

Project Documentation: E-commerce Pharmacy Website

1. Introduction

Overview of the Project

The e-commerce pharmacy website aims to provide users with a seamless platform to purchase medicines and health-related accessories. Users can upload prescriptions for prescription medicines, engage in live chats with doctors, and book appointments through the platform.

Purpose and Objectives

The primary purpose of the project is to create a user-friendly and secure platform for buying medicines online. Objectives include improving accessibility to healthcare, facilitating prescription verification, and enabling online doctor consultations.

Target Audience

The platform is designed for customers seeking convenient access to pharmaceutical products and healthcare services. Additionally, it caters to healthcare professionals providing online consultations.

2. Project Scope

- Features and Functionalities.
- User authentication and authorization.
- Product catalog with detailed information.

- Prescription upload for medication verification.
- Live chat functionality for direct communication with doctors.
- Appointment booking system for online doctor consultations.
- Order management for tracking and processing purchases.
- Admin dashboard for overseeing the platform's operation.
- Limitations and Constraints.
- The platform provide emergency medical services.
- Availability of live chat depends on doctors' schedules.
- Prescription verification is based on the information provided by users.

3. System Architecture

High-Level Architecture.

The system follows a client-server architecture with a web-based front end, server-side application logic, and a database for data storage.

Technology Stack

Frontend and Backend: Wordpress.

Real-time Communication: WebSocket for live chat.

Database Design

The database includes tables for users, products, appointments, and orders, with appropriate relationships.

4. User Stories

Customer

As a customer., I want to register an account on the platform.

As a customer, I want to browse the product catalog and view product details.

As a customer, I want to upload my prescription for medication verification.

As a customer, I want to engage in live chat with a doctor.

As a customer, I want to book an appointment with a doctor.

As a customer, I want to track and manage my orders.

Doctor

As a doctor, I want to register an account and set my availability.

As a doctor, I want to view and respond to live chat requests.

As a doctor, I want to manage my appointment schedule.

As a doctor, I want to view patient prescriptions for verification.

Admin

As an admin, I want to monitor user activities.

As an admin, I want to manage product listings and inventory.

As an admin, I want to oversee doctor activities and appointments.

5. Functional Modules

User Authentication

The system ensures secure user authentication using JWT tokens.

Product Catalog

Users can browse and search for products, view details, and add them to the cart.

Prescription Upload

Customers can upload prescription images for medication verification.

Live Chat with Doctor

Real-time communication is facilitated through a live chat feature between customers and doctors.

Appointment Booking

Customers can schedule online doctor appointments based on doctor availability.

Order Management

The system allows users to place orders, track order status, and manage their order history.

Admin Dashboard

Administrators have access to a dashboard for monitoring user and system activities.

6. Use Case Diagrams

- Customer Interactions
- Customer Use Case Diagram
- Doctor Interactions
- Doctor Use Case Diagram
- Admin Interactions
- Admin Use Case Diagram

Tables and Relationships

- Users (id, username, email, password, role)
- Products (id, name, description, price, quantity)
- Appointments (id, user_id, doctor_id, date, time)
- Orders (id, user_id, product_id, quantity, total_price)

8. User Interface Design

- Wireframes.
- [Link to Wireframes.](#)
- Mockups.
- [Link to Mockups.](#)
- UI/UX Guidelines.
- Consistent color scheme and branding.
- Intuitive navigation for a seamless user experience.

9. Testing

- Unit Testing.
- Perform unit tests for each module and functionality.
- Integration Testing.
- Test the interaction between different modules.
- User Acceptance Testing (UAT).
- Conduct UAT with a select group of users for feedback.

11. Security

Data Encryption.

Use HTTPS to encrypt data during transmission.

User Authentication and Authorization.

Implement secure user authentication and role-based authorization.

Secure File Upload.

Employ server-side validation and secure storage for uploaded prescription files.

12. Third-Party Integrations

Payment Gateway.

Integrate payment gateway provider for secure online transactions.

Live Chat API.

Use live chat provider for real-time communication.

Prescription Verification Service.

Implement prescription verification service for accurate verification.

13. Performance Optimization

Caching Strategies.

Implement caching for frequently accessed data.

Load Balancing.

Use load balancing to distribute traffic evenly.

Thank all team members, stakeholders, and contributors.

Website-Link: <https://dev-nibirpharma.pantheonsite.io/>