Full Stack .NET-React Developer

Capstone Project Problem Statement

E-Healthcare

Problem statement:

Create a dynamic and responsive .Net+React e-healthcare web application to allow users to purchase medicines for different categories.

Background of the problem statement

ABC Healthcare is a Mumbai-based pharma company which sales medicines throughout India as per the demand they receives from multiple hospitals and clinics. They have been operating in India since last 15 years.

However in recent years since all industries are coming online to boost their sales and cover larger market space, ABC Healthcare missed the chance and as a result their sales has been dropping since last 2 years. To overcome this and bring sales back on track they have decided to bring their service online to allow their customers to purchase medicines by their web application.

You are hired as one of the Full Stack .Net developer and have been asked to develop the web application. The management team has provided you the requirements and their business model so that you can easily arrange different components of the application.

Features of the application:

1. User Registration
2. User Login
3. Admin Login
4. Add/Update medicines to portal
5. Browse through medicines.
6. Search medicines.
7. Sort medicines based on name, category.
8. Manage Cart
9. Place order

Recommended Technologies

1. Database management: SQLServer

2. Back-end logic: ASP.NET Web API

3. Front-end development: React, HTML/CSS, Bootstrap.

4. Testing technologies: NUnit/XUnit

5. DevOps and production technologies: Git, GitHub, Docker

Project development guidelines

1. The project will be delivered within four sprints with every sprint delivering a minimal viable product.

2. It is mandatory to perform proper sprint planning with user stories to develop all the components of the project.

3. The learner can use any technology from the above-mentioned technologies for different layers of the project.

4. The web application should be responsive and should fetch or send data dynamically without hardcoded values.

5. The learner must maintain the version of the application over GitHub and every new change should be sent to the repository.

6. The learner should make a rich front-end of the application, which is user friendly and easy for the user to navigate through the application.

7. There will be two portals in the application, namely the admin and user portal. More information on this is on the next page.

8. Application should be responsive and be user friendly on mobile devices.

Admin Portal

Admin is responsible for managing content in the portal. Admin will handle adding and updating data in portal.

Admin should be able to perform below functionalities.

1. Login into system.
2. View list of medicines in the table format.
3. View list of medicine categories in table format.
4. Create new category with name.
5. Add new medicines in category with name, price, image, seller, descriptions.
6. Update existing medicines in category with name, price and image etc.
7. Disable medicines from category which are not available.
8. View list of users in table format.

User Portal

From the user's perspective, application should allow users to browse through different medicines, add them to their cart and purchase them. However user should be logged in to make any purchase through portal.

User should be able to perform below functionalities.

1. Browse through different medicines available in portal.
2. Register in the application if not done yet.
3. Login into portal before making any purchase.
4. Add medicines which want to buy in the cart.
5. Place order for medicines in cart.
6. Get Order summary when order is placed.