A Mini Project Synopsis on

Quick-Mart

T.E. - I.T Engineering

Submitted By

Meet Bohra 20104057

Shivam Gupta 20104110

Yashab Mahimi 20104026

Under The Guidance Of

Prof Geetanjali Kalme

DEPARTMENT OF INFORMATION TECHNOLOGY

A. P. SHAH INSTITUTE OF TECHNOLOGY

G.B. Road, Kasarvadavali, Thane (W), Mumbai-400615

UNIVERSITY OF MUMBAI

Academic year : 2022-23

CERTIFICATE

This to certify that the Mini Project report on **Quick-Mart (Ecommerce Website)** has been submitted by Meet Bohra (20104057), YashabMahimi (20104026), Shivam Gupta (20104110) and who are a Bonafide students of A. P. Shah Institute of Technology, Thane, Mumbai, as a partial fulfilment of the requirement for the degree in **Information Technology**, during the academic year **2022-2023** in the satisfactory manner as per the curriculum laid down by University of Mumbai.

Guide: Prof. Geetanjali Kalme

Dr. Kiran Deshpande Dr. Uttam D. Kolekar

Head Department of Information Technology Principal External Examiner(s)

1.

2.

Place: A.P Shah Institute of Technology,
Thane Date:

ACKNOWLEDGEMENT

This project would not have come to fruition without the invaluable help of our guide **Prof Geetanjali Kalme** Expressing gratitude towards our **HoD, Dr. Kiran Deshpande**, and the Department of Information Technology for providing us with the opportunity as well as the support required to pursue this project. We would also like to thank our teacher **Ms. Roshna Sangle** who gave us her valuable suggestions and ideas when we were in need of them. We would also like to thank our peers for their helpful suggestions.

Quick-Mart – Online Grocery Shopping

ABSTRACT

The Online Shopping is a web-based application intended for online retailers. The main objective of this application is to make it interactive and its ease of use. It would make searching, viewing and selection of a product easier. It contains a sophisticated search engine for user's to search for products specific to their needs. The search engine provides an easy and convenient way to search for products where a user can Search for a product interactively and the search engine would refine the products available based on the user’s input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. The application also provides a drag and drop feature so that a user can add a product to the shopping cart by dragging the item in to the shopping cart. The main emphasis lies in providing a user- friendly search engine for effectively showing the desired results.

\

Table of Contents

Chapter 1

Introduction

E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer, or consumer-to-business. E-commerce shops have become part of our daily lives. Technological advancement has made it possible for people to sit in the convenience of their homes and still shop online without going to a physical shop. This project is divided into two main categories: The Administrators and the Customers/Users. The store manager and the staff members operate as the administrators. They can add, edit, update products or, delete products thus they able to change the names of products, change prices and, add or remove products. The customer can search for products selection, update the cart, remove products from the cart and check out from the shop. The customer is also able to update his information such as names, address, and other data. The User is only able to browse the online shop and add a product to the cart. The user is limited to the use of the shop.

Problem Identified

The traditional way of buying goods/products is the customer need to go to the market, where he/she must search for the products which consumes a lot of time then check the quality and then wait for billing which consumes customer valuable time and effort.

Proposed Solution

- Saves customers time and efforts.
- Provide hassle-free services to customers.
- Wide variety of products are available.
- Get detailed information of products.

1.1 Purpose:

Our mission is to provide our customers fresh and first-rated products with top-notch service at a price that is reasonable to our customers, creating an extraordinary

Shopping experience and to become an innovative E-commerce trade model that is imperishable, authentic, fair, and passionate where outmost customer satisfaction is our united priority. Quality is our non-negotiable obligation. We go all out to touch hearts and move markets.

1.2 Problem Statement:

It may seem like a fancy and appealing idea to start a E-commerce Website- and it is. Apart from branding, registering your website, you will need to prepare to start and sustain a successful business. One of the ways to do this is to anticipate challenges you may face in operating your E-commerce shop and mapping out ways to overcome them beforehand.

- Building trust with the user
- Payment Processing
- Inventory/stock updates
- Shipping
- Product reviews
- Navigation to product pages
- Customers can abandon purchases

1.3 Objectives:

Online Shopping is the process whereby consumers directly buy goods and services without any intermediary service over the internet. The goal of this website is to develop a web based interface for people, the website would be easy to use and hence the shopping experience pleasant for the users. The main goal of this website is:

- To provide a user-friendly, comfortable interface to the customer which we have achieved using html and css.
- Ensure a friendly comfortable atmosphere with dynamic features using css.
- Reduce the language barrier between user and the application using translation api which will enable user to set the desired language.
- To manage safe payments for customers using razorpay integration.
- To provide verification of orders to user using emails (SMTP).

- To provide order tracking option to user.
- Enable users to add items to cart and set the quantity using scripting.

1.4 Scope:

- The current system will be extended to allow the users to create accounts and save products in to wish list.

- Provide user-friendly interface with dynamic features.

- Users will have multiple shipping and billing information saved. During checkout they will get verification mail.

- The users could subscribe for price alerts which would enable them to receive messages when price for products fall below a particular level.

- User get a 24*7 service.

- User will get price drop alert.

- Customers will give feedback and rating of the Product

Chapter 2

Literature Review:

International Journal of Engineering Research & Technology (IJERT) http://www.ijert.orgISSN: 2278-0181 IJERTV9IS060267 (This work is licensed under a Creative Commons Attribution 4.0 International License.) Published by : www.ijert.orgVol. 9 Issue 06, June-2020

1. In this paper it has presented a comparative study of non-relational databases and relational databases. It mainly focuses on presentation on one implementation of the NoSQL database technology, namely MongoDB, and draws a comparison with MYSQL which is another database and tries to justify why MySQL is less preferable and less efficient than MongoDB. It also discusses the disadvantages of using a relational database compared to a non- relational database. The forum is developed using MongoDB, a NoSQL database chosen from a variety of non-relational databases. The database integration in the framework is also be presented. If the application is data-intensive and stores many data and queries, we can choose MongoDB instead of MySQL. It should also be noted that in certain situations, each user requires his or her own individual settings in the same application and connection database does not permit a full customization based only on the user's needs. Therefore, increasingly more applications start using a non-relational database, as they provide a more versatile framework that can be formed according to the needs of each user.

2. The advantages of using AngularJS to create the front-end framework, NodeJS to design the Back-end Web server and the performance benefits of storing data based on MongoDB are discussed in [2] this paper. This paper concentrates on MongoDB storage solutions for the storage of large data and on MapReduce- based analysis solutions. This paper discusses on how Web services are designed that have the requirements of large data visualization based on NodeJS. Within this paper, the design of the express monitoring system is implemented The primary technologies used in system design was first discussed. It also primarily introduces the framework architecture, MongoDB database-based storage solutions and the MapReduce-based analysis solutions. Finally, this paper introduces the Express Supervision Framework interface application and statistical analysis modules. Machine learning is to be used in future.

3. In this paper, it characterizes the runtime behaviors on an evolving server-side application JavaScript, Node.js, compared to JavaScript's client-side code. The runtime profile reveals that the V8 C++ library used for server load is spent a considerable amount (47.5% on average) of the total CPU time, while it is only 3.2% on the client-side. The study on the server-side system of complex call contexts shows that function calls to the V8 runtime to handle JavaScript objects lead significantly towards high CPU utilization in the V8 library. We focused on the overuse of the V8 library code with CPUs and analyzed the call stacks in detail during the execution of the library code. The function executes the C++ code of the server-side JavaScript framework which implements the node.js API, and native code in the package node module is one reason for the excess of the CPU use in the V8 library

Chapter 3

Proposed System:

Quick-Mart E-commerce system is an system that is use to maintain the Whole Record of products link to add Customer Name, Address, Shipping address. This system automates and simplifies all the functions of shop and it will also help to handle all the operations.

3.1Features and Functionality

Quick-Mart software is the need and necessity of every organization and its human resource systems. The customers information and their details are efficiently managed to satisfy the needs of both the customers and the administrator.

1. User is provided with user friendly navigation i.e.; user can go from one page to another easily
2. User can use Product filtering and sorting functionality to search and sort the products they are looking for
3. User can do payment using secure payment options
4. User can view the availability of products and place order accordingly
5. User can add and remove items in the cart
6. We have added a Language Translator so user can view the products in their preferred language
7. Users will be provided with 24*7 Customer support

Chapter 4

Requirement Analysis:

Performance Requirements The load time for the user interface screen should take no longer than 5 seconds.

- **Design Constraints** The application should be able to run on any Pc or Laptop.

- **Availability** The application should be always available whenever user wants to use.

Hardware requirements

•RAM

The application requires a device with a minimum of 512MB RAM while running.

•. **Processor speed**

The application requires a device with a minimum processor speed of 1GHz while running

Software requirements

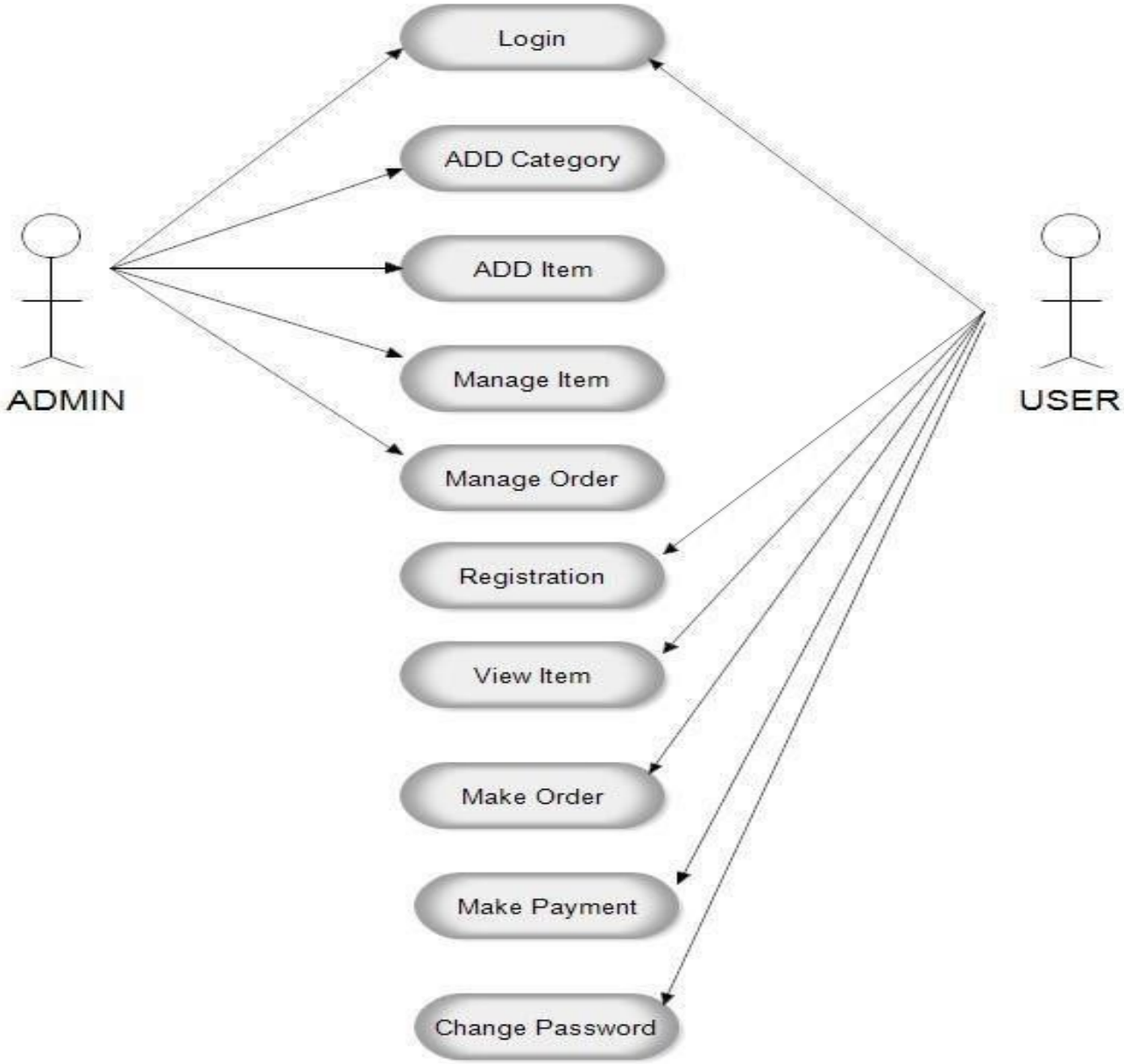
•Operating system

The application must run on Windows Operation System

Chapter 5

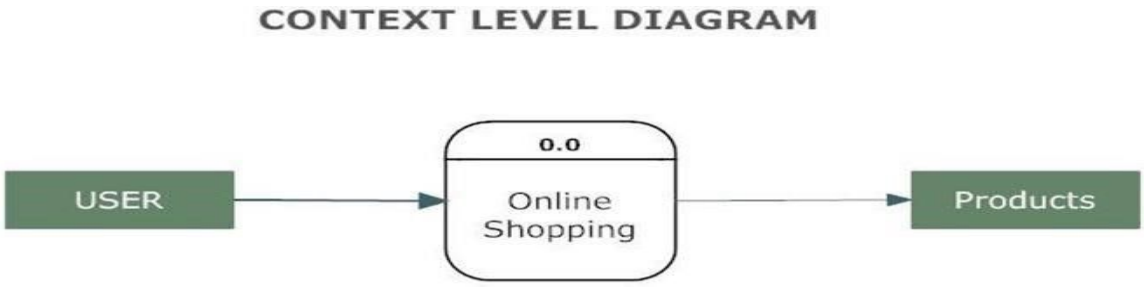
Project Design

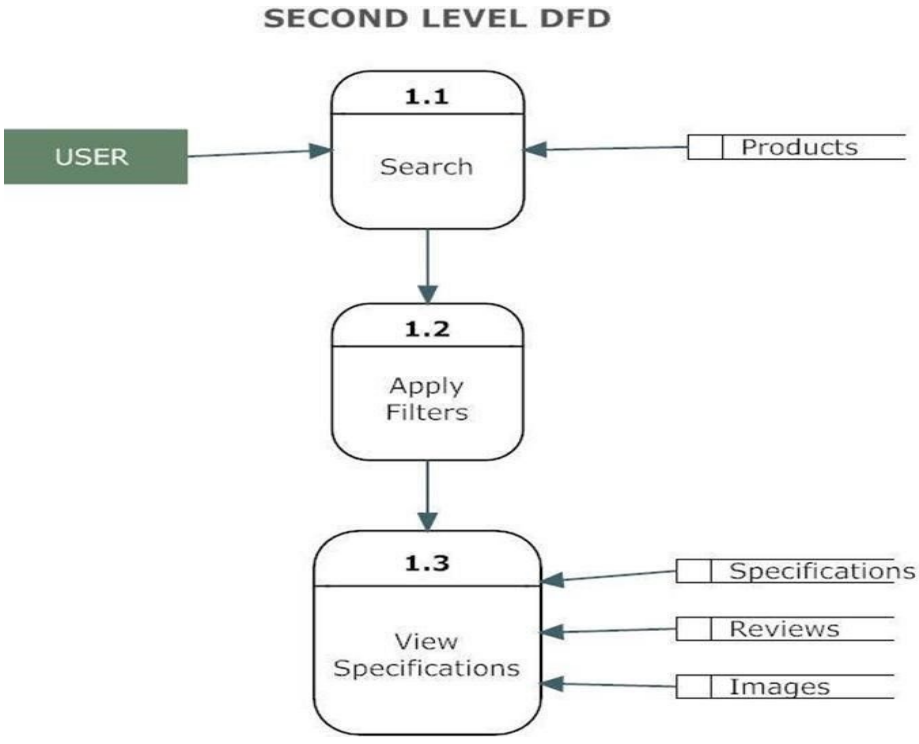
Use Case Diagram



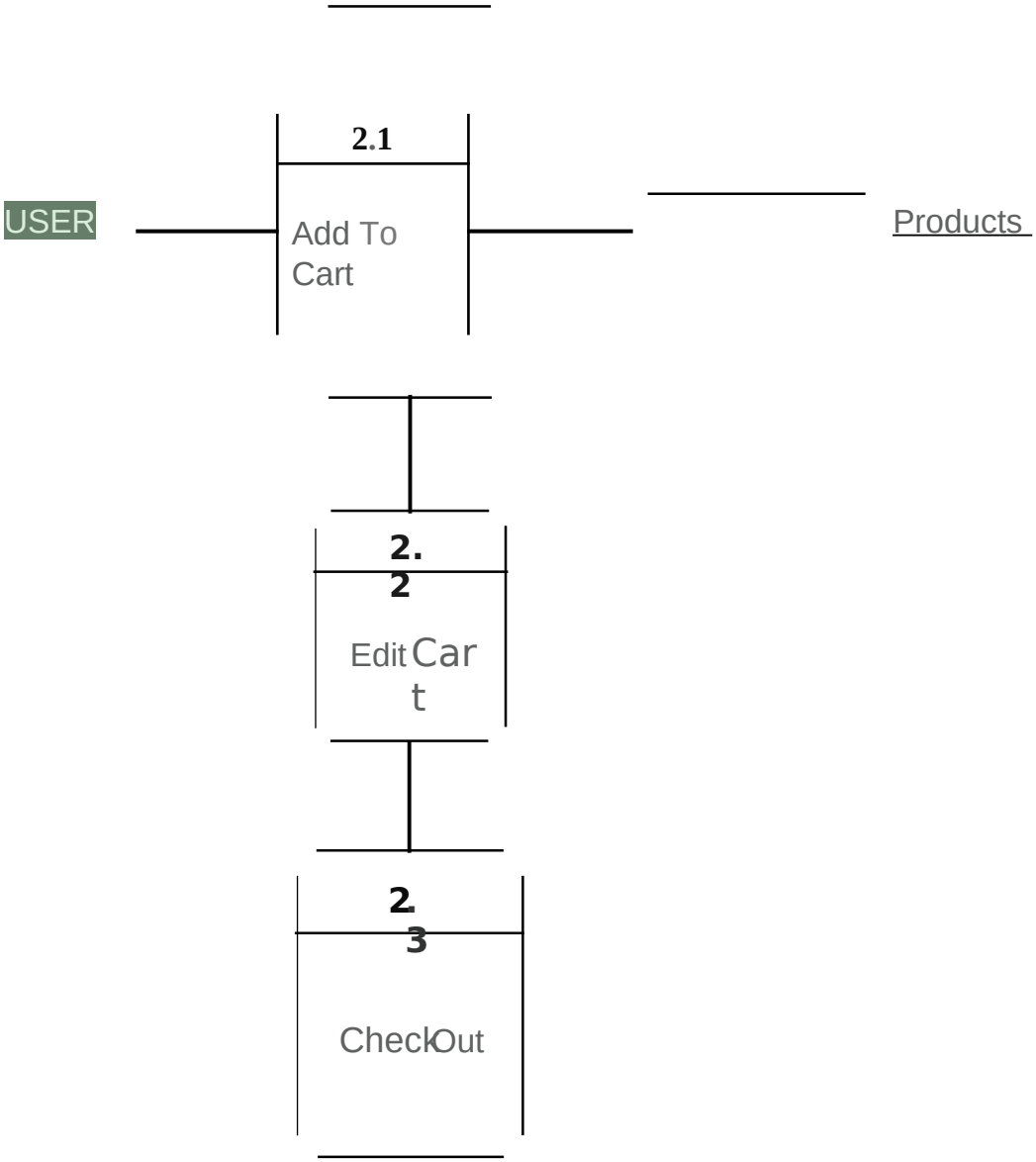
5.2DFD

The DFD helps represent the system. For Online shopping , DFD shows that the system has only one entity which is user. The processes include searching products, viewing specifications, adding products to cart and checkout.

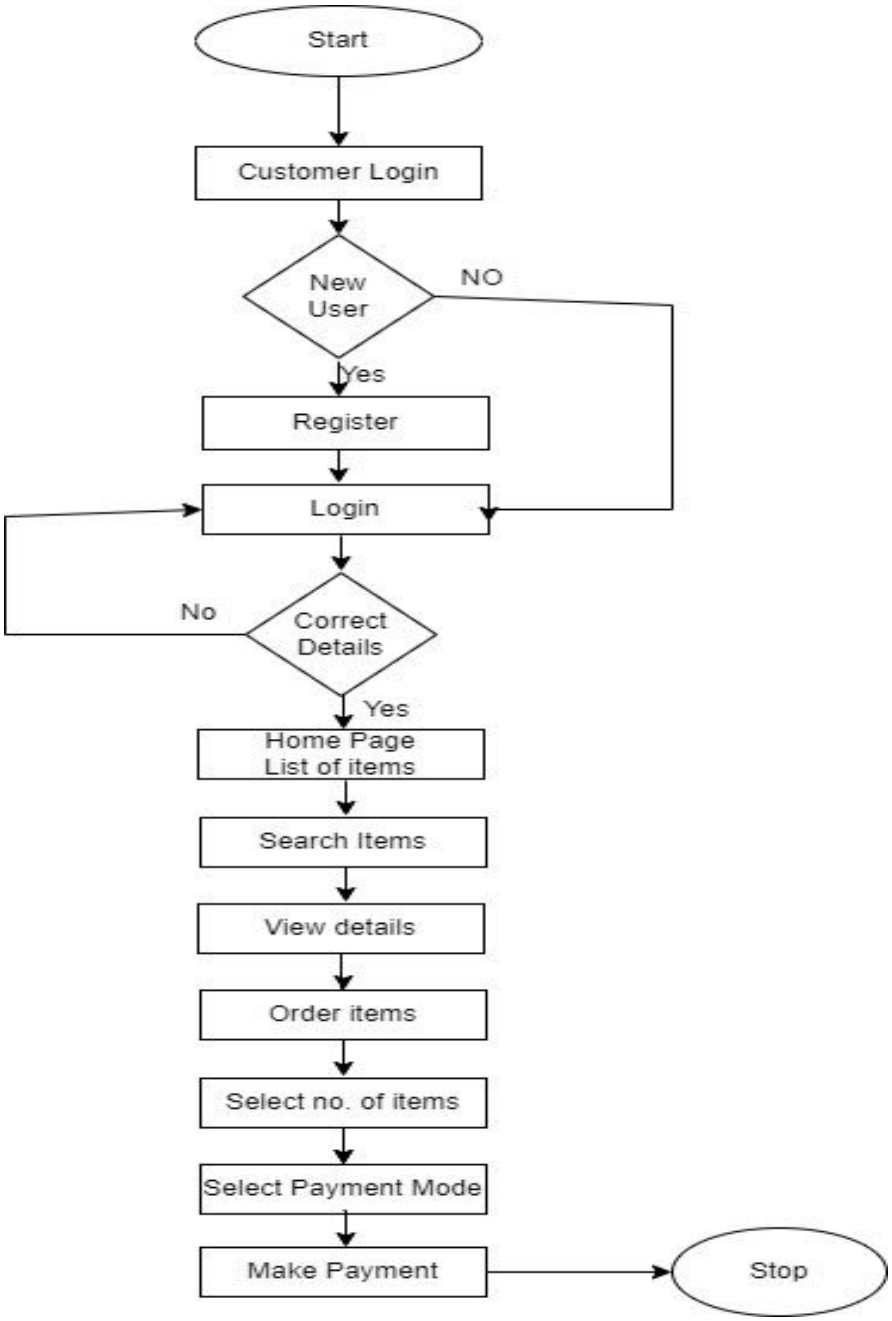




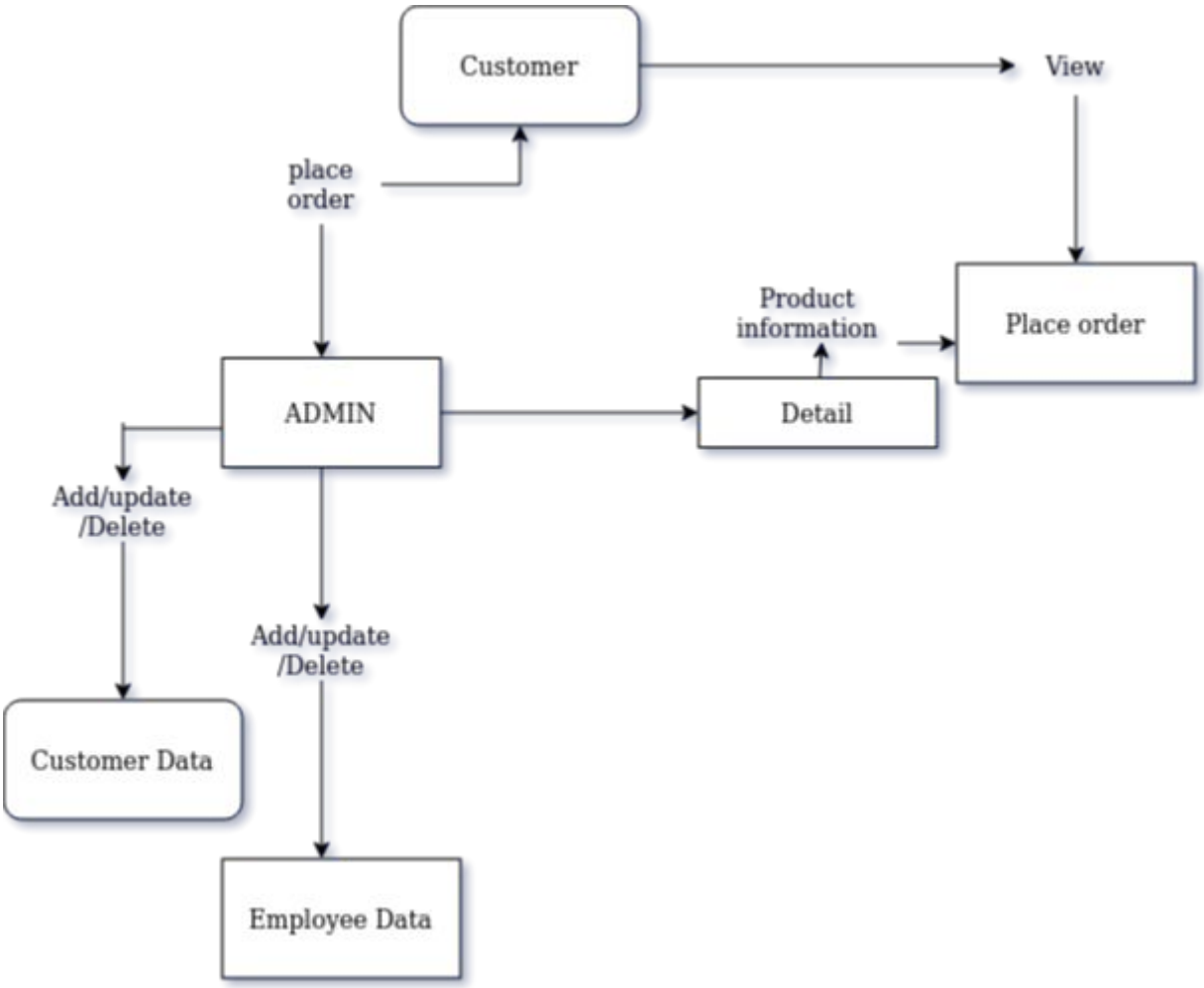
SECOND LEVEL DFD



5.3Flowchart



5.4 System Architecture



Chapter 6

Technical Specification:

Frontend: Html, CSS, JavaScript

As a web developer, the three main languages we use to build websites are HTML, CSS, and JavaScript. JavaScript is the programming language, we use HTML to structure the site, and we use CSS to design and layout the web page. These days, CSS has become more than just a design language, though. You can implement animations and smooth transitions with just CSS.

OS: Windows

Windows is a graphical operating system developed by Microsoft. It allows users to user to view and store files, run the software, play games, watch videos, and provides a way to connect to the internet. It was released for both home computing and professional works.

Backend: Node JS, Mongo DB

Node JS:

The Node.js is more advantageous to the developers in comparison to its disadvantages. What is more important is the fact that it has extended the area of JavaScript application and can be used for both frontend as well as backend servers. With the progress of time, more business organizations have adopted Node.js and have ended getting positive results.

MongoDB:

MongoDB is a reliable database recommended while designing a scalable web application and requires a large database to store huge amount of unstructured data. If the user is looking for the best availability, faster processing, good backup, zero loss of information, then MongoDB is the best solution to use. Most importantly, it is free to use.

Software Requirements

Frontend:

- CSS
- HTML
- JAVASCRIPT
- BOOTSTRAP

BACKEND:

- MongoDB
- NodeJs

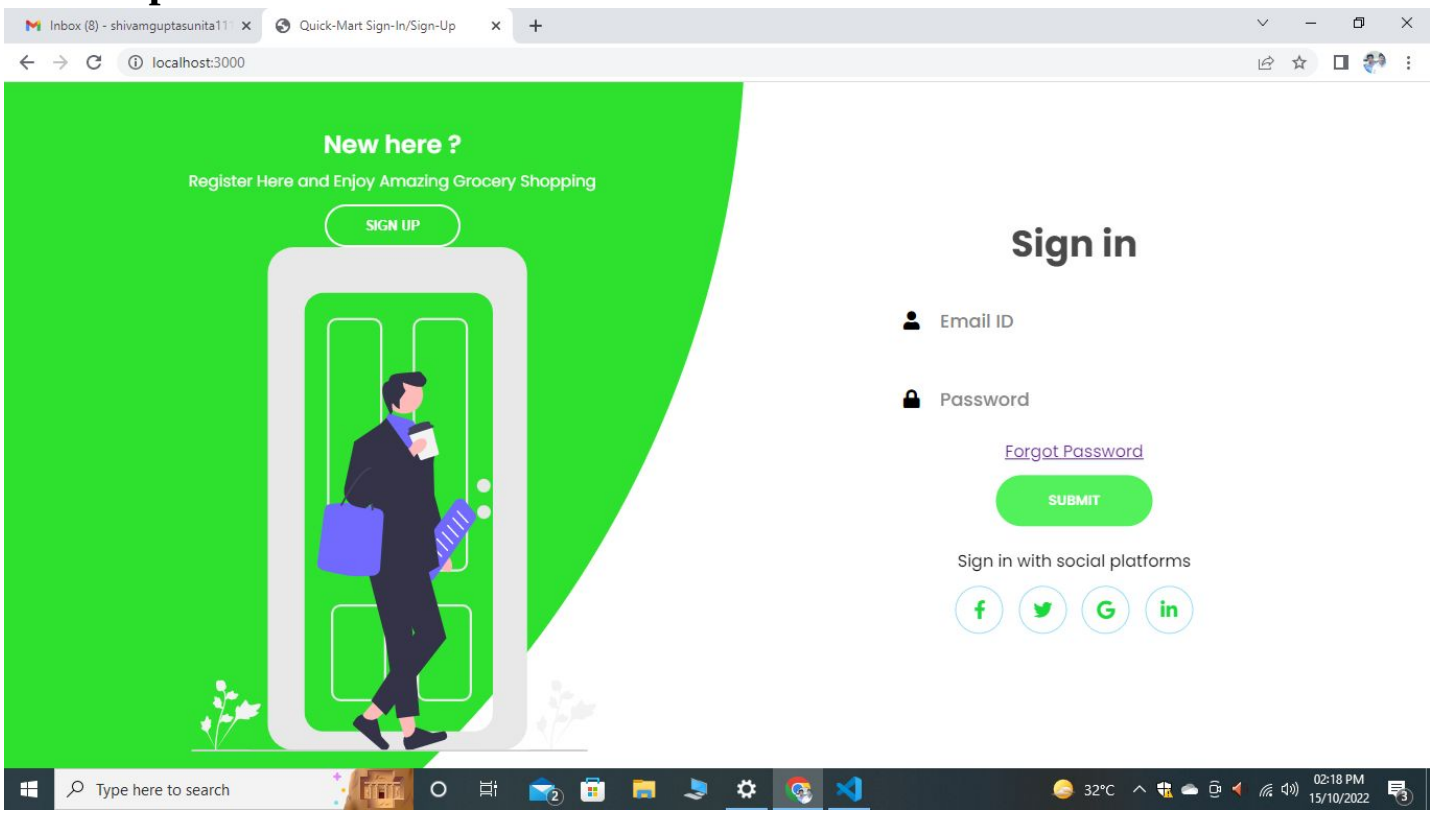
Chapter 7

Project Scheduling Template:

Sr. No	Group Member	Time duration	Work to be done
1	Shivam Gupta	1st week of July	*Login and registration page with database connection*
	Meet Bohra		Validation of login page.
	Yashab Mahimi		Testing login and registration page to find possible bugs
2	Yashab Mahimi	**2nd week of July**	Implementing Home page
	Meet Bohra		Implementation of description page
	Shivam Gupta		Bootstrap and testing of bugs
3	Shivam Gupta	**1st week of August**	Checkout page
	Meet Bohra		Implementing Payment gateway
	Yashab Mahimi		SMTP and testing of bugs

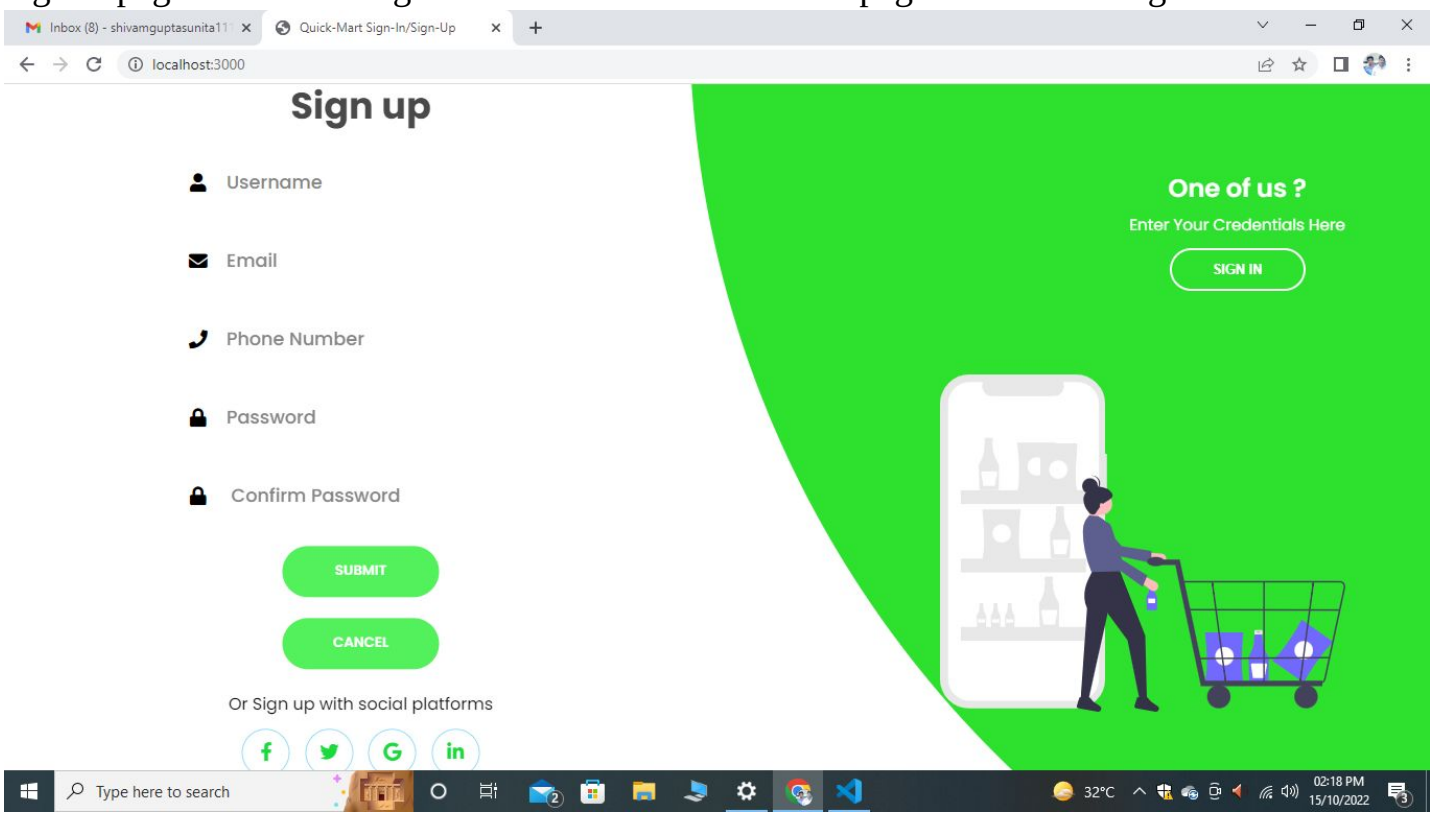
Chapter 8

Implementation:



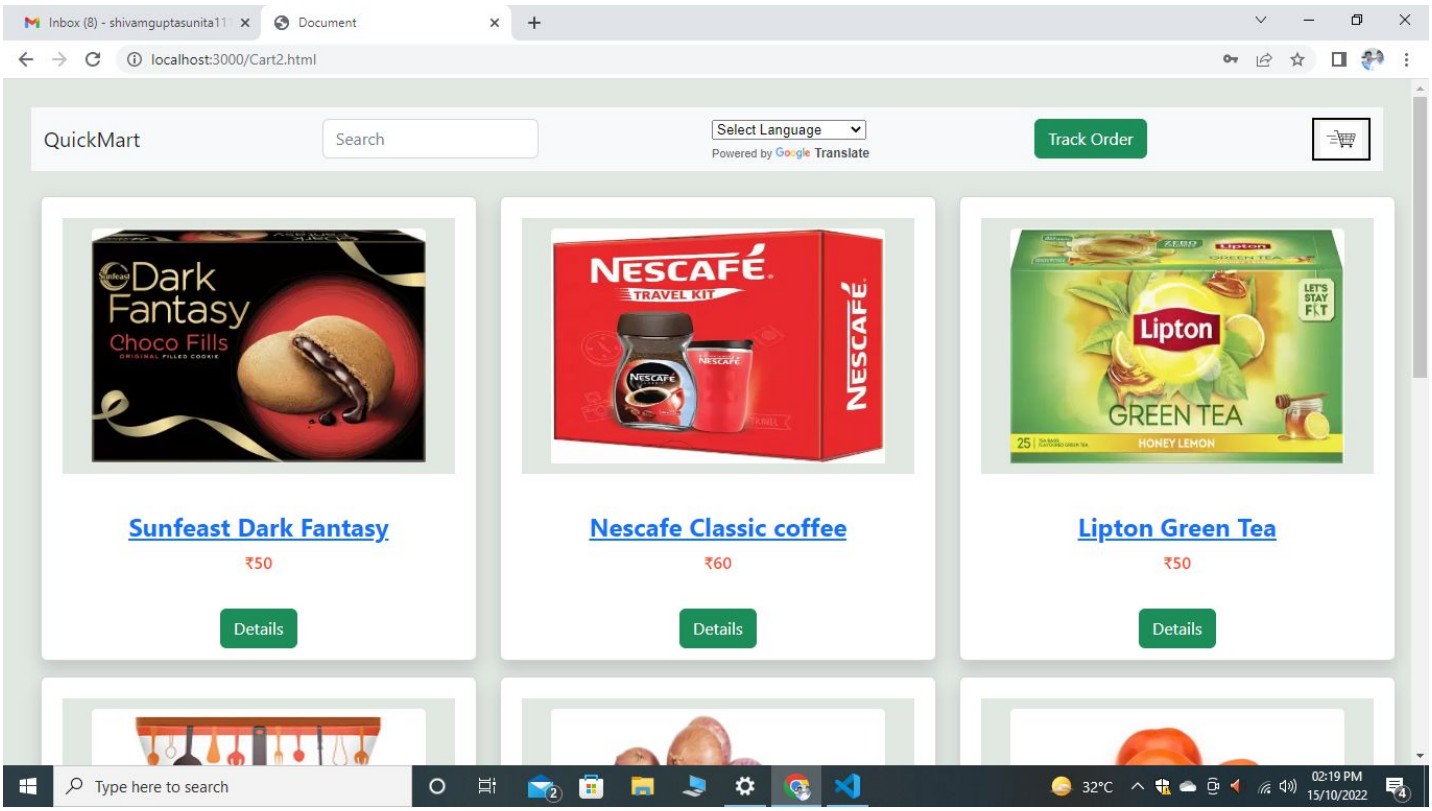
(Figure 8.1)

Sign in page : User will login with his credentials on this page as shown in fig. 8.1.



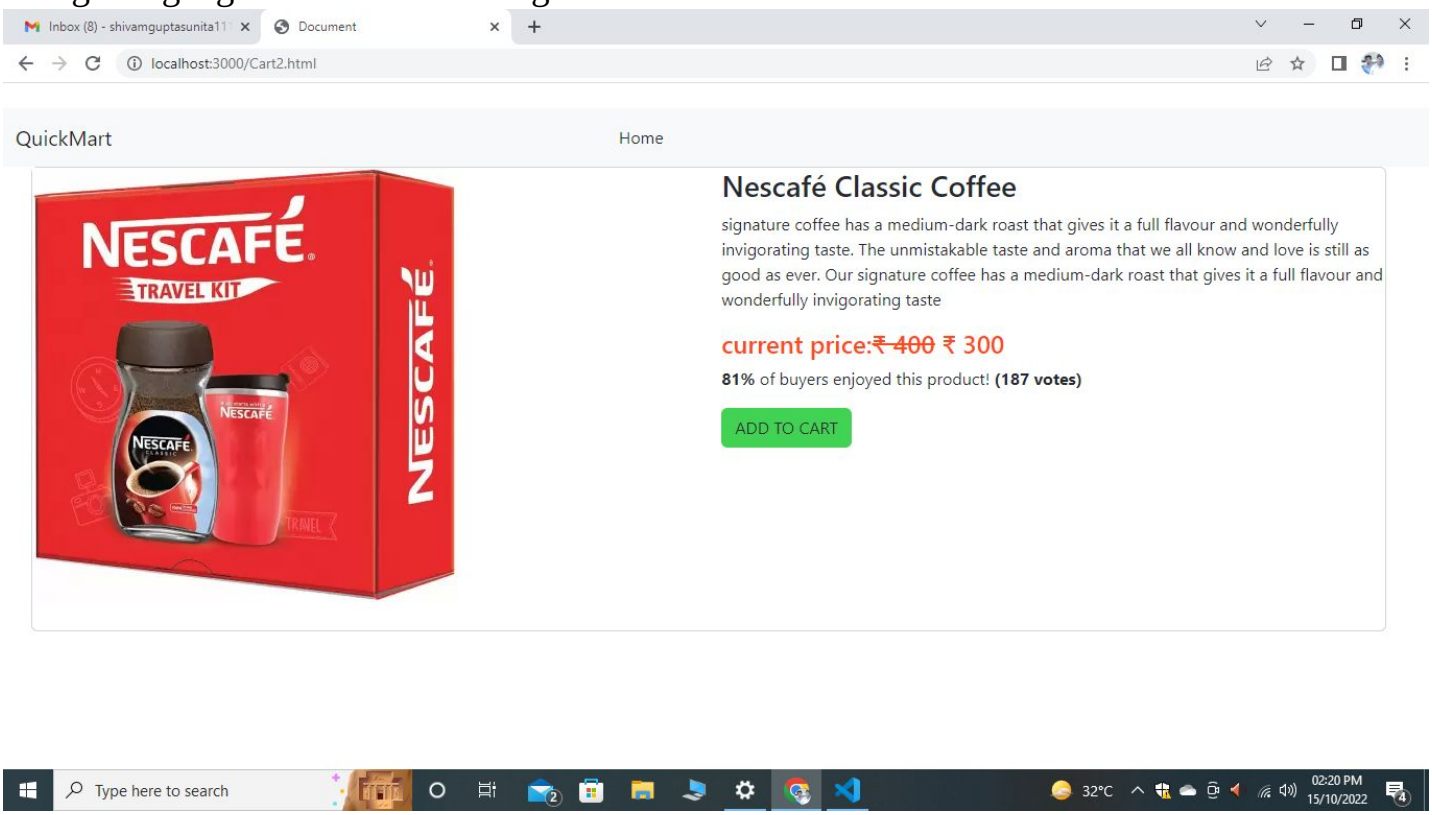
(Figure 8.2)

Sign up page: User can create his account on this page as shown in fig. 8.2.



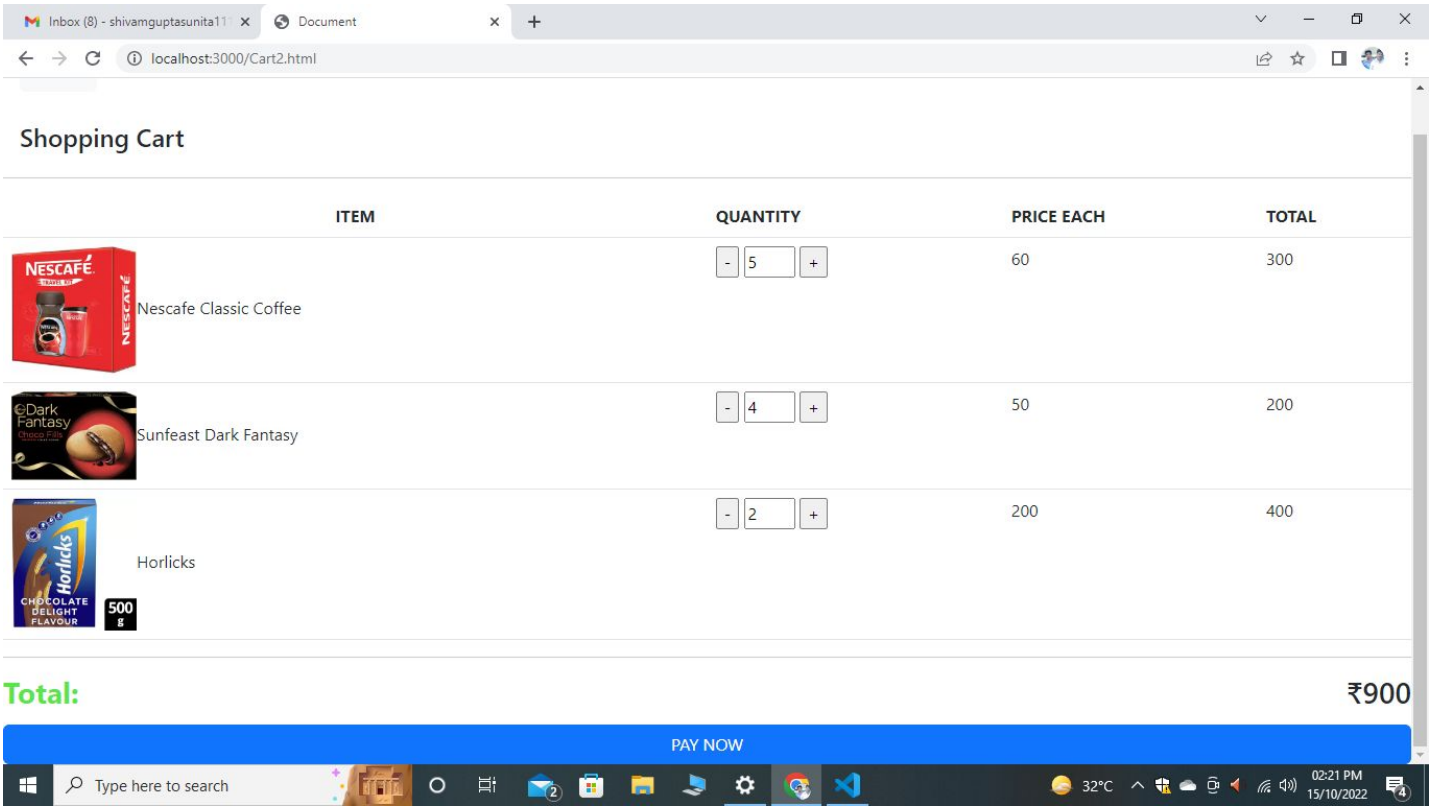
(Figure 8.3)

Homepage: List of products will be displayed on this page. User can search for products, change language etc. as shown in figure 8.3.



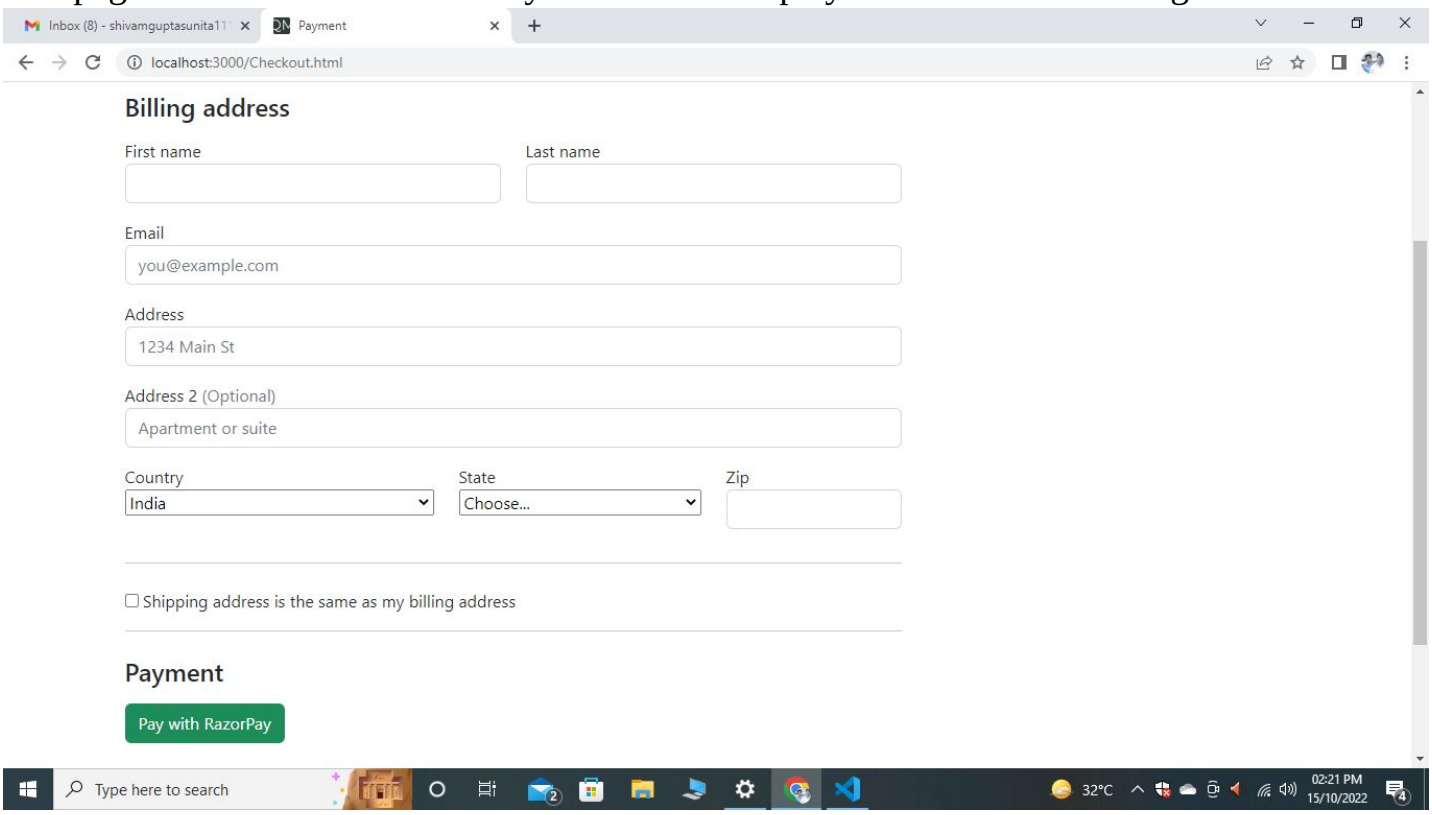
(Figure 8.4)

Description page: Description page of each product is available. User can see product details using this page as shown in fig. 8.4.



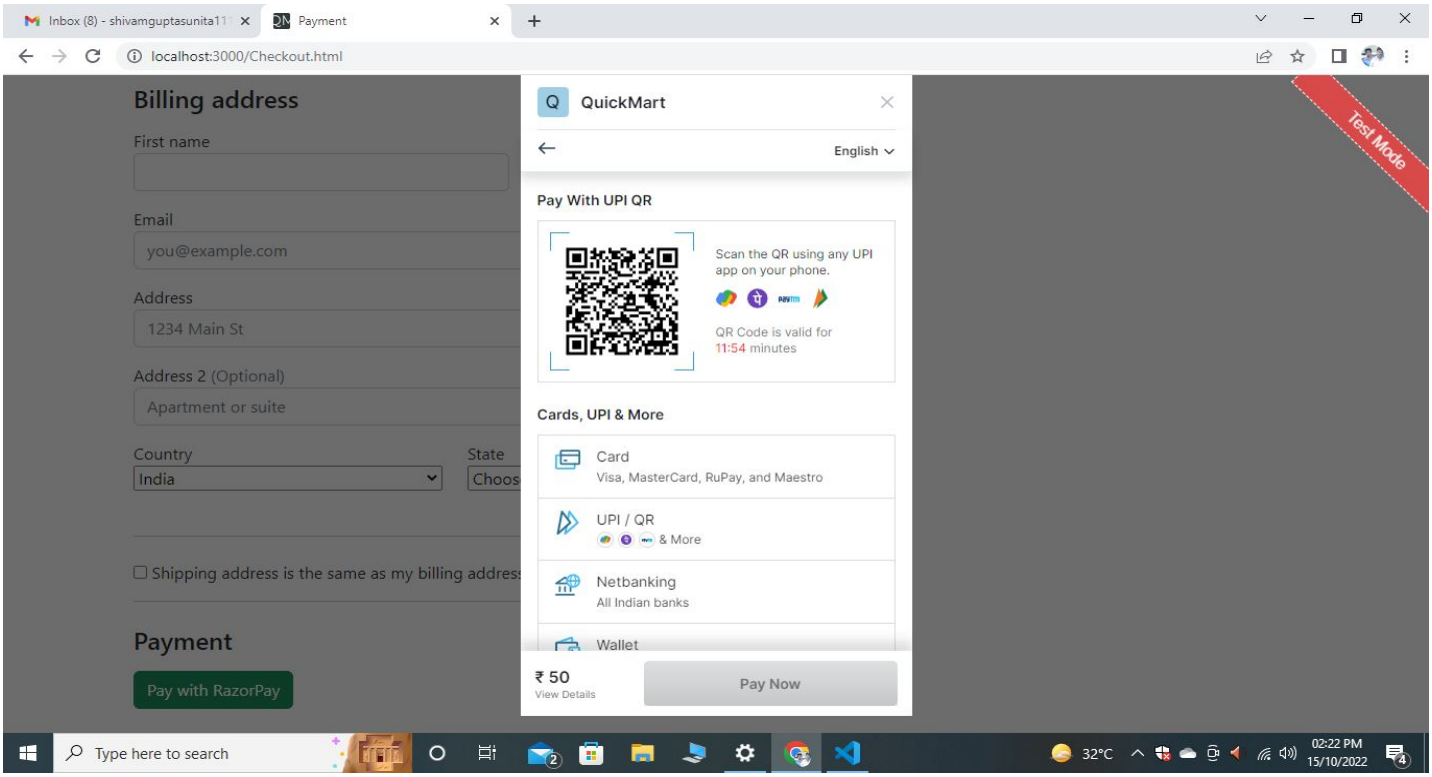
(figure 8.5)

Cart page: Products added to cart by user will be displayed here as shown in fig. 8.5.



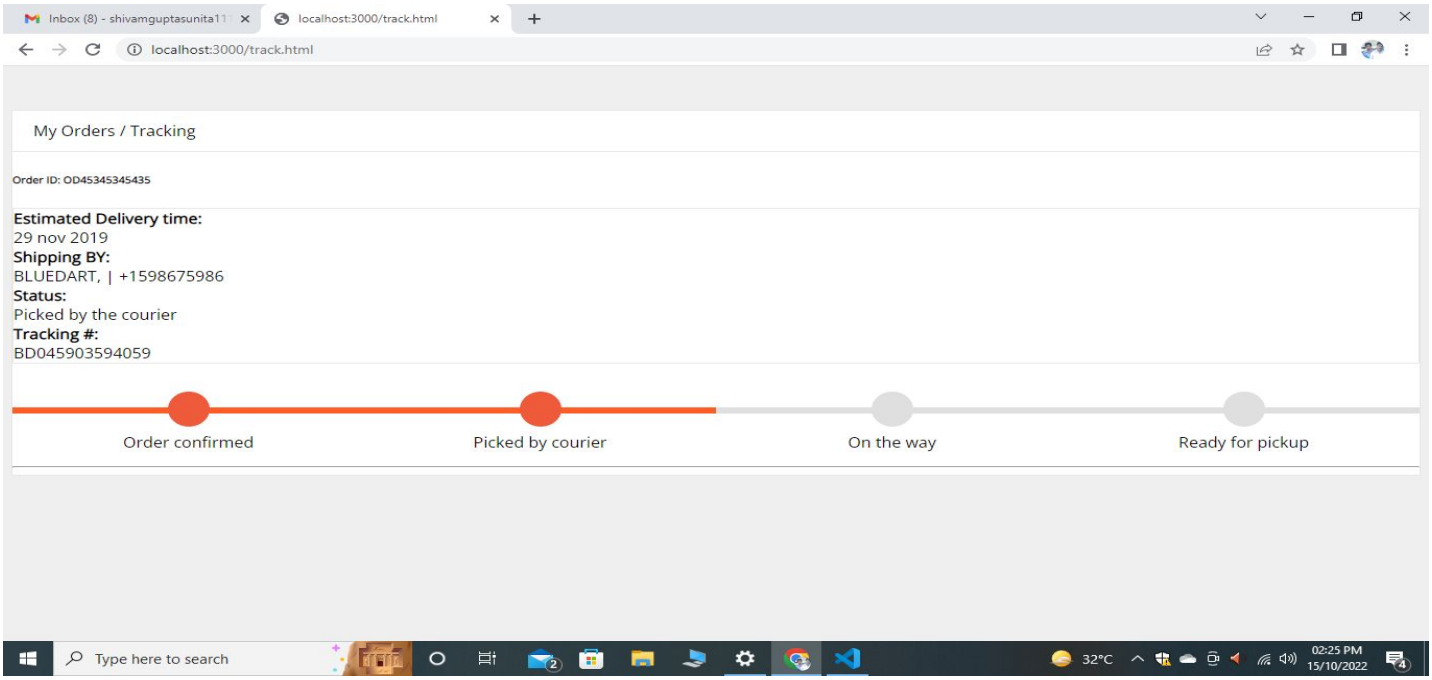
(figure 8.6)

Payment page: User will enter shipping details on this page as shown fig 8.6.



(Figure8.7)

Payment(Razorpay): User will be able to do safe payment using upi, card etc.



(Figure 8.8)

Order Tracker:User will be able to track his orders using this page as shown in fig.

Chapter 9

Results & Challenges

The application can be used for any Ecommerce application. It is easy to use, since it uses the GUI provided in the user dialog. User friendly screens are provided. The application is easy to use and interactive making online shopping a recreational activity for users. It has been thoroughly tested and implemented.

Challenges

- Compatibility with browsers like Mozilla Firefox, Internet explorer, Google Chrome etc.
- Using a layered approach in developing the application which would make the application maintainable.

The overall idea of doing this project is to get a real time experience. Learn modern technologies.

Chapter 10

Conclusions

The ‘Online Shopping’ is designed to provide a web-based application that would make searching, viewing and selection of a product easier. The search engine provides an easy and convenient way to search for products where a user can Search for a product interactively and the search engine would refine the products available based on the user’s input. The user can then view the complete specification of each product. They can also view the product reviews and also write their own reviews. Use of Ajax components would make the application interactive and prevents annoying post backs. Its drag and drop feature would make it easy to use.

References:

1. https://cloud.google.com/translate
2. **https://www.w3schools.com/html/**
3. **https://www.w3schools.com/css/**
4. **https://www.w3schools.com/js/**
5. **https://www.emailjs.com/**
6. **https://razorpay.com/integrations/**