Online Shopping System

Problem Statement

The current online shopping platforms have several limitations such as poor search functionality, slow response times, limited product information, and lack of secure payment options. To address these challenges, an Online Shopping System is required that can provide customers with a convenient and user-friendly platform to search for products, view product information, add products to a cart, make payments, and track orders. The system should also enable merchants to manage their product catalog, track sales, and process orders efficiently.

Software Requirement Specification(SRS)

1. Introduction

The Online Shopping System is a software application designed to provide a convenient and user-friendly platform for customers to purchase goods and services online. The system will enable customers to search for products, view product information, add products to a cart, make payments, and track orders. The system will also enable merchants to manage their product catalog, track sales, and process orders. The primary goal of the system is to enhance the convenience of online shopping for customers and provide merchants with a reliable platform to sell their products.

2. General Description

The Online Shopping System will be an e-commerce platform that allows customers to browse and purchase products from a variety of merchants. The system will have a centralized database that stores information about products, merchants, orders, and customers. The system will be accessible to users with varying levels of technical proficiency and will provide real-time access to data.

3. Functional Requirements

The Online Shopping System will have the following functional requirements:

- Customer registration and login
- Product search and browsing
- Product information display
- Shopping cart management
- Payment processing
- Order tracking and history
- Merchant registration and login
- Product catalog management
- Order processing and fulfillment
- Reporting and analytics

4. Interface Requirements

The Online Shopping System will have a user-friendly interface that is easy to navigate and use. The system will support multiple languages and will be accessible on desktop and mobile devices. The system will also be integrated with payment gateways for secure transactions.

5. Performance Requirements

The Online Shopping System will be designed to handle a large number of concurrent users and high traffic. The system will have a fast response time, and data retrieval and storage will be optimized for performance. The system will also have backup and restore capabilities to ensure data availability in case of system failure or data loss.

6. Design Constraints

The Online Shopping System will be developed using modern programming languages and frameworks. The system will be designed to be scalable, secure, and easy to maintain. The system will also comply with data privacy regulations and security standards.

7. Non-Functional Attributes

The Online Shopping System will have the following non-functional attributes:

- Security: The system will use secure protocols to protect user data and transactions.
- Accessibility: The system will be accessible to users with disabilities and will comply with accessibility standards.
- Reliability: The system will be designed to minimize downtime and ensure high availability.
- Usability: The system will have a user-friendly interface that is easy to use and navigate.
- Performance: The system will have fast response times, optimized data retrieval and storage, and will be able to handle a high volume of users.

8. Preliminary Schedule and Budget

The development of the Online Shopping System will be carried out in several stages, with each stage having its specific budget and timeline. The total budget and timeline will depend on the complexity and scope of the project. The preliminary schedule and budget will be determined during the initial planning phase.