Documentation

**1. Introduction**

1.1 Purpose

The purpose of this document is to outline the design, architecture, and functional requirements of the Medicare e-healthcare web application for ordering medicines. The platform aims to enhance the online ordering process, making it user-friendly and efficient.

1.2 Scope

The application provides two portals: an Admin Portal for managing medicines and a User Portal for customers to browse, filter, and purchase medicines. It will include features like Registration, Login, Payment Gateway, Searching, Filtering, Sorting, and Dynamic Data handling.

1.3 References

* Java Programming Language
* Angular Framework
* MySQL and Oracle Databases
* Selenium, Jasmine, and TestNG for testing

**2. Overall Description**

2.1 System Architecture

The application follows a three-tier architecture:

1. **Frontend**: Built using Angular, HTML/CSS, Bootstrap, and JavaScript.
2. **Backend**: Developed in Java, using Spring Boot.
3. **Database**: Managed through MySQL or Oracle.

2.2 Modules

* **Admin Portal**: Manages medicine details.
* **User Portal**: Handles user activities, including search and purchase.

**3. Functional Requirements**

3.1 Admin Portal

* **Add/Remove Medicines**: Admins can add or remove medicines to maintain a rich product line.
* **Edit Medicine Details**: Allows editing of medicine details such as name, price, seller, etc.
* **Enable/Disable Medicine Products**: Admin can control the availability of products.

3.2 User Portal

* **User Registration and Login**: Users can create accounts and log in.
* **Search, Filter, and Sort**: Users can search for products, apply filters, and sort the results.
* **Add to Cart**: Users can add selected medicines to the cart.
* **Payment Gateway**: Seamless payment process with a summary page upon completion.

**4. Non-Functional Requirements**

* **Responsiveness**: The application must be compatible with different devices.
* **Dynamic Data Handling**: No hardcoded values; real-time data fetching and handling.
* **User-Friendly Interface**: Easy navigation and intuitive design.

**5. Development and Deployment**

5.1 Development Guidelines

* **Four-Sprint Development**: Delivered in four sprints with MVP for each.
* **GitHub for Version Control**: Maintain the application version over GitHub.
* **CI/CD Pipeline**: Implement using Jenkins.
* **Hosting**: Deploy and host the application on AWS EC2 instance.

5.2 Testing

* **Automation Testing**: Implement before entering CI/CD.
* **Frontend Testing**: Utilize Selenium and Jasmine.
* **Backend Testing**: Employ TestNG.

**6. Conclusion**

The Medicare e-healthcare web application is a comprehensive solution aimed at bridging the gap between the traditional medicine supply chain and the evolving online market. It emphasizes user experience, administrative control, and seamless integration of various technological components.