WRITE UP

Github url: NAVEENHN21/CapstoneProject (github.com)

Admin Login Details:

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1. Project Background: Medicare is a company that has been experiencing a decline in sales due to the rising popularity of online medicine ordering platforms. To combat this, the management has decided to develop a dynamic and user-friendly web application that allows users to order medicines conveniently. As a Full Stack Java developer, you have been hired to develop this application.
2. Features of the Application: The web application will have the following features:
    - Registration: Users can create an account to access the application.
    - Login: Registered users can log in to their accounts.
    - Payment Gateway: Seamless integration of a payment gateway for secure transactions.
    - Searching: Users can search for medicines based on keywords.
    - Filtering: Users can apply filters to refine search results.

- Sorting: Sorting options to arrange medicines based on different criteria.
- Dynamic Data: The application will fetch and display data dynamically from the backend.
- Responsive Design: The application will be compatible with different devices, ensuring a smooth user experience.

3. Recommended Technologies: The following technologies are suggested for different aspects of the project:
    - Database Management: MySQL and Oracle.
    - Backend Logic: Java programming, NodeJS.
    - Frontend Development: JSP, Angular, Bootstrap, HTML/CSS, and JavaScript.
    - Automation and Testing: Selenium, Jasmine (frontend testing), and TestNG.
    - DevOps and Production: Git, GitHub, Jenkins, Docker, Kubernetes, and AWS.

4. Project Development Guidelines: The project will be divided into four sprints, with each sprint delivering a minimal viable product (MVP). Proper sprint planning with user stories is required to develop all components of the project.

Version control is essential, and the application should be maintained on a GitHub repository. Every new change should be committed to the repository.

A CI/CD pipeline should be implemented using Jenkins to automate the build, test, and deployment process. Automation testing should be performed before the application enters the CI/CD pipeline.

The application should be hosted on an AWS EC2 instance for production deployment.

Git branching should be used for basic automation testing of the application in a separate branch.

The frontend of the application should have a rich and user-friendly interface, making it easy for users to navigate.

5. Admin Portal: The admin portal is responsible for managing backend data and product information. The admin user should be able to perform the following actions:
    - Add or remove medicine details to build a comprehensive product line.
    - Edit medicine details such as name, price, seller, product description, and offers to keep information up-to-date.
    - Enable or disable a medicine product based on availability.

6. User Portal: The user portal caters to end-users and provides various functionalities. Users should be able to:
    - Sign in to the application to maintain a record of their activities.
    - Search for medicines based on keywords to find specific products.
    - Apply filters and sorting options to get the best deals based on different criteria.

- Add selected medicines to the cart and customize the purchase before finalizing.
- Perform seamless transactions through a secure payment gateway.
- Access an order summary details page once the payment is complete.

This detailed explanation provides an overview of the Medicare e-healthcare web application project.