



# **SYNOPSIS**

## **ON**

### **E-Commerce Website**

**Submitted By:**

Nikhil Agrawal (E) 2115000664

Mayank Agrawal (E) 2115000610

Ranjeet Singh (E) 2115000828

**Submitted To:**

Mr. Sanjay Madaan

Assistant Professor

Department of CEA

# SHOP HUB

## Objective:

Develop an e-commerce platform that is user-friendly, easy to navigate, and functional to provide a positive user experience.

## Scope:

The scope of e-commerce website includes creating a secure, user-friendly platform with features for online sales. Limitations may arise from technical challenges, security vulnerabilities, and the need for ongoing maintenance and updates.

## Methodology:

This website leverages a combination of technologies, including HTML, CSS, JavaScript, and the MERN stack (MongoDB, Express.js, React, Node.js), to develop a robust and feature-rich e-commerce platform. These technologies work together to provide a seamless user experience, dynamic content delivery, and security. By using the MERN stack, we can efficiently handle data management, user interactivity, and server-side processes, enhancing the website's functionality and performance.

## Proposed System:

The proposed e-commerce website is designed to provide a user-friendly online platform for customers to browse and purchase a wide range of products. The core idea is to create a seamless and secure shopping experience. The website will function by offering a responsive and visually appealing interface with product listings, search functionality, a shopping cart, and secure payment processing. Customers can register, log in, and manage their accounts, while administrators can efficiently manage product listings, orders, and inventory.

## Features:

**Product Listings:** Display a wide range of products with details, images, and prices.

**Search Functionality:** Allow user to search for products based on keywords, categories.

**Product Description:** Provide detailed information about products, including specification, features and customer reviews.

**Shopping Cart:** Enable user to add, remove, and manage items they want to purchase.

**User Registration:** Allow customers to create accounts for easy access to order history.

## **Implementation Plan:**

- 1.Planning(3 days):** Define project goals and requirements.
- 2.Development(14 days):** Build the front-end and back-end and integrate payment gateways.
- 3.Testing(1-2 days):**Thoroughly test and fix any issues.
- 4.Development(1-2 days):**Configure serves, migrate data and launch the website.

## **Team Members:**

1. Nikhil Agrawal: Work on fronted-end and Back-end.
2. Mayank Agrawal: Work on fronted-end and Back-end.
3. Ranjeet Singh: Work on Database and Deployment.

## **Resources Required:**

- 1. Integrated Development Environment(IDE):** Software for coding, debugging and testing(Visual Studio).
- 2. Version Control System:** To manage code and collaborate effectively(GitHub).
- 3. Front-End Technologies:** HTML, CSS, JavaScript and relevant frameworks or libraries(React).
- 4. Back-End Technology:** Server-side programming languages(Node.js) and frameworks.
- 5. Database Management:** Database software (MongoDB, MySQL).

## **References:**

[www.google.com](http://www.google.com)

W3school

## **Expected Outcomes:**

- 1. A Fully Functional E-Commerce Website:** A live and operational e-commerce platform that allows customers to browse, search, and purchase products or services online.
- 2. Responsive and User-Friendly Design:** A website with a responsive design that adapts to various devices, offering an excellent user experience on desktops, tablets, and mobile phones.
- 3. Comprehensive Product Listings:** A well-organized product catalog with detailed descriptions, images and pricing.

**4. User Account Management:** Functionality for user registration, login, and profile management and manage personal information.

## **Conclusion:**

In conclusion, the development of an e-commerce website is a multifaceted project with a clear set of objectives and expected outcomes. The website's primary purpose is to provide a functional and secure platform for online shopping, offering a wide range of products or services to customers. It should be responsive, user-friendly, and optimized for performance, while also incorporating essential features such as payment processing, user account management, and dynamic content updates.