

E-Commerce Platform

Executive Summary

This proposal outlines the development of a comprehensive E-Commerce Platform to provide a seamless online shopping experience. The platform will leverage ASP.NET Core, SQL Server, and Entity Framework Core to deliver robust functionality, including user authentication, product management, shopping cart operations, payment processing, and admin tools. Our goal is to build a scalable, user-friendly solution that meets modern e-commerce needs.

Scope of Work

Features

1. User Management

- **User Registration & Login:** Secure authentication using ASP.NET Core and ASP.NET Identity.
- **Profile Management:** Enable users to update their personal details.

2. Product Management

- **Product Listing:** CRUD operations for products with attributes like name, price, description, and images.
- **Categorization:** Group products into categories for improved discoverability.

3. Shopping Cart & Checkout

- **Cart Management:** Allow users to add/remove products to/from their cart.
- **Checkout Process:** Facilitate order placement and collection of shipping details.

4. Payment Processing

- **Basic Payment Options:** Support payment via Cash on Delivery or simple online gateways.

5. Order Management

- **Order Tracking:** Customers can track order statuses (e.g., Pending, Shipped).
- **Order History:** Display a history of past orders.

6. Admin Panel

- Manage user accounts, modify roles, and handle product and order data efficiently.

Technology Stack

- **Backend Framework:** ASP.NET Core (with MVC).
- **Database:** SQL Server with Entity Framework Core.
- **Authentication:** ASP.NET Identity for secure user management.
- **Version Control:** GitHub for collaboration and code management.

Objectives

1. Develop a secure and intuitive user management system for customer registration, login, and profile updates.
2. Implement a dynamic product management system with support for categories, CRUD operations, and product filtering.
3. Build a shopping cart and checkout system with basic payment processing capabilities.
4. Create a robust order management system for customers to track and manage orders.
5. Develop an admin panel for user, product, and order management.

Benefits

- A modern, scalable, and secure platform.
- Improved customer satisfaction through intuitive features.
- Efficient management for admins to oversee operations.

Conclusion

This project will deliver a feature-rich e-commerce platform tailored to meet both user and admin needs. With a focus on security, usability, and scalability, we aim to create a product that drives business success.