



COSMOS COLLEGE OF MANAGEMENT AND TECHNOLOGY
(AFFILIATED TO POKHARA UNIVERSITY)

A
PROJECT PROPOSAL
ON
ONLINE SHOPPING WEBSITE

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Abstract

'Online Shopping website' The online shopping website is a digital platform designed to provide users with a convenient and efficient way to browse, select, and purchase a wide range of products and services. Through a user-friendly interface, customers can explore product categories, view detailed descriptions, and make secure transactions. The platform incorporates features such as a shopping cart, secure payment gateways, and order tracking to enhance the overall shopping experience. Merchants can easily manage their product listings and inventories, ensuring real-time updates for customers. The website aims to bridge the gap between buyers and sellers in the online marketplace, offering a seamless and enjoyable shopping journey for users while promoting a diverse array of products and fostering e-commerce growth.

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List of Abbreviations

HTML: Hypertext Markup Language

CSS: Cascading Style Sheets

JS: Javascript

Django: Django (web framework)

sqlite: Default django db

1. Introduction

E-commerce, or electronic commerce, has gained widespread adoption due to several compelling reasons. It provides businesses with global market access, operates 24/7 for consumer convenience, reduces costs, and saves time. Data-driven decision-making, secure transactions, and innovative technologies contribute to the success of e-commerce. Additionally, logistical efficiency, adaptability to market trends, and participation in digital transformation ensure the continued relevance and growth of e-commerce in the dynamic digital era.

1.1 Background

Online shopping originated in the 1970s and gained momentum in the 1990s through platforms like Amazon and eBay. The late 1990s saw a boom and subsequent bust. Technological advancements in the 2000s and 2010s, coupled with the rise of mobile commerce, transformed online shopping into a global, diverse market. Major players, notably Amazon, dominated. From a small concept, online shopping has evolved significantly, shaping consumer habits and retail landscapes worldwide.

1.2 Problem statements

- Unauthorized access, data breaches, and cyber threats pose significant risks to e-commerce platforms, compromising user information and trust.
- The prevalence of online fraud, including payment fraud and identity theft, undermines the integrity of transactions and erodes consumer confidence.
- Disparities in internet access and digital literacy contribute to a digital divide, limiting the participation of certain demographics in e-commerce activities.
- Some e-commerce platforms struggle to provide meaningful and personalized experiences, leading to reduced customer engagement and satisfaction.

1.3 Objectives

- To develop an easy to use web based interface where users can search for products, view a complete description of the products and order the products.
- To add recommendation feature in system.

- To digitized the payment method.
- To provide better shopping facility and services in reasonable price.

2. Literature Review

The literature on online shopping websites presents a comprehensive exploration of various facets within the realm of e-commerce. Scholars extensively investigate consumer behavior, shedding light on the motivations, preferences, and decision-making processes that drive individuals to engage in online shopping. Technological innovations, including the rise of mobile commerce, artificial intelligence, and virtual try-on technologies, are scrutinized for their impact on shaping the online shopping experience.[1]

Major e-commerce platforms, particularly industry giants like Amazon and Alibaba, are subjects of study, with researchers analyzing their strategies and influence on user satisfaction. Security concerns and the establishment of trust in online transactions are recurring themes, as scholars delve into issues related to privacy, data protection, and perceived risks in online payment.[2]

The literature also explores global and cultural perspectives, examining how cultural factors influence consumer attitudes, trust, and preferences in the online shopping landscape. Additionally, economic and social implications of the growth of online shopping are scrutinized, including its effects on traditional retail industries, employment patterns, and social interactions.

Legal and ethical considerations in online shopping, encompassing areas such as marketing practices, advertising, and data usage, are explored to understand the regulatory frameworks governing e-commerce transactions. Overall, this extensive body of research provides a nuanced understanding of the intricate dynamics between consumers, technology, and the evolving e-commerce environment, laying the groundwork for continued exploration in this rapidly evolving field. Using the simple, robust, Python-based Django framework, you can build powerful Web solutions with remarkably few lines of code. In *Python Web Development with Django*, three experienced Django and Python developers cover all the techniques, tools, and concepts you need to make the most of Django 1.0, including all the major features of the new release. The authors teach Django through in-depth explanations, plus provide extensive sample code supported with images and line-by-line explanations. You'll discover how Django leverages Python's development speed and flexibility to help you solve a wide spectrum of Web development problems and learn Django best practices covered nowhere else. You'll build your first Django application in just minutes and deepen your real-world skills through start-to-finish application projects including Simple Web log (blog)

Online photo gallery Simple content management system Ajax-powered live blogger Online source code sharing/syntax highlighting tool How to run your Django applications on the Google App Engine This complete guide starts by introducing Python, Django, and Web development concepts, then dives into the Django framework, providing a deep understanding of its major components (models, views, templates), and how they come together to form complete Web applications. After a discussion of four independent working Django applications, coverage turns to advanced topics, such as caching, extending the template system, syndication, admin customization, and testing. Valuable reference appendices cover using the command-line, installing and configuring Django, development tools, exploring existing Django applications, the Google App Engine, and how to get more involved with the Django community.[3]

User Experience (UX) consists of user interacting with a system in a specific context. Usability addresses efficiency, effectiveness, and satisfaction (i.e. user's ability to use an interface), whereas UX describes the whole interaction, including user's thoughts and feelings about the interaction. In user-centered design practice, the goal is to help users work more efficiently and effortlessly. User needs are two-fold: the interaction should fulfill both pragmatic and hedonic user needs. Good UX is an important factor of efficient, satisfactory online customer journey. In this study, customer journey is the path user goes through on an ecommerce website. Planning the customer journey carefully will help users perform tasks efficiently and accomplish their goals and ease their decision-making process.[2]

Do you want to build web pages, but have no previous experience? This friendly guide is the perfect place to start. You'll begin at square one, learning how the Web and web pages work, and then steadily build from there. By the end of the book, you'll have the skills to create a simple site with multi-column pages that adapt for mobile devices. Learn how to use the latest techniques, best practices, and current web standards—including HTML5 and CSS3. Each chapter provides exercises to help you to learn various techniques, and short quizzes to make sure you understand key concepts. This thoroughly revised edition is ideal for students and professionals of all backgrounds and skill levels, whether you're a beginner or brushing up on existing skills. Build HTML pages with text, links, images, tables, and forms Use style sheets (CSS) for colors, backgrounds, formatting text, page layout, and even simple animation effects Learn about the new HTML5 elements, APIs, and CSS3 properties that are changing what you can do with web pages Make your pages display well on mobile devices by creating a responsive web design Learn how JavaScript works—and why the language is so important in web design Create and optimize web graphics so they'll download as quickly as possible[4]

3. Requirement Analysis

The system is technically feasible as all the necessary hardware and software are readily available. The required resources for the development and maintenance of the system are easily accessible. Moreover, the project is operationally feasible as it does not require users to have advanced computer knowledge to use it. The system is user-friendly, and users can easily learn to use it by reading the manual or tutorial provided by the developers. Additionally, the system is operationally efficient and provides effective data retrieval and storage functionality.

3.1 System Requirements

- For frontend we will use HTML,CSS,JavaScript
- For backend we will use Django
- For database we will use dB SQLite

3.2 Functional Requirements

- User Registration and Authentication
- Product Catalog.
- Shopping Cart and Checkout.
- User Reviews and Ratings.

4. Methodology

Here to make this project we will use the Incremental model which is the part of the SDLC (Software development lifecycle). To make this project we will divide the task between the member of the group after the completion of task we will integrate them and make a complete website. Here for the frontend we will use HTML, CSS, JavaScript, bootstrap. For the backend we will use Python, Django and for the database we will use dB SQLite. For developing an online shopping website involves analyzing requirements, planning, designing the user interface and system architecture, coding, testing, deploying, and maintaining the site. This systematic approach ensures the creation of a user-friendly and robust platform.

Creating an online shopping website involves several key steps and methodologies to ensure a smooth and successful development process. Here's a general methodology that you can follow:

- 1. Market Research**
- 2. Define Goals and Objectives**
- 3. Create a Business Plan**
- 4. Select E-commerce Platform**
- 5. Domain and Hosting**
- 6. Design and User Experience**
- 7. Development**
- 8. Security**
- 9. Payment Gateway Integration**
- 10. Testing**
- 11. Launch**
- 12. Marketing and Promotion**
- 13. Analytics and Optimization**

14. Customer Support

15. Maintenance and Updates

4.1 Software Process Model (Incremental Model)

Incremental Model is a process of software development where requirements divided into multiple standalone modules of the software development cycle. In this model, each module goes through the requirements, design, implementation and testing phases. Every subsequent release of the module adds function to the previous release. The process continues until the complete system achieved.

- **Requirement analysis:** In the first phase of the incremental model, the product analysis expertise identifies the requirements. And the system functional requirements are understood by the requirement analysis team. To develop the software under the incremental model.
- **Design and Development:** In this phase the design of the system functionality and the development method are finished with success. When software develops new practicality, the incremental model uses style and development phase.
- **Testing:** The testing phase checks the performance of each existing function as well as additional functionality. Here the various methods are used to test the behavior of each task.
- **Implementation:** Implementation phase enables the coding phase of the development system. It involves the final coding that design in the designing and development phase and tests the functionality in the testing phase. After completion of this phase, the number of the product working is enhanced and upgraded up to the final system product.

4.2 Content-based Filtering

Content-based filtering uses item features to recommend other items similar to what the user likes, based on their previous actions or explicit feedback. Content-based filtering is a type of recommended system that personalizes suggestions based on a user's activities.

It analyzes attributes and keywords associated with items in a database, like those in an online marketplace, and aligns them with a user profile. This profile is built from the user's interactions—purchases, ratings (user likes and dislikes), searches, and clicks.

Content-based filtering delivers tailored recommendations by focusing on individual preferences, effectively aligning options with each user's unique tastes and interests. Recommendation system is used in our system when the user select the product or the item then our system show the product detail as well as the similar item related to that product selected by user as well as the new related product that user may like.

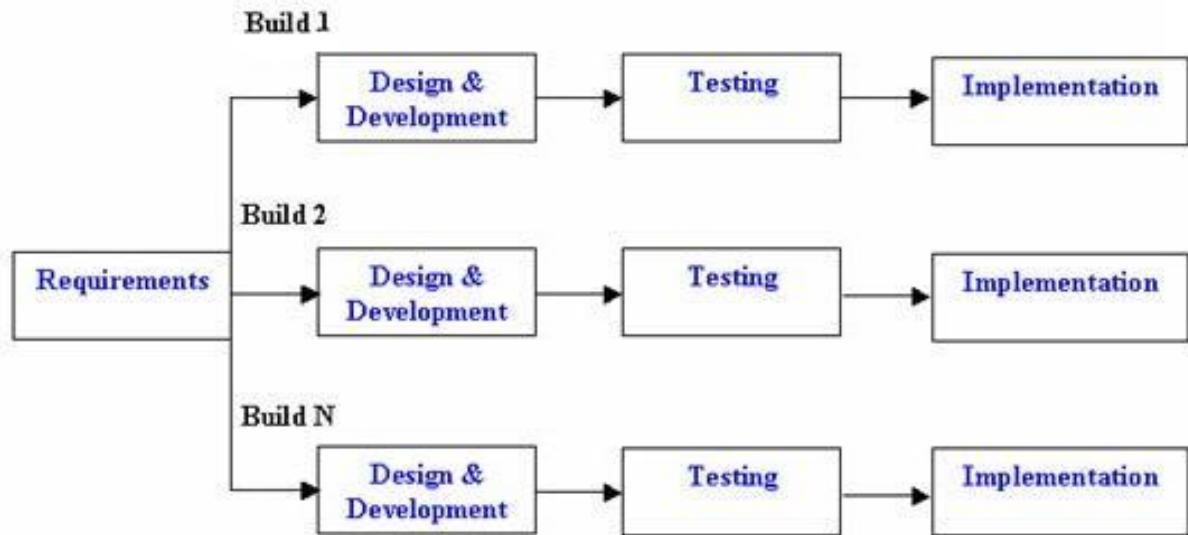


Figure 4.1: Incremental Model

CONTENT-BASED FILTERING

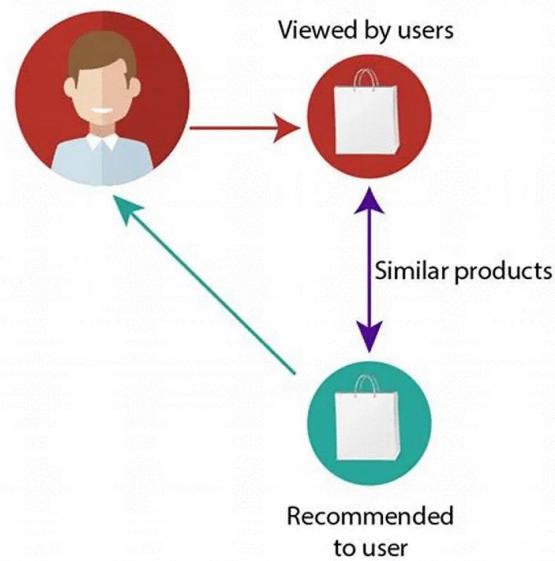


Figure 4.2: Content-based filtering

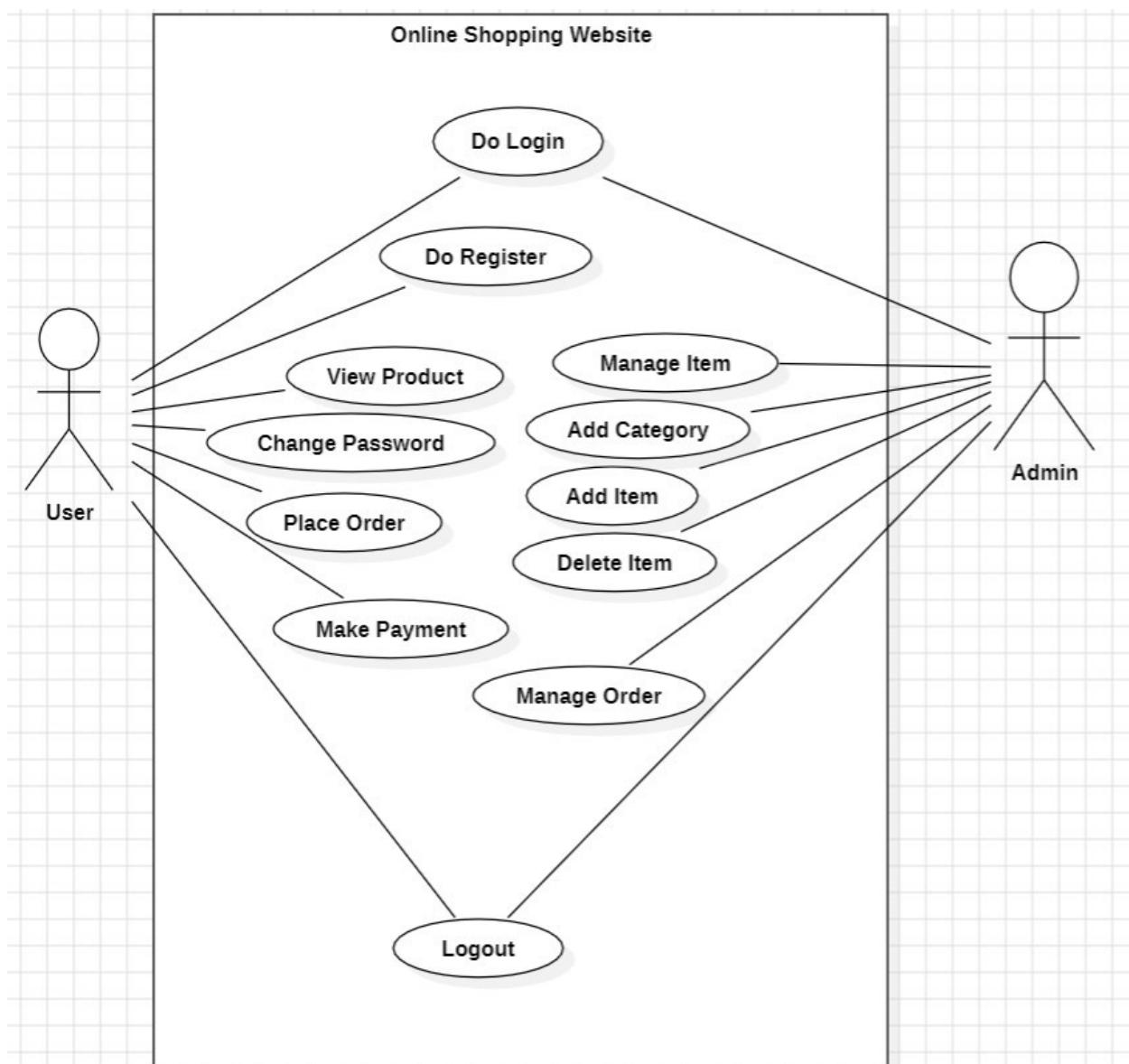


Figure 4.3: Use Case Diagram

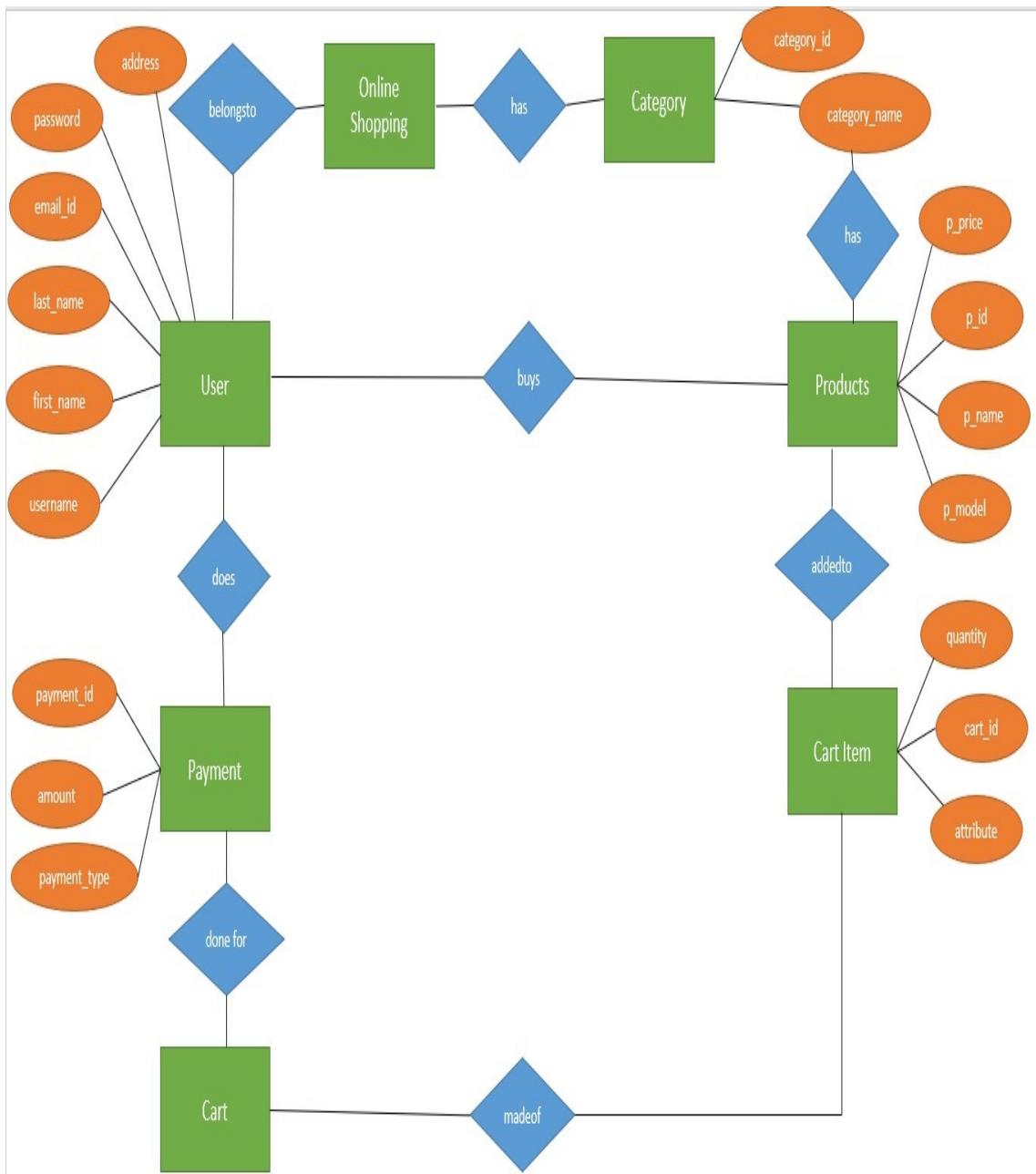


Figure 4.4: ER Diagram

5. ACCOMPLISHED WORK

- Home page
- Admin page
- Admin Login page
- User Register/Login page
- Add and delete items on product page
- User Reviews and Ratings.
- Backend
- Database

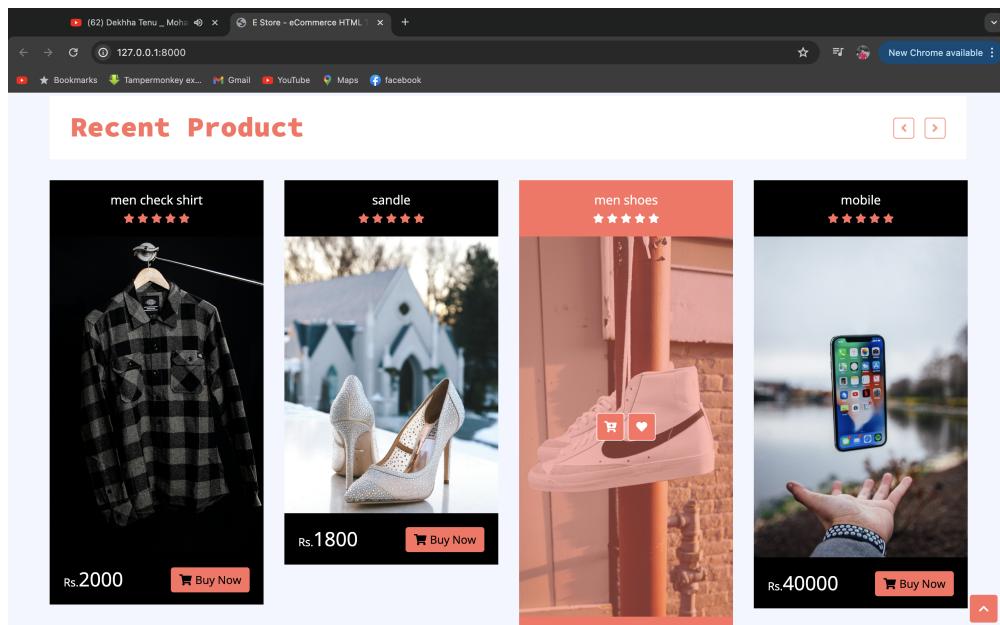
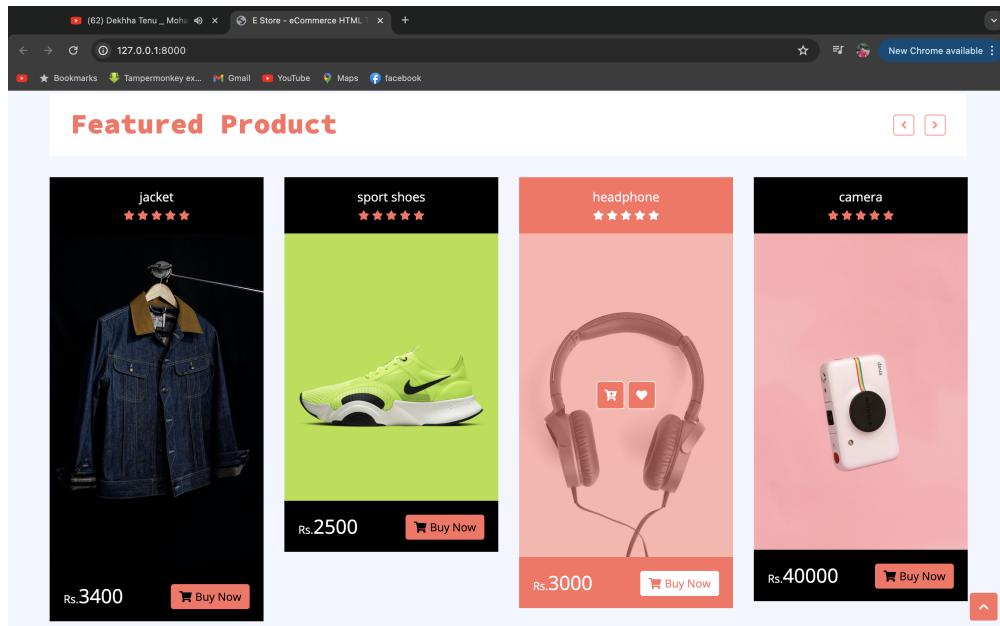
6. REMAINING WORK

- Features
- Payment method

7. Snapshots

The screenshot shows the homepage of an eCommerce website. At the top, there's a navigation bar with a logo, a search bar, and user account information. Below the navigation is a sidebar with a list of categories: home, Men Fashion, Women Fashion, Sport, Baby clothes and Toys, Electronic, and Gadget & Accessories. The main content area features a large image of a desk with multiple laptops and a "Shop Now" button. To the right is a smaller image of social media icons. Below these are several brand logos: Harley-Davidson, Hollister, Nike, Kashyap, Sonam, and a logo for a fashion brand. A horizontal slider bar is visible at the bottom of this section.

The screenshot shows a section of the website highlighting services. It includes four boxes: "Secure Payment" (Mastercard logo), "Worldwide Delivery" (Delivery truck icon), "90 Days Return" (Return arrow icon), and "24/7 Support" (Speech bubble icon). Below this are four product images: a woman in a red coat, a floral arrangement, a laptop setup, and a couple posing.



Rs.2500 **Buy Now**

Get in Touch

123 E Store, Los Angeles, USA
email@example.com
+123-456-7890

Follow Us

Company Info

About Us
Privacy Policy
Terms & Condition

Purchase Info

Payment Policy
Shipping Policy
Return Policy

We Accept: Payment Method

Secured By: Payment Security

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Template By HTML Codex

HOME ADMIN

+012-345-6789

Logo

Search

Home / Products / Cart

Product	Price	Remove
headphone	Rs. 3000	
double size bed	Rs. 25000	
mobile	Rs. 40000	

Get in Touch

123 E Store, Los Angeles, USA
email@example.com
+123-456-7890

Follow Us

Company Info

About Us
Privacy Policy
Terms & Condition

Purchase Info

Payment Policy
Shipping Policy
Return Policy

127.0.0.1:8000/cart

support@email.com +012-345-6789 ADMIN

HOME

Logo Search Cart (3)

Home / Products / Cart

Product	Price	Quantity	Total	Remove
sport shoes	Rs. 2500	- 2.0 +	Rs. 5000.0	
wooden chair	Rs. 10000	- 2.0 +	Rs. 20000.0	
saddle	Rs. 1800	- 2.0 +	Rs. 3600.0	

Cart Summary

Total	Rs.28600.0
Delivery Charge	Rs. 50
Grand Total	Rs. 28650.0

[Checkout](#)

Get in Touch

123 E Store, Los Angeles, USA
 email@example.com
 +123-456-7890

Follow Us



Company Info

About Us
 Privacy Policy
 Terms & Condition

Purchase Info

Payment Policy
 Shipping Policy
 Return Policy

127.0.0.1:8000/category/men-fashion

support@email.com +012-345-6789 ADMIN

HOME

Logo Search Cart (3)

Home / Products / Product List

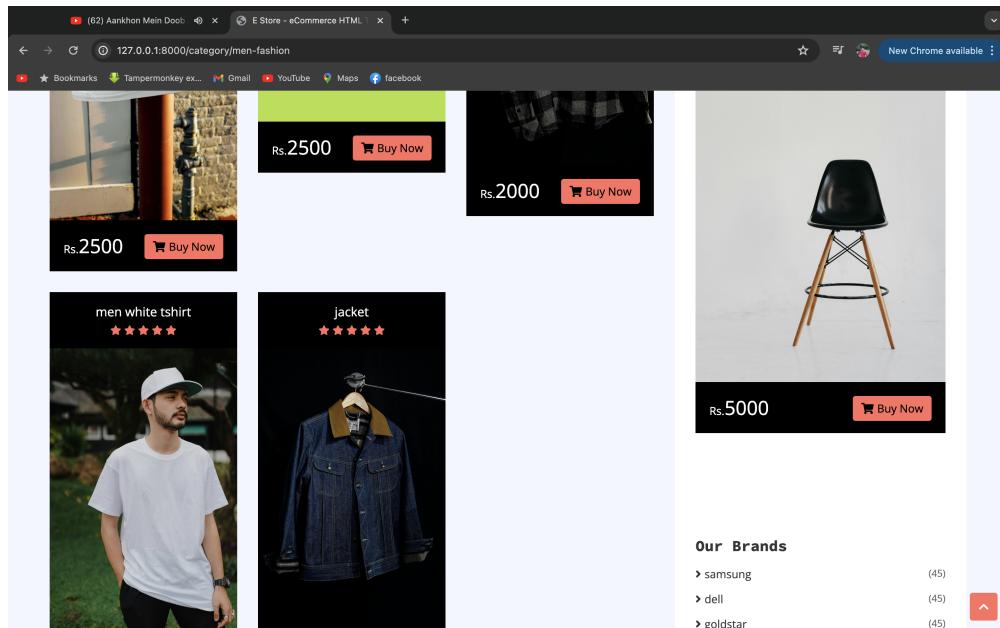
Search

Product short by Product price range

--	--	--	--

Category

- home
- Men Fashion
- Women Fashion
- Sport
- Baby clothes and Toys
- Electronic
- Gadget & Accessories



A screenshot of a web browser displaying a product detail page for a jacket. The page has a red header bar with 'HOME' and 'ADMIN' buttons. Below the header, there is a navigation bar with 'Logo', 'Search' (with a magnifying glass icon), and 'Cart' (with a heart icon). The main content area shows a large image of the jacket on a hanger. To the right of the image, the product details are listed: 'jacket', '★★★★★', 'Price: Rs 3400', 'Quantity: - 1 +', 'Size: S M L XL', and 'Color: White Black Blue'. Below these details are two buttons: 'Add to Cart' and 'Buy Now'. To the right of the product image, there is a sidebar titled 'category' with a list of categories: 'home', 'Men Fashion', 'Women Fashion', 'Sport', 'Baby clothes and Toys', 'Electronic', and 'Gadget & Accessories'. At the bottom of the sidebar, there is a small image of a room light with the text 'room light' and '★★★★★'.

This screenshot shows a product review section for a jacket. At the top, there's a placeholder image for a review. Below it is a form for giving a review, with a dropdown menu set to 'Choose a car: 5'. The review area contains the placeholder text 'Review' and a 'Submit' button. To the right of the review section is a large image of a laptop on a desk, with a price of 'Rs.120000' and a 'Buy Now' button.

Description **Specification** **Reviews**

Give your Review:

Choose a car: 5

Review

Submit

Related Products

jacket ★★★★☆ men shoes ★★★★☆ sport shoes ★★★★☆

Rs.120000 Buy Now

Our Brands

- > samsung (45)
- > dell (45)
- > goldstar (45)

This screenshot shows a product page for a jacket. The main image is a denim jacket on a hanger. Below it is a price of 'Rs.3400' and a 'Buy Now' button. To the right of the main image are two smaller images: one of men's shoes and another of sport shoes. Each item has a price of 'Rs.2500' and a 'Buy Now' button. On the right side of the page, there's a sidebar with a 'Related Products' section and a 'Our Brands' section. The 'Our Brands' section lists various brands with their counts: samsung (45), dell (45), goldstar (45), kelvinjeans (45), harley (45), hollister (45), nike (45), kashyap (45), sonam (45), zara (45), and prada (45). Below this is a 'Tags Cloud' section with words like 'Lorem ipsum', 'Vivamus', 'Phasellus', 'pulvinar', 'Curabitur', 'Fusce', 'Sem quis', 'Mollis metus', 'Sit amet', 'Vel posuere', 'orci luctus', and 'Nam lorem'.

Related Products

jacket ★★★★☆ men shoes ★★★★☆ sport shoes ★★★★☆

Rs.3400 Buy Now

Rs.2500 Buy Now

Rs.2500 Buy Now

Our Brands

- > samsung (45)
- > dell (45)
- > goldstar (45)
- > kelvinjeans (45)
- > harley (45)
- > hollister (45)
- > nike (45)
- > kashyap (45)
- > sonam (45)
- > zara (45)
- > prada (45)

Tags Cloud

Lorem ipsum Vivamus Phasellus pulvinar
 Curabitur Fusce Sem quis Mollis metus
 Sit amet Vel posuere orci luctus Nam lorem

Home / Products / Checkout

Cart Total

Total	Rs.
Delivery Charge	Rs. 50
Grand Total	Rs.

First Name:

Last Name:

Email Address:

Phone Number:

Address:

Payment Method:

UPI

Fonepay

Cash On Delivery

Place Order

WELCOME, ADMIN. VIEW SITE / CHANGE PASSWORD / LOG OUT

Recent actions

- + bhabishya Customer review
- + karlosh Customer review
- + Rabin Customer review
- Slider
- + jacket Product
- + men white tshirt Product
- + men check shirt Product
- + ladies scaf Product
- + ladies blue skirt Product
- + skirt Product

8. Timeline

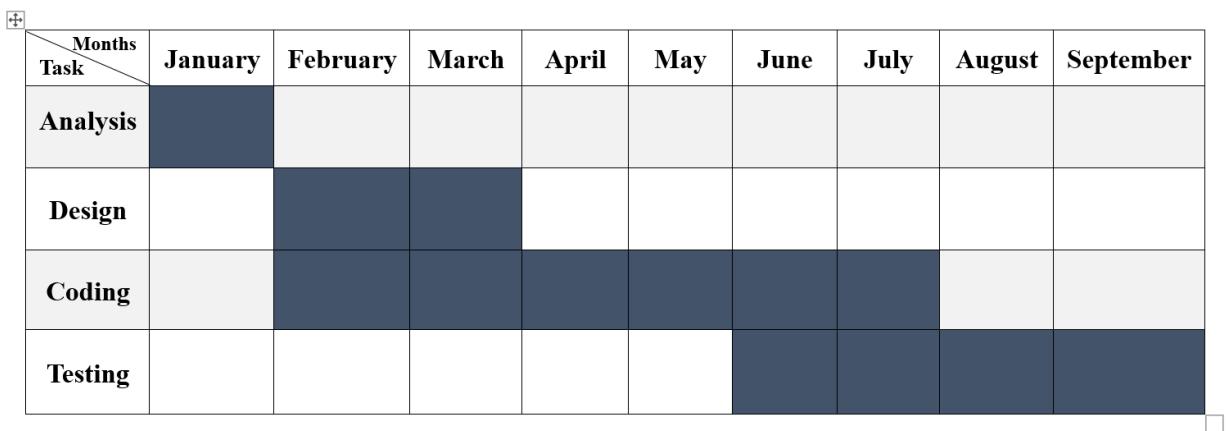


Figure 8.1: Gantt Chart

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