requirement details and all. A candidate is given the following options:

- Home Page
- Category Page
- Search Engine
- View Profile
- View Order
- Change Password
- Registration Page
- Check order delivery status
- Add to cart
- Login/Logout

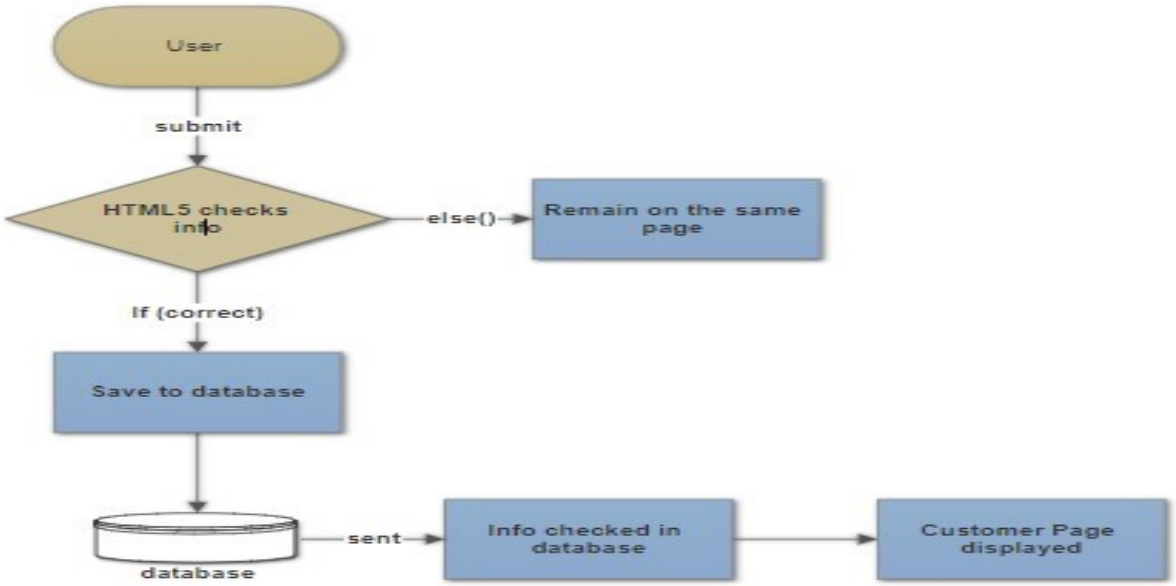


Figure 4.1: User Registration Diagram)

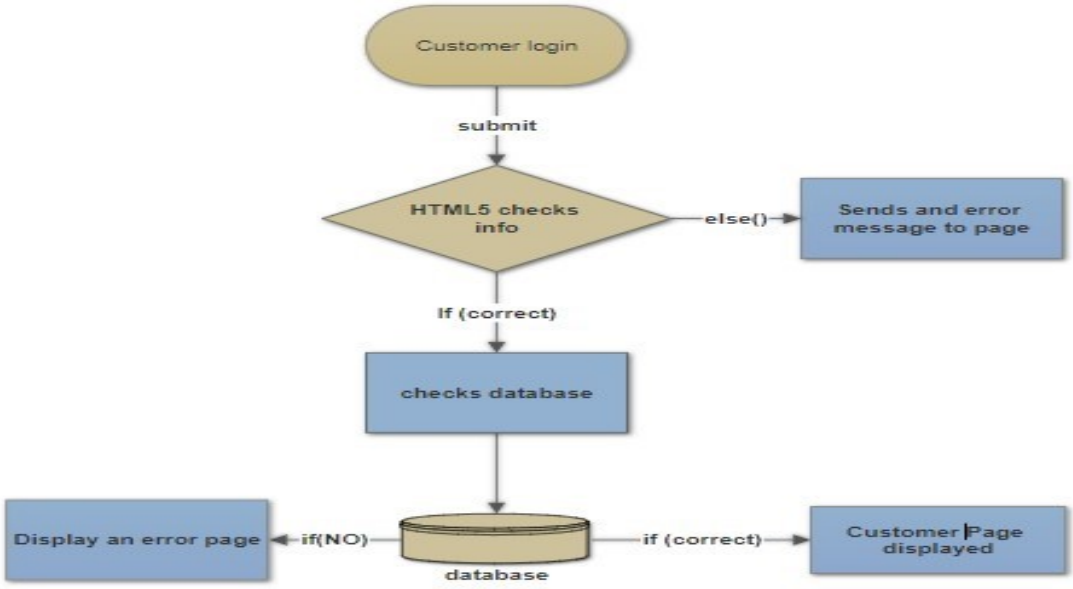


Figure 4.2: Customer Login Function)

4.2 Administrator Module

Administrator has the full authority over the website. Admin can view the entire registered user and have the power to delete them. Admin can edit the Webpages and update them, also view all the company details.

- Have a permission to Add, Update, Delete the user
- Create groups of them
- Login/Logout
- Update delivery status

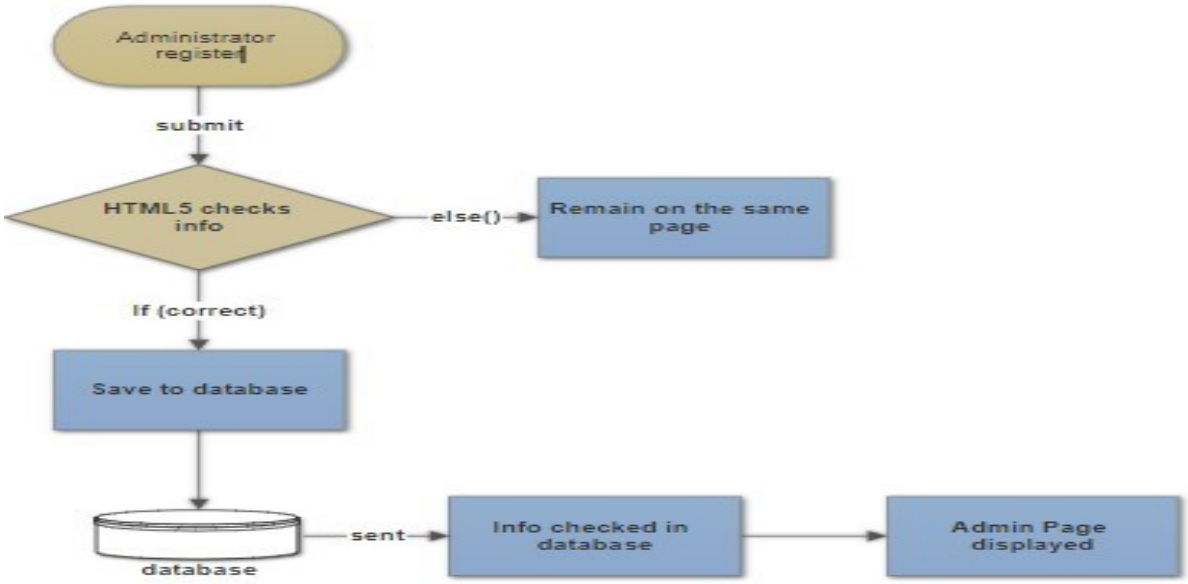


Figure 4.3: Administration Registration Diagram)

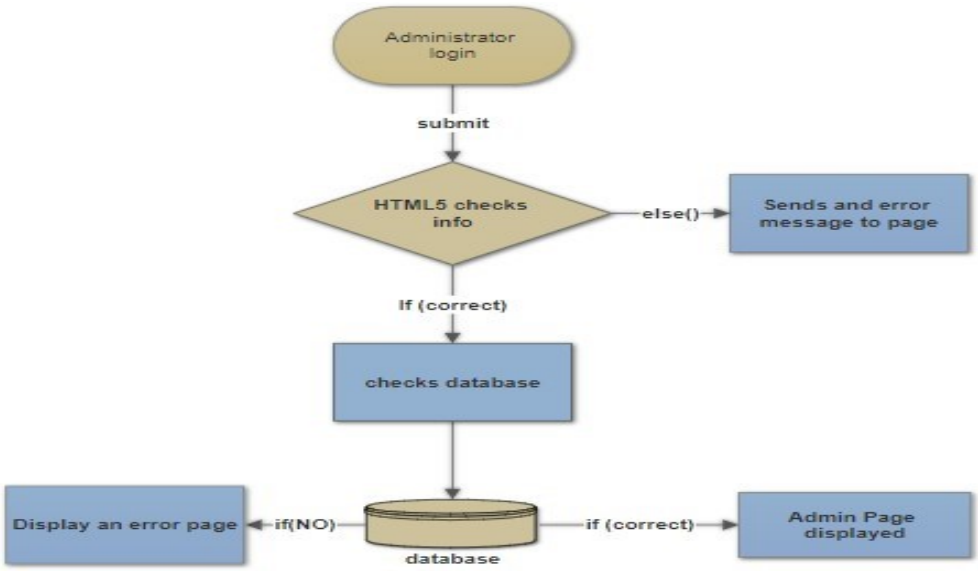


Figure 4.4: Administrator Login Diagram

4.3 Working of Project

Any member can register and view available product.

- Only registered member can purchase multiple products regardless of quantity.
- ContactUs page is available to contact Admin for queries.
- There are three roles available: Visitor, User and Admin.

  Visitor can view available products.

  User can view and purchase products.

  An Admin has some extra privilege including all privilege of visitor and user.
- Admin can add products, edit product information and add/remove product.
- Admin can add user, edit user information and can remove user.
- Admin can ship order to user based on order placed by sending confirmation mail.

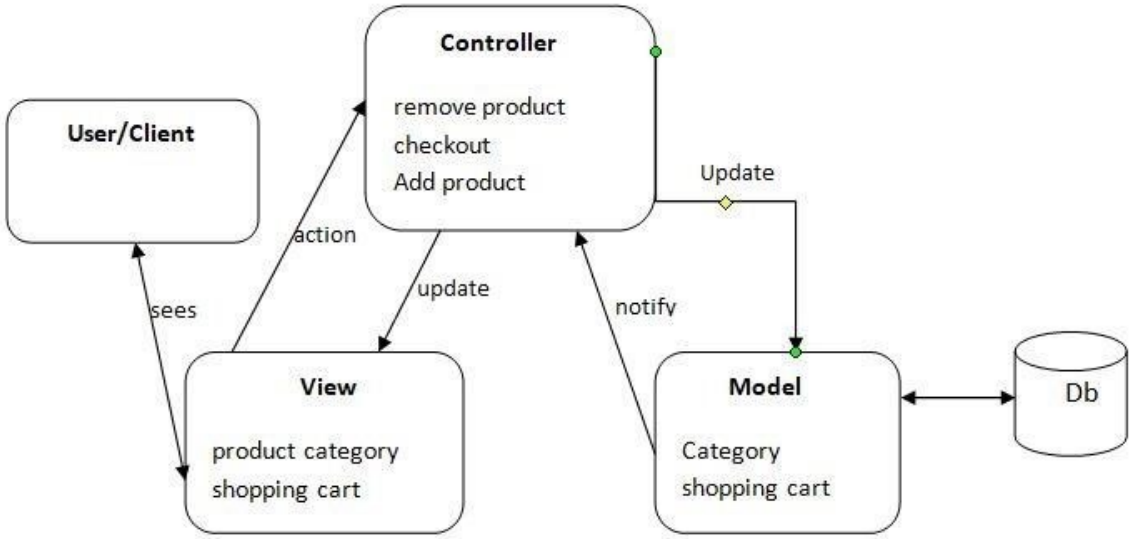


Figure 4.5: MVC Diagram

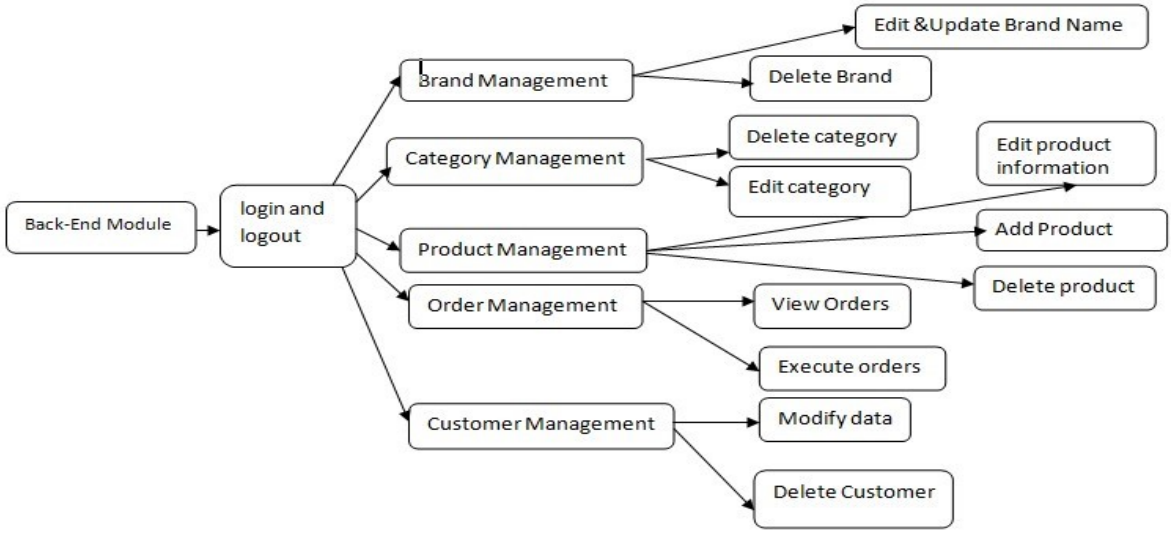


Figure 4.6: MVC Diagram

4.4 Flow Diagram

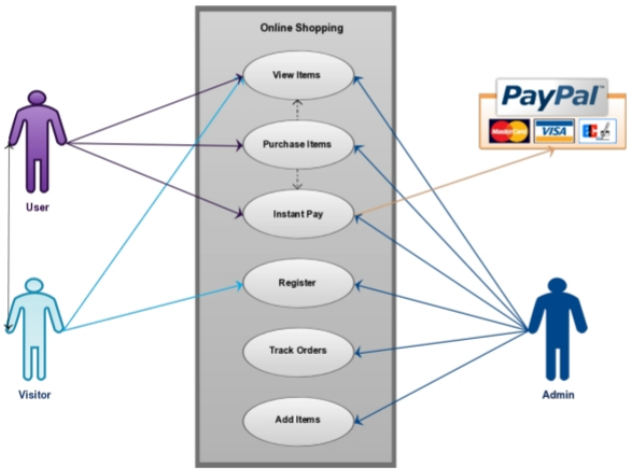


Figure 4.7: Figure a

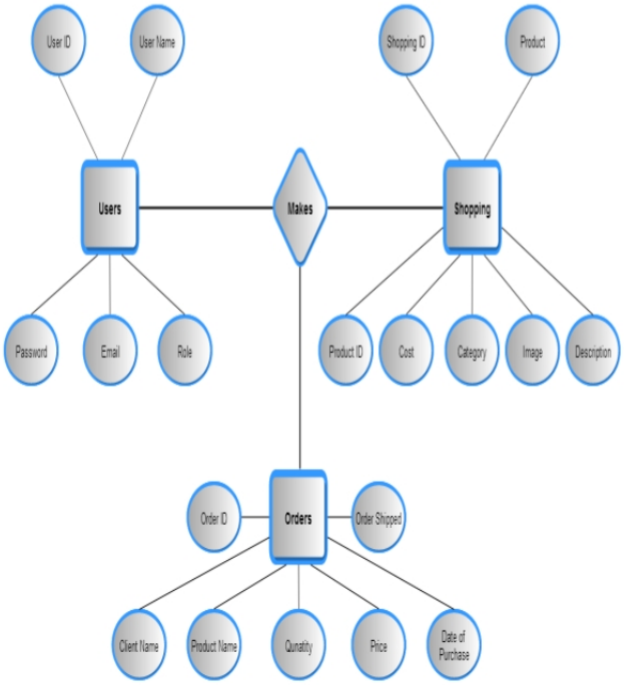


Figure 4.8: Figure b

Chapter 5

Entity-Relationship Diagram(ER-D)

5.1 What is an ER diagram?

An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how "entities" such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships and their attributes. They mirror grammatical structure, with entities as nouns and relationships as verbs.

5.2 Uses of entity relationship diagrams

Database design: ER diagrams are used to model and design relational databases, in terms of logic and business rules (in a logical data model) and in terms of the specific technology to be implemented (in a physical data model.) In software engineering, an ER diagram is often an initial step in determining requirements for an information systems project. It's also later used to model a particular database or databases. A relational database has an equivalent relational table and can potentially be expressed that way as needed.

Database troubleshooting: ER diagrams are used to analyse existing databases to find and resolve problems in logic or deployment. Drawing the diagram should reveal where the discrepancy in the database is.

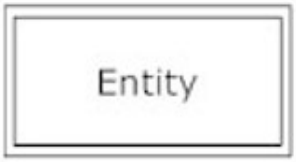
Business information systems: The diagrams are used to design or analyse relational databases used in business processes. Any business process that uses fielded data involving entities, actions and interplay can potentially benefit from a relational database. It can streamline processes, uncover information more easily and improve results.

Business process re-engineering (BPR): ER diagrams help in analyzing databases used in business process re-engineering and in modelling a new database setup.
Education: Databases are today's method of storing relational information for educational purposes and later retrieval, so ER Diagrams can be valuable in planning those data structures.

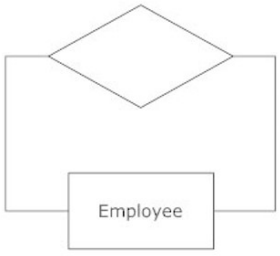
5.3 Common Entity Relationship Diagram Symbols

An ER diagram is a means of visualizing how the information a system produces is related. There are five main components of an ERD:
Entities are represented by rectangles. An entity is an object or concept about which you want to store information.

A weak entity is an entity that must defined by a foreign key relationship with another entity as it cannot be uniquely identified by its own attributes alone.



Actions, which are represented by diamond shapes, show how two entities share information in the database. In some cases, entities can be self-linked. For example, employees can supervise other employees.



Attributes, which are represented by ovals. A key attribute is the unique, distinguishing characteristic of the entity. For example, an employee's social security number might be the employee key attribute.

A multivalued attribute can have more than one value. For example, an employee entity can have multiple skill values.

A derived attribute is based on another attribute. For example, an employee's monthly salary is based on the employee's annual salary.

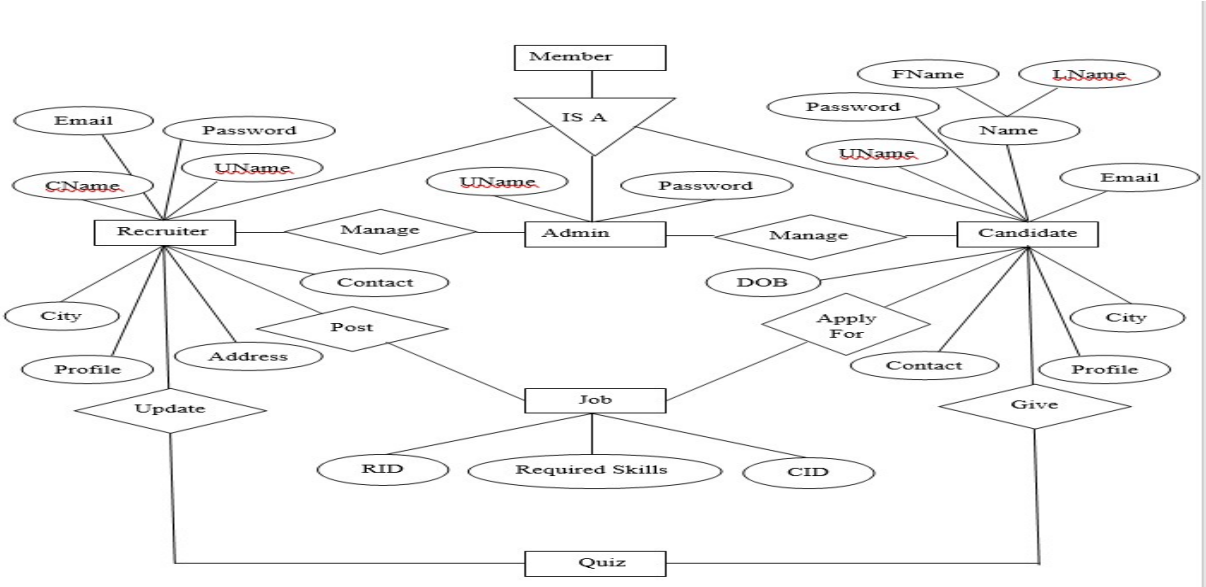


Figure 5.1: ER Diagram

Chapter 6

Data Flow Diagram

6.1 Data Flow

diagram is graphical representation of flow of data in an information system. It is capable of depicting incoming data flow, outgoing data flow and stored data. The DFD does not mention anything about how data flows through the system.
There is a prominent difference between DFD and Flowchart. The flowchart depicts flow of control in program modules. DFDs depict flow of data in the system at various levels. DFD does not contain any control or branch elements.

6.2 Types of DFD

Data Flow Diagrams are either Logical or Physical.
Logical DFD - This type of DFD concentrates on the system process and flow of data in the system. For example, in a Banking software system, how data is moved between different entities.
Physical DFD - This type of DFD shows how the data flow is actually implemented in the system. It is more specific and closer to the implementation.

6.3 DFD Component

DFD can represent Source, destination, storage and flow of data using the following set of components - **Entities** - Entities are source and destination of information data. Entities

Figure 6.1: DFD Component

are represented by rectangles with their respective names.

Process - Activities and action taken on the data are represented by Circle or Round-edged rectangles.

Data Storage - There are two variants of data storage - it can either be represented as a rectangle with absence of both smaller sides or as an open-sided rectangle with only one side missing.

Data Flow - Movement of data is shown by pointed arrows. Data movement is shown from the base of arrow as its source towards head of the arrow as destination. Levels of DFD

Chapter 7

Snapshots Of Project

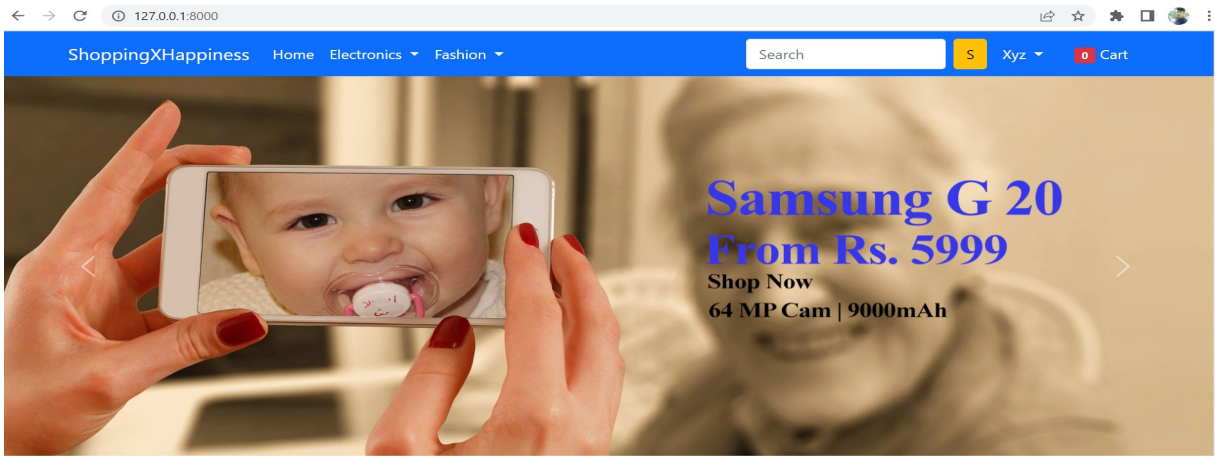


Figure 7.1: Home Page

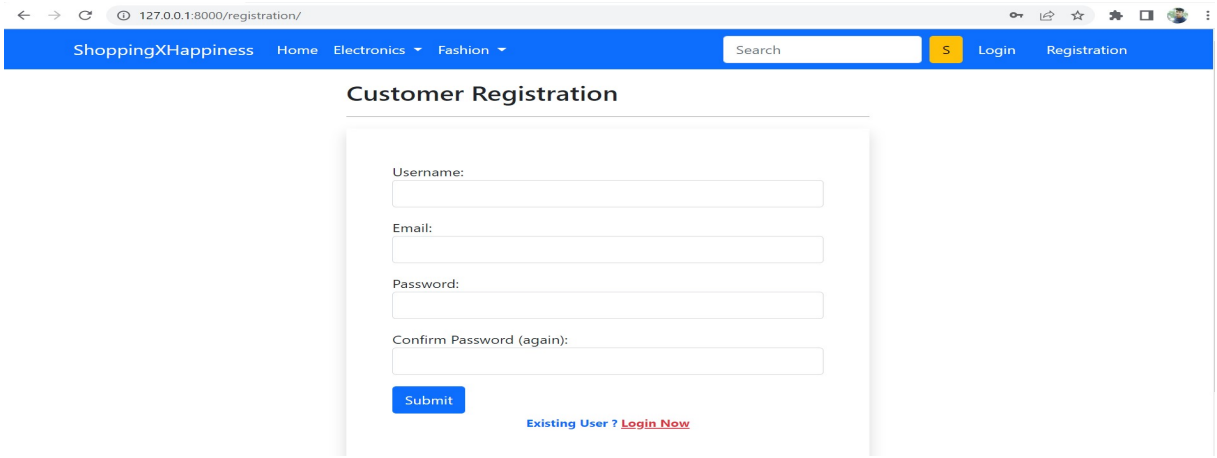


Figure 7.2: User Registration Form

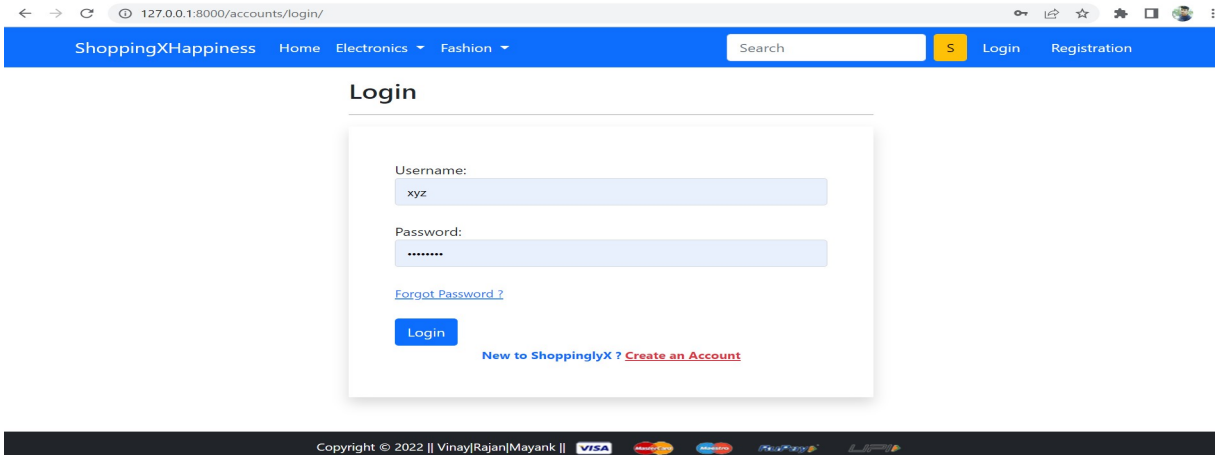


Figure 7.3: User Login Form(only for Existing users)

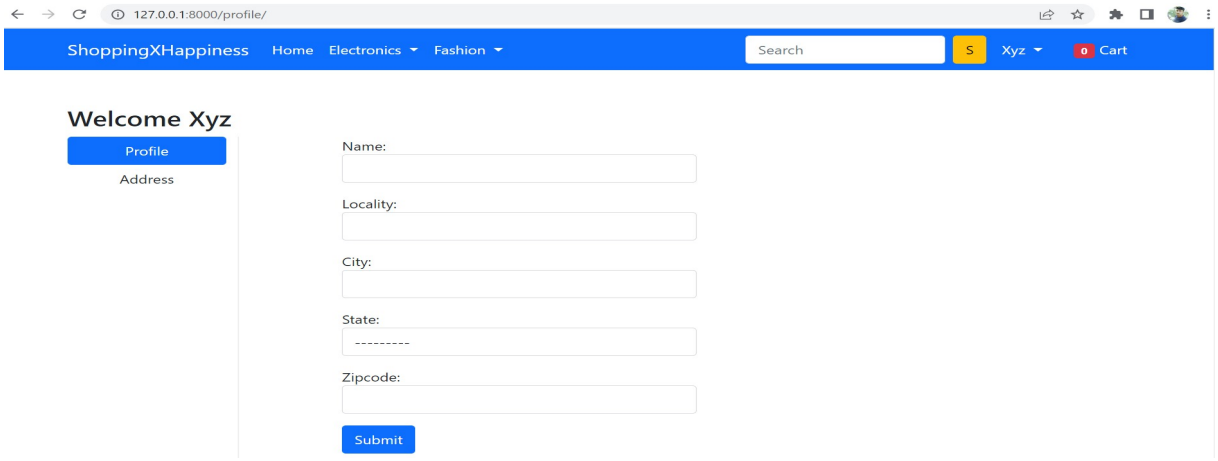


Figure 7.4: User Address form

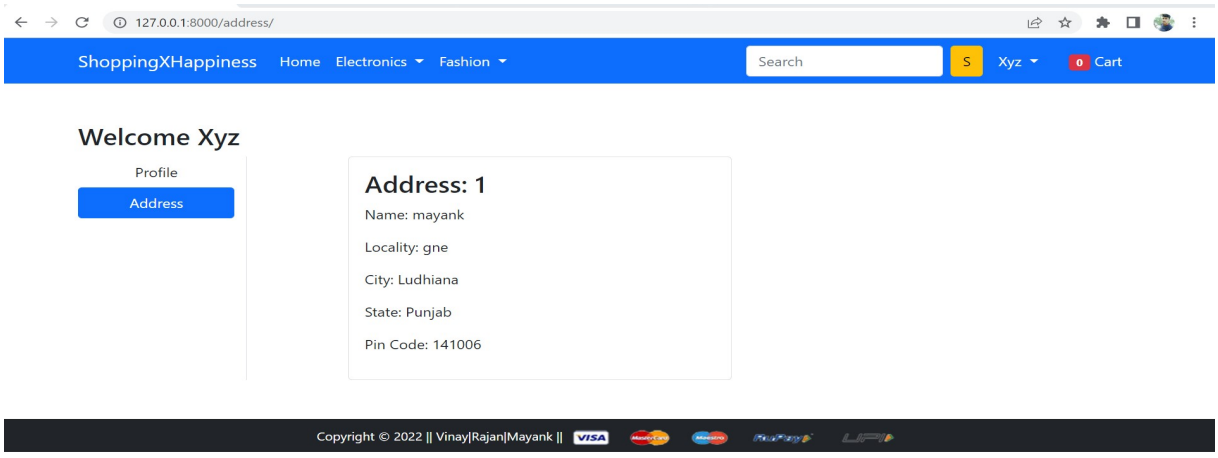


Figure 7.5: Save the User Details

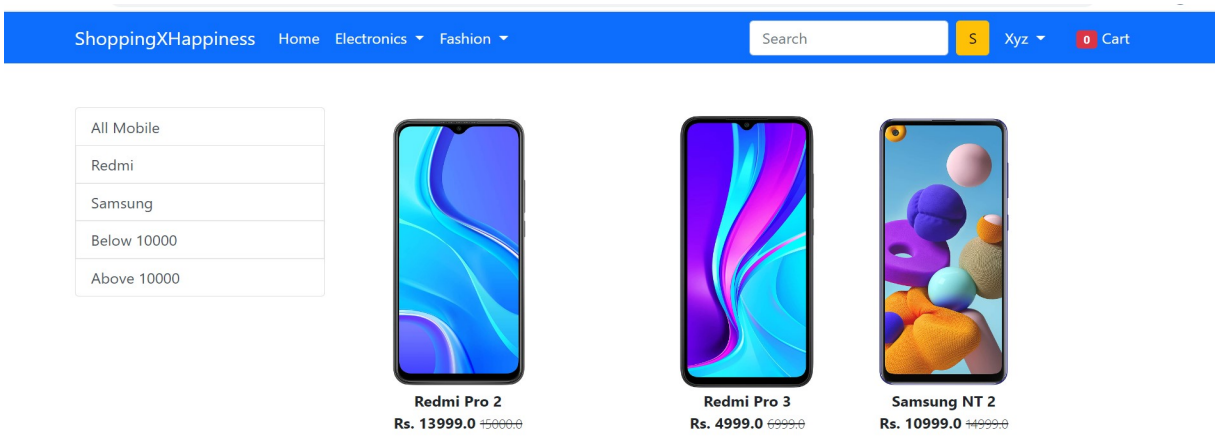


Figure 7.6: Choose Product from List of Items

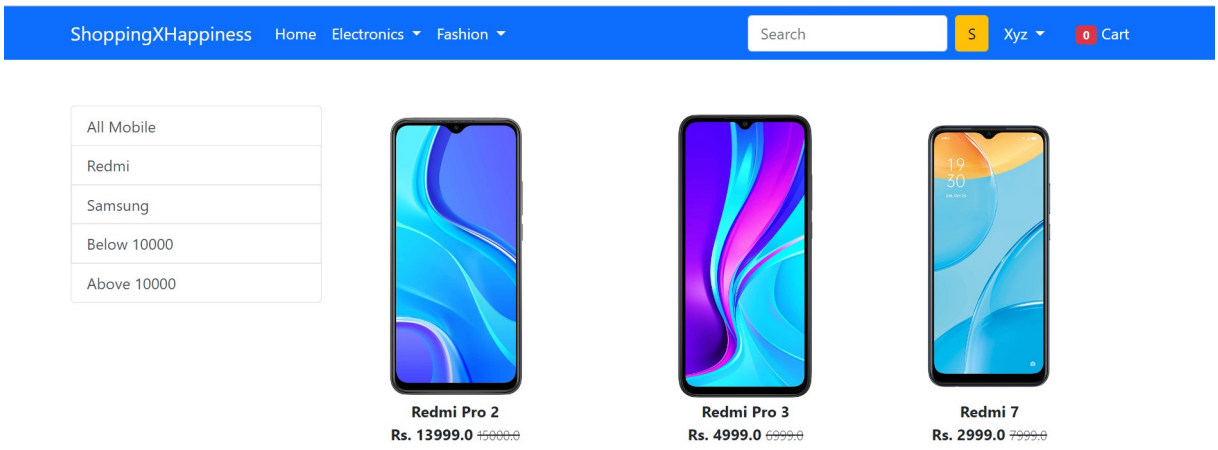


Figure 7.7: Specific Brand Filter

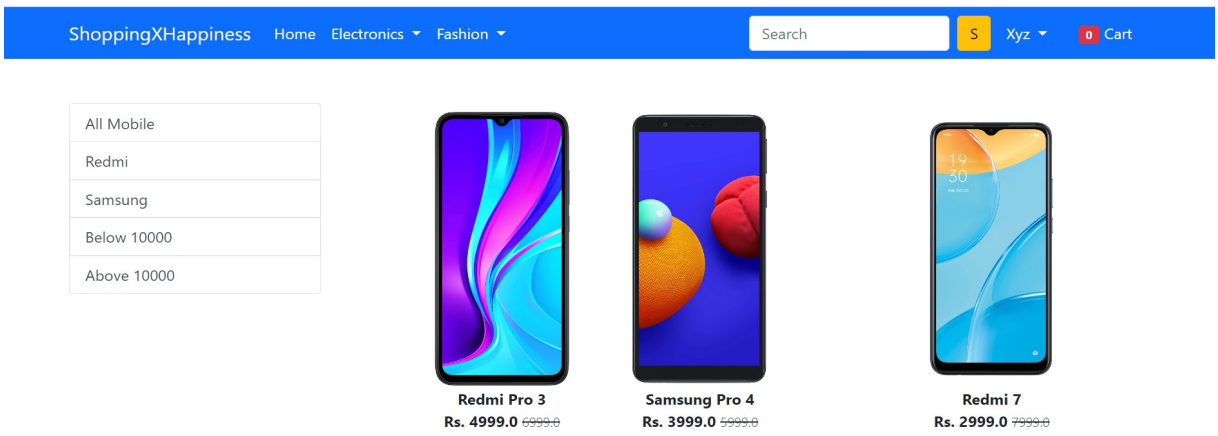


Figure 7.8: Price Filter

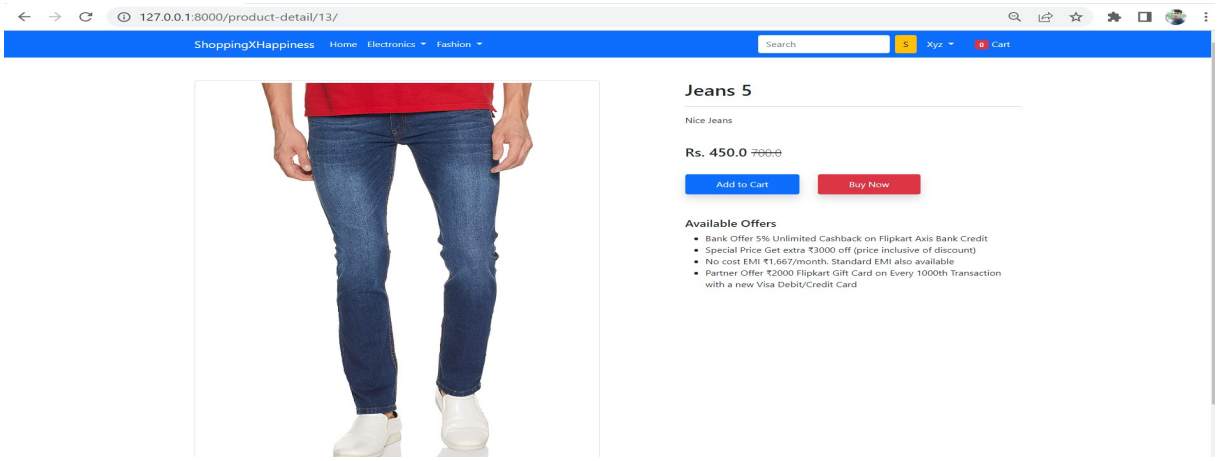


Figure 7.9: Add to Cart

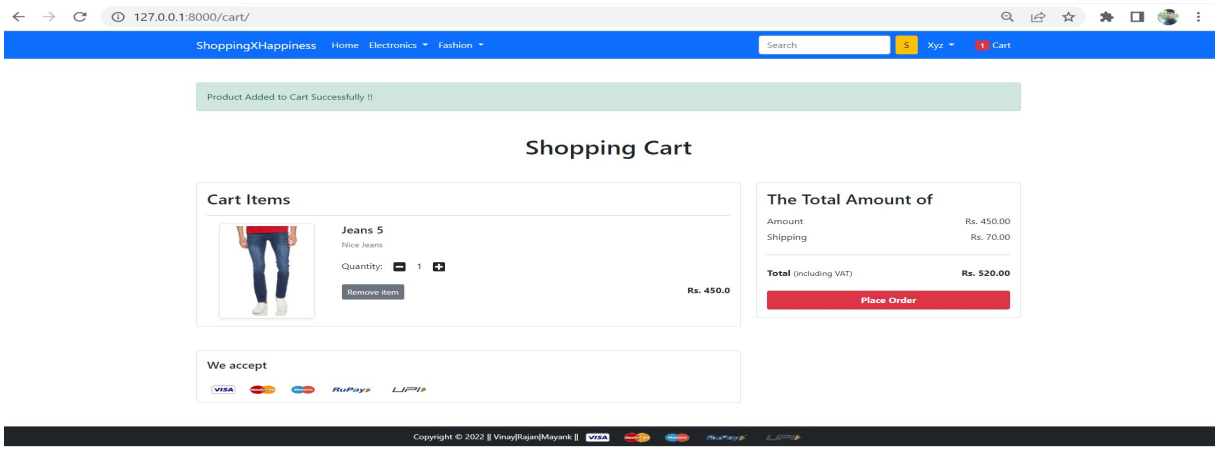


Figure 7.10: Cart Details

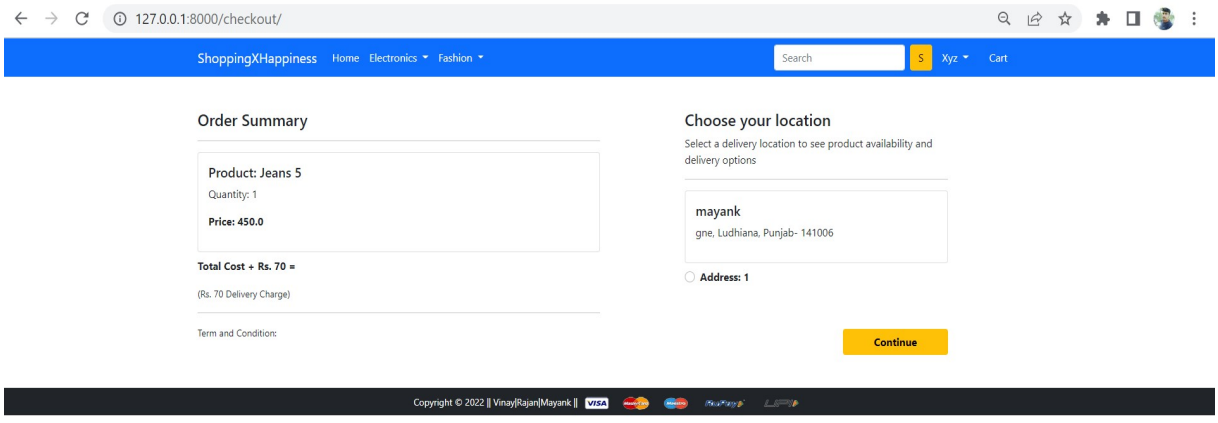


Figure 7.11: Buy the Selected Product

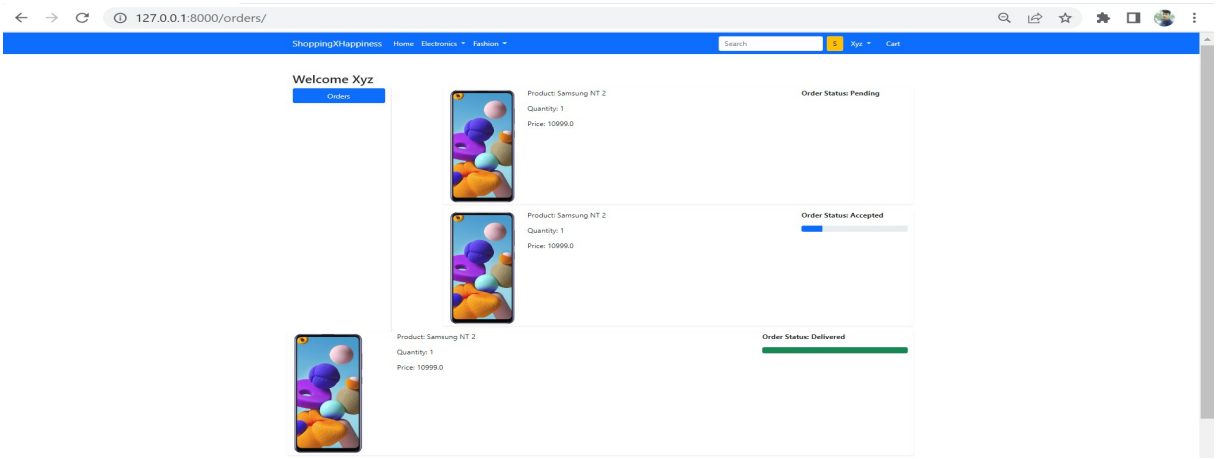


Figure 7.12: Finally Check the Product Ordered Status

Chapter 8

Database

8.1 What is SQLite?

SQLite is an in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine. It is a database, which is zero-configured, which means like other databases you do not need to configure it in your system.
SQLite engine is not a standalone process like other databases, you can link it statically or dynamically as per your requirement with your application. SQLite accesses its storage files directly.

8.2 Django ORM Resources

The Django ORM has evolved over the past dozen years since it was created make sure to not only read up on the latest tutorials but also learn about newer optimizations, such asprefetch*,elatedandselectrelated*, *thathavebeenaddedthroughoutthepro ject' shistory*.
D jangomodels, *encapsulationanddataintegrityisadetailedarticlebyT omChristieonencapsulatingD jangon*
D jangoDebugT oolbarisapower f ulD jangoORMdatabasequeryinspectiontool.Highlyrecommendeddurin
MigratingaD jangoapp f romMyS QLtoPostgreS QLisaquicklookathowtomove f romMyS QLtoPostgreS Q

8.3 Django Migrations Resources

Django migrations were added in version 1.7. Django projects prior to 1.7 used the South project, which is now deprecated and merged into Django. Migrations can be tricky to wrap your head around as you're getting started with the overall framework but the following resources should get you past the initial hurdles. Django Migrations - a Primer takes you through the new migrations system integrated in the Django core as of Django 1.7, looking specifically at a solid workflow that you can use for creating and applying

migrations.

Django 1.7: Database Migrations Done Right explains why South was not directly integrated into Django, how migrations are built and shows how backwards migrations work. Executing custom SQL in Django migrations examines how you can hook in straight SQL that will run during a Django migration. Squashing and optimizing migrations in Django shows a simple example with code for how to use the migrations integrated into Django 1.7.

Supporting both Django 1.7 and South explains the difficulty of supporting Django 1.7 and maintaining South migrations for Django 1.6 then goes into how it can be done.

Writing unit tests for Django migrations contains a ton of awesome code examples for testing your migrations to ensure data migrations work well throughout the lifecycle of your Django project.

Strategies for reducing memory usage in Django migrations shows the large memory usage problem that often occurs with Django migrations at scale and what you can do to mitigate the issue. How to Create Django Data Migrations has a straightforward blog ORM modeling example to show how to perform data migration. Keeping data integrity with Django migrations shows two table modification scenarios, one where a column needs to be added to an existing table, and another where a Many-to-Many field needs to be converted to a standard Foreign Key column while retaining all of the data.

8.4 Database Snapshots

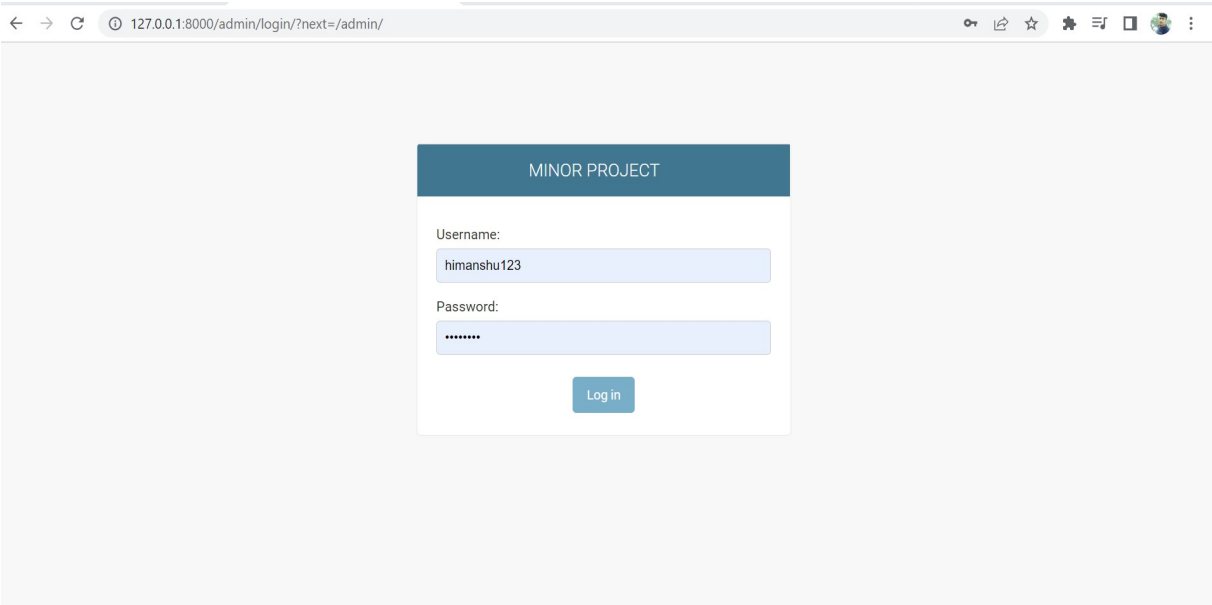


Figure 8.1: Admin Login Page

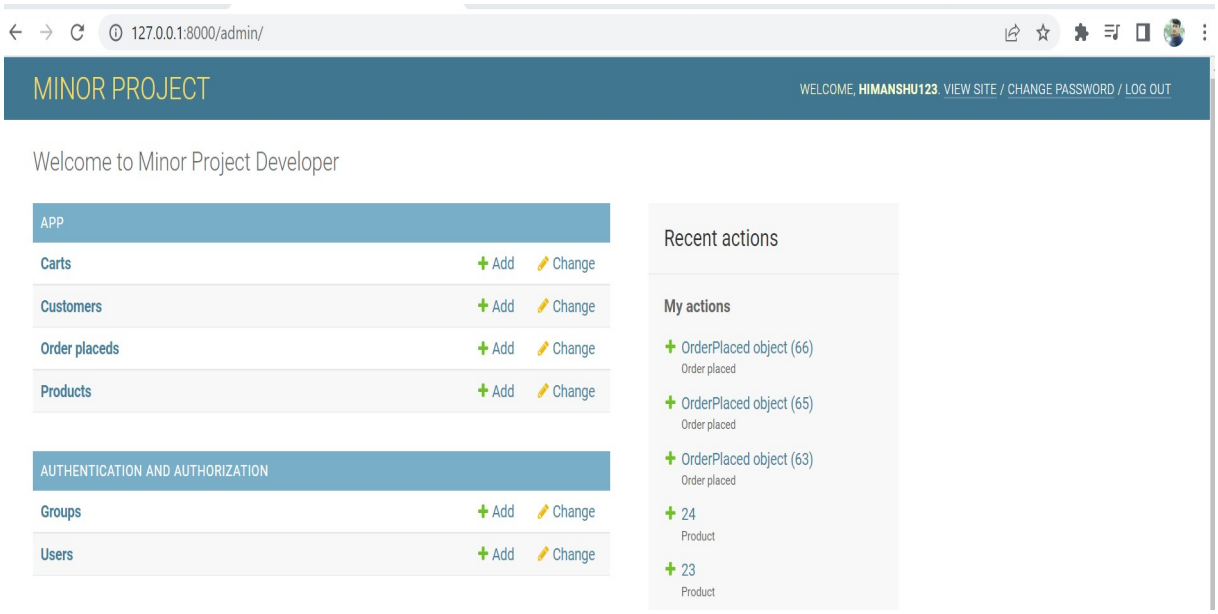


Figure 8.2: Site Administration

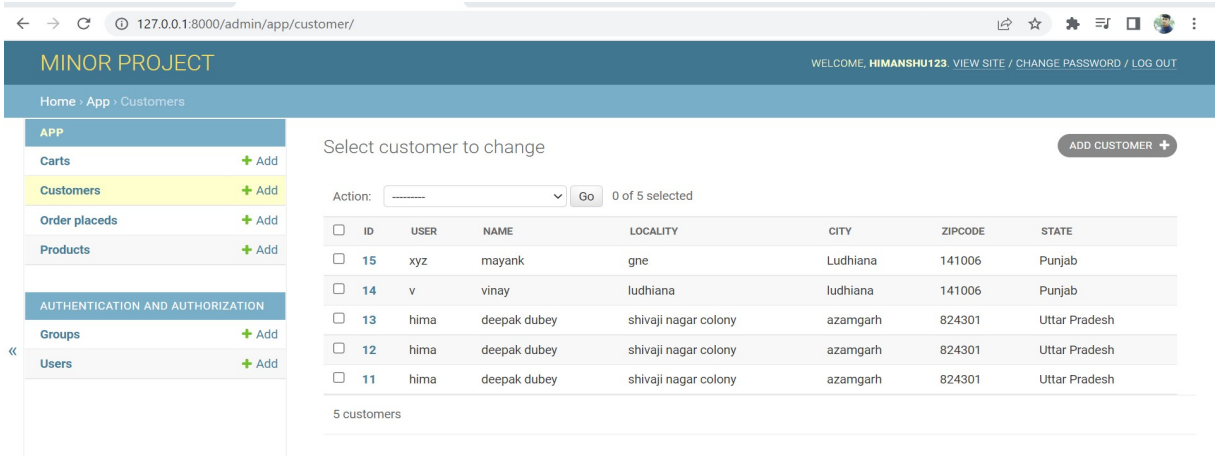


Figure 8.3: User Details

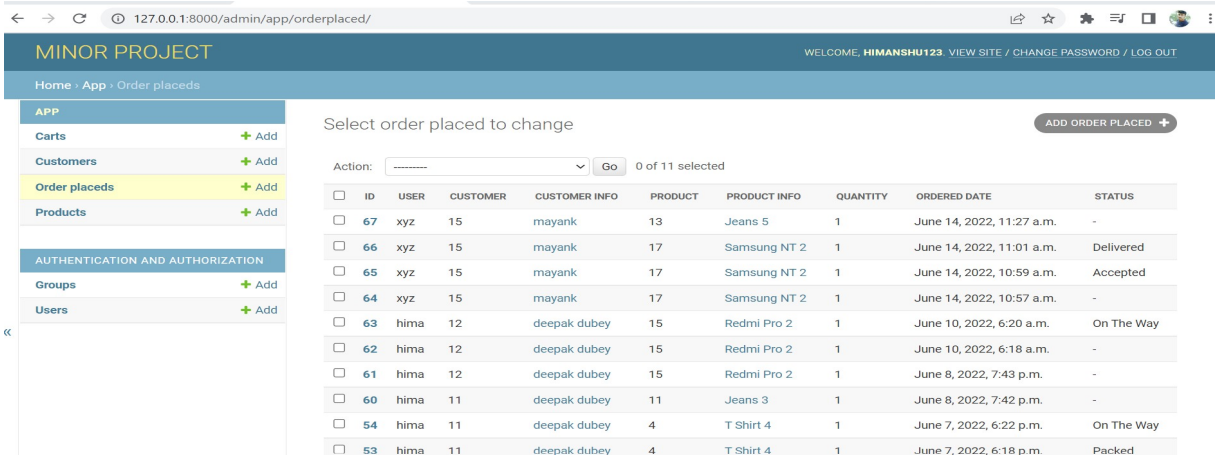


Figure 8.4: User Data

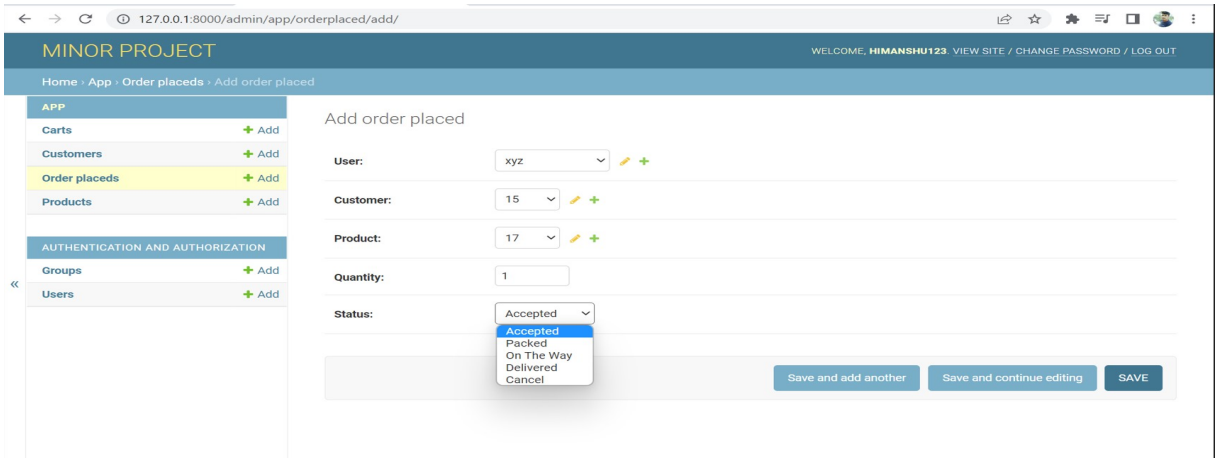


Figure 8.5: Shipping Status

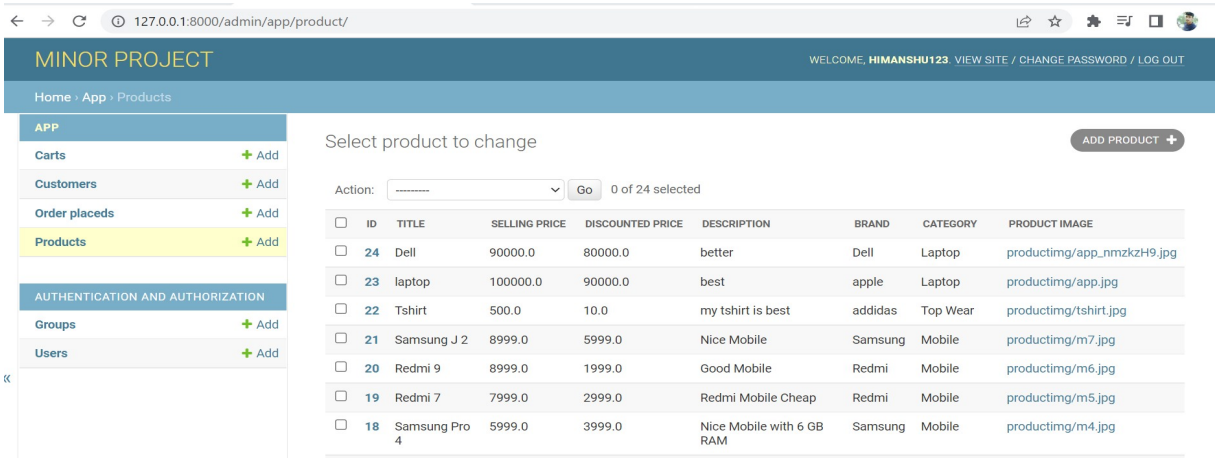


Figure 8.6: Product Details

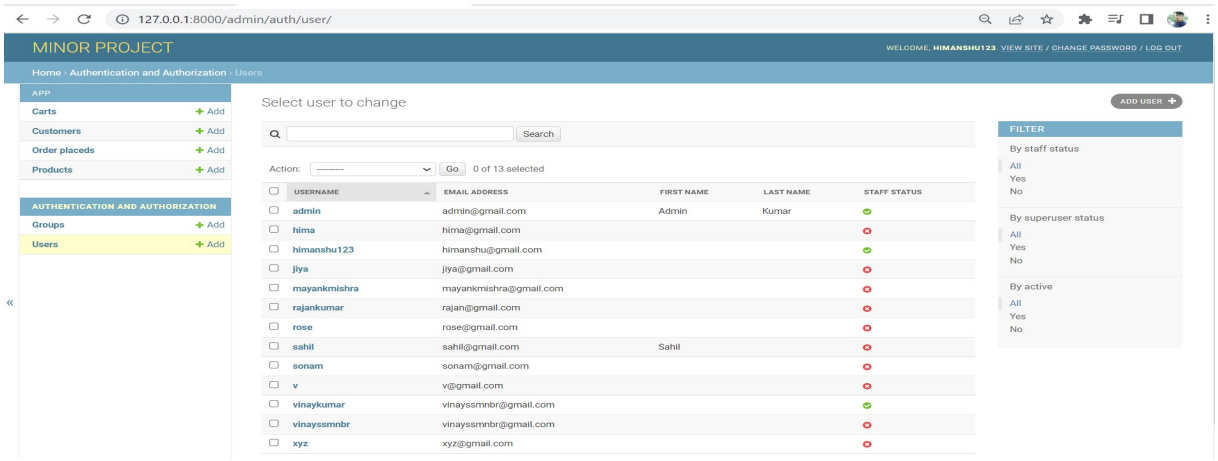


Figure 8.7: All User Details

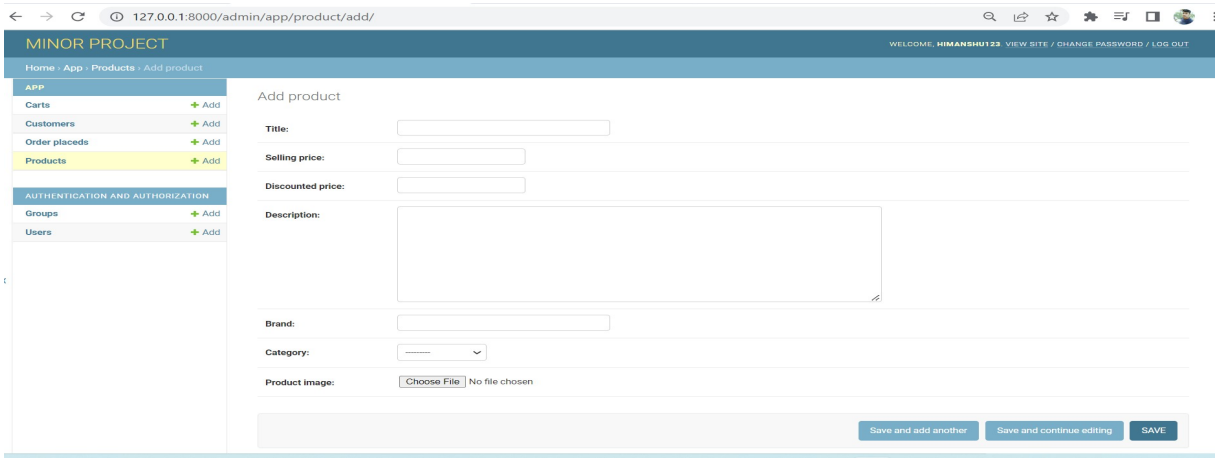


Figure 8.8: Add Product By Admin

Chapter 9

Conclusion and Future Scope

9.1 Coclusion

The electronic shop was developed using Python, Django, HTML5 and CSS3 technology. Any consumer can browse products, add, replace or delete a product from the cart. The consumer can log in, with his information such as his email and password. If the logindoes not go through, the user can re-register or ask to change the password. After login, the user cansee the product in the cart and proceed onwards. The product can be paid with PayPal. The administrator can verify the order, However the consumer can still look at the orders in his or heraccount. The ordered price is saved in the database

9.2 Future Improvement

Invoices need to be implemented in the shop, emails and notifications need's to be sent to customers for new arrivals or discount. The shop hasto have a search engine where users and customers can search for the various product from the shop. Debit and credit cards need's to be implemented in the shop as well. There have to be language varieties so that none-English users and customers can shop easily without any difficulty.

References

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[2] G. Van Rossum, F. L. Drake, and A. Kuchling, *Python tutorial*. Open Documents Library, 1999.

[3] C. Burch, "Django, a web framework using python: Tutorial presentation," *Journal of Computing Sciences in Colleges*, vol. 25, no. 5, pp. 154–155, 2010.