MILITARY INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE CODE: CSE-364

COURSE NAME: SOFTWARE DEVELOPMENT PROJECT - I

PROJECT TITLE: A FRIENDLY GUIDE TO MEDICINE SHOPPING

Group 01

AFRA ANAN	202114006
AHMAD ABDULLAH	202114008
MAISHA TABASSUM	202114036
MD ZAKARIA HOSSAIN EMON	202114066

Table of Contents

Pharma Buddy: A Friendly Guide to Medicine Shopping

Project Idea:

The proposed project is to develop a web-based application that assists users in efficiently managing their medical needs. The application aims to provide a convenient platform for users to show pharmacies, check medicine availability, compare prices, and buy medicines according to the preferences & within short period of time. This application is significant in enhancing transparency in the medicine market and empowering users to make informed decisions about their healthcare purchases.

Objectives:

1. To provide personalized dashboards for users, making navigation and access to information seamless and efficient.

2. To enable user feedback and pharmacy listings to create a transparent and reliable platform for medicine purchasing and information.

3. To facilitate streamlined processes such as medicine search, cart creation, and purchase history viewing, enhancing the overall convenience for customers.

4. To gather user feedback and insights from the admin dashboards to continuously improve the platform, ensuring it meets users' evolving needs effectively.

5. To enhance transparency and user trust by implementing a feature that allows pharmacies to indicate and display the availability status of medicines.

Features:

1.Registration: It allows customers & pharmacies to create personalized accounts for a seamless experience.

2.Login: It enables login for registered customers & pharmacies.

3.View Medicine List: It allows to browse a list of available medicines.

4.Add Medicine to Cart: It permits to add desired medicines to shopping carts.

5.Admin Dashboard: It provides administrators with a dashboard to manage and view the list of medicines available on the platform, add medicines if needed, view the user list & view the customer feedback.

6.Pharmacy Dashboard: It allows pharmacies to add and manage their medicine inventory through a dedicated dashboard.

7. User Dashboard: It provides users with a personalized dashboard for efficient navigation and access to features as well as they can edit their personal information.

8.User Feedback: It permits users to provide feedback on their experiences.

9.User can View Existing Pharmacy: It allows users to view information about pharmacies already registered on the platform.

10.User View Medicines Under Pharmacies: It enables users to see the list of medicines offered by different pharmacies.

11.Purchase History: It gives customers see to their purchase history.

12.Sort by Price: It allows users to sort medicines based on price for easy comparison.

13.Sort by Distances: It permits users to sort pharmacies based on distance, enhancing convenience.

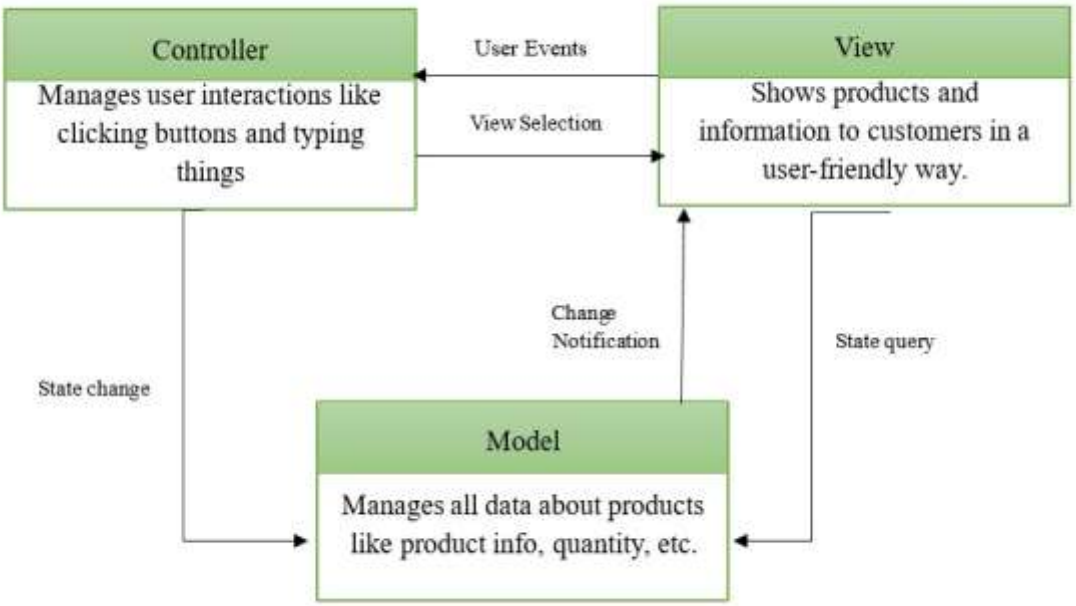
Stakeholders:

Users: Customers (seeking medical products) and pharmacies (providing medical products).

Administrators: Manage and oversee the platform's functionality, ensuring smooth operations.

Developers: Responsible for the implementation, development, and maintenance of the project.

System Architecture



MVC (Model-View-Controller) offers significant advantages for our online medicine shopping

- **Structured Organization:** Divides into Model (data handling), View (customer presentation), and Controller (interaction management).
- **Flexible Modifications:** Enables independent changes, ensuring alterations don't affect other parts inadvertently.
- **Diverse User Experience:** Allows multiple ways for customers to view products, catering to different preferences.
- **Readiness for Growth:** Easily adapts to future enhancements or new features without causing disruptions.
- **Efficient Team Collaboration:** Facilitates seamless teamwork among various roles, fostering smooth project development.
- In essence, MVC streamlines organization, modifications, customer experiences, future readiness, and team collaboration for our eco-friendly packaging marketplace.

Choice of Frontend with UI Snapshots:

The frontend of the platform is developed using:

• **React JS:** For building a dynamic and responsive user interface.

• **HTML:** The backbone of the website's structure.

• **Tailwind CSS:** For styling and designing a modern, user-friendly interface.

Choice of Backend

The backend of the platform is built using:

- **1.Node JS:** As the primary runtime environment for executing the server-side code.
- **2.Express JS:** To handle and manage server requests efficiently.
- **3.MongoDB:** As the database for storing and retrieving data dynamically.

Prototype of the Project:

Leveraged Figma for creating detailed visual prototypes, offering a preview of the final product's layout and design.

Cost Estimation:

Ser No	Items	Estimated Cost (in BDT Taka)
1	Website Development	60,000
2	Mobile App Development	40,000
3	Database Hosting and Maintenance	15,000
4	Server and Cloud Services	20,000
5	Sustainable Product Sourcing	30,000
6	Supply Chain Management Software	25,000
7	Marketing and Advertising	20,000
8	User Experience (UX) Design	20,000
10	Customer Support	10,000
11	Legal and Regulatory Compliance	15,000
12	Miscellaneous Expenses	20,000
Total Estimated Cost		275,000

Tools Used for Developing Final Project User Interfaces:

Frontend Development:

React JS:

React JS was utilized as the primary frontend library for building dynamic and responsive user interfaces. Its component-based architecture allowed for modular design and efficient development.

HTML:

HTML (Hypertext Markup Language) served as the backbone for structuring the web pages. It provided a standardized markup language for creating the structure and layout of the user interfaces.

Tailwind CSS:

Tailwind CSS was employed for styling and designing the user interfaces. This utility-first CSS framework facilitated the creation of a modern, user-friendly interface with efficient styling

classes.

UI/UX Prototyping:

Figma:

Figma was leveraged for creating detailed visual prototypes of the user interfaces. This collaborative design tool allowed the team to work on the design aspects, offering a preview of the final product's layout and design.

Explanation:

React JS:

React JS is a JavaScript library commonly used for building user interfaces, especially for single-page applications where the user experience is crucial. It enables the creation of reusable UI components, making the development process more efficient.

HTML:

HTML is the standard markup language for creating the structure of web pages. It defines the elements and their layout on the page, providing the foundation for building user interfaces.

Tailwind CSS:

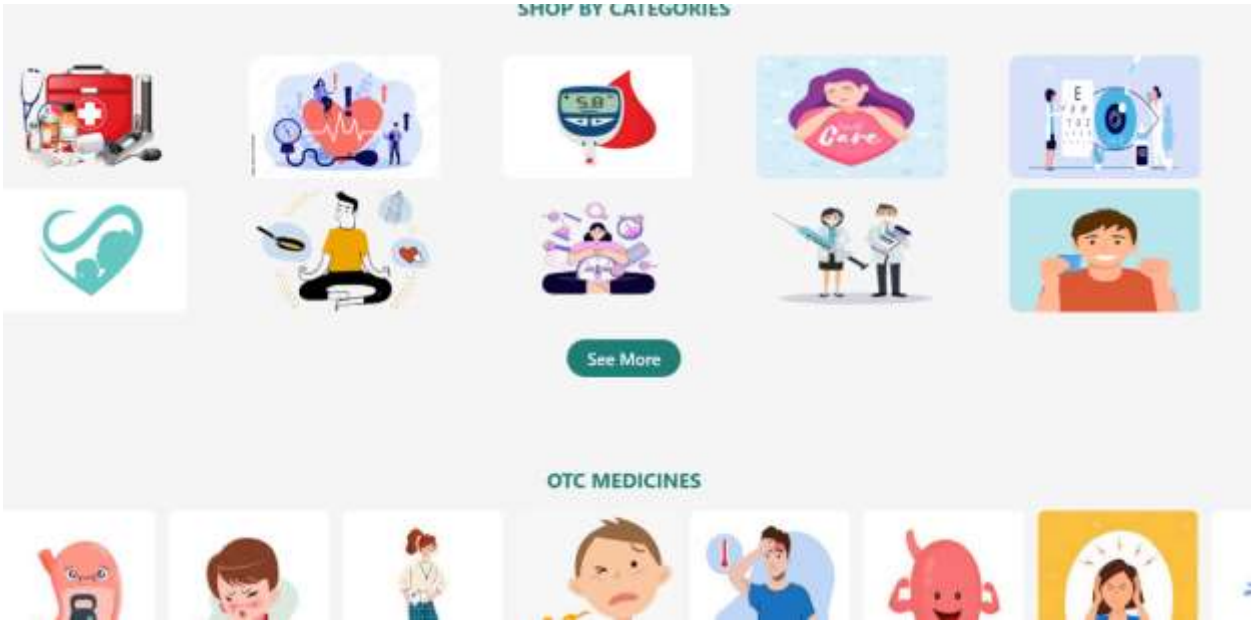
Tailwind CSS is a utility-first CSS framework that simplifies the process of styling web applications. It offers pre-defined utility classes that can be applied directly in the HTML, allowing for quick and consistent styling.

Figma:

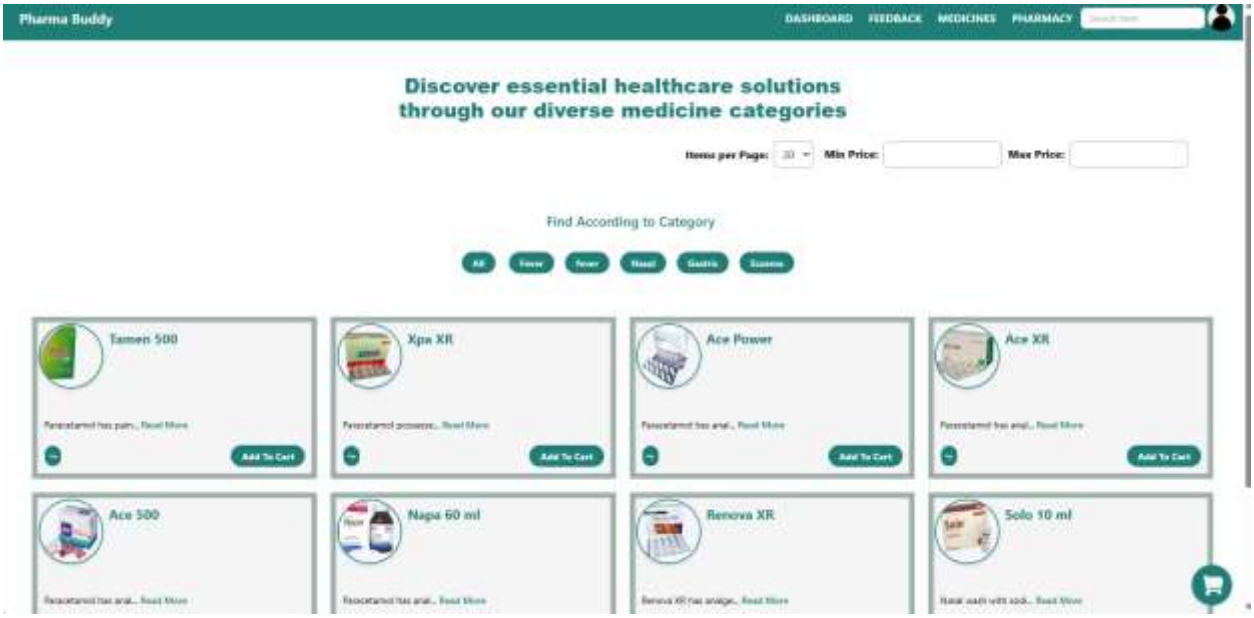
Figma is a collaborative design tool that facilitates the creation of UI/UX prototypes. It enables designers and developers to work together on the same platform, providing real-time collaboration and visualization of the design elements.

UI Snapshots:

Pharma Buddy Home Page UI

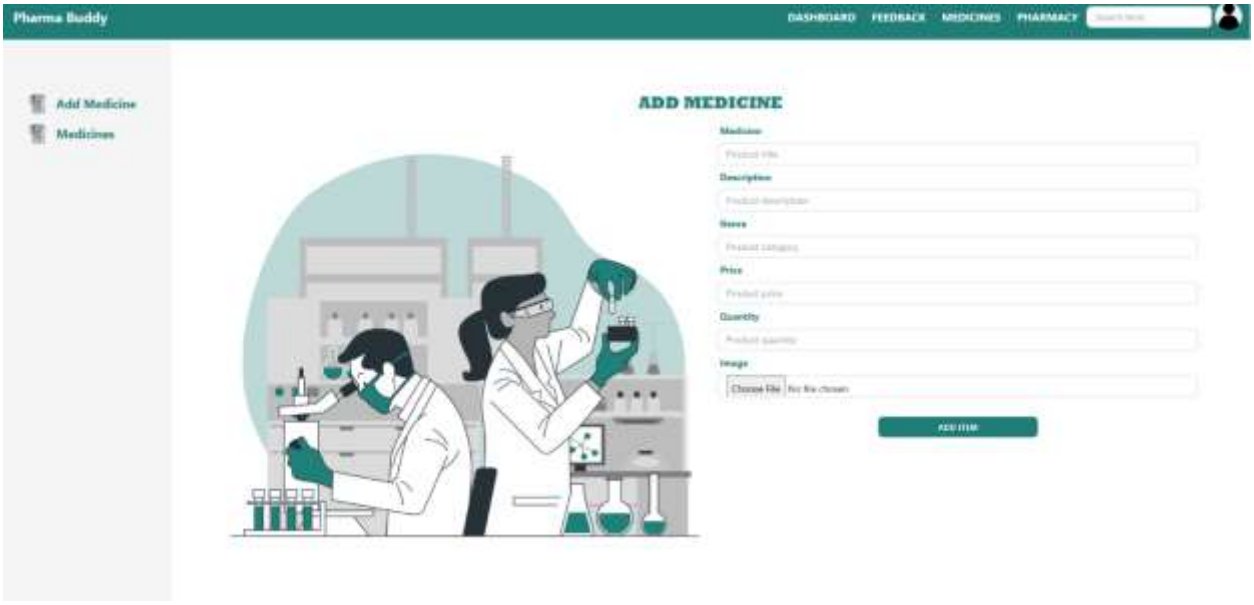


Medine List UI

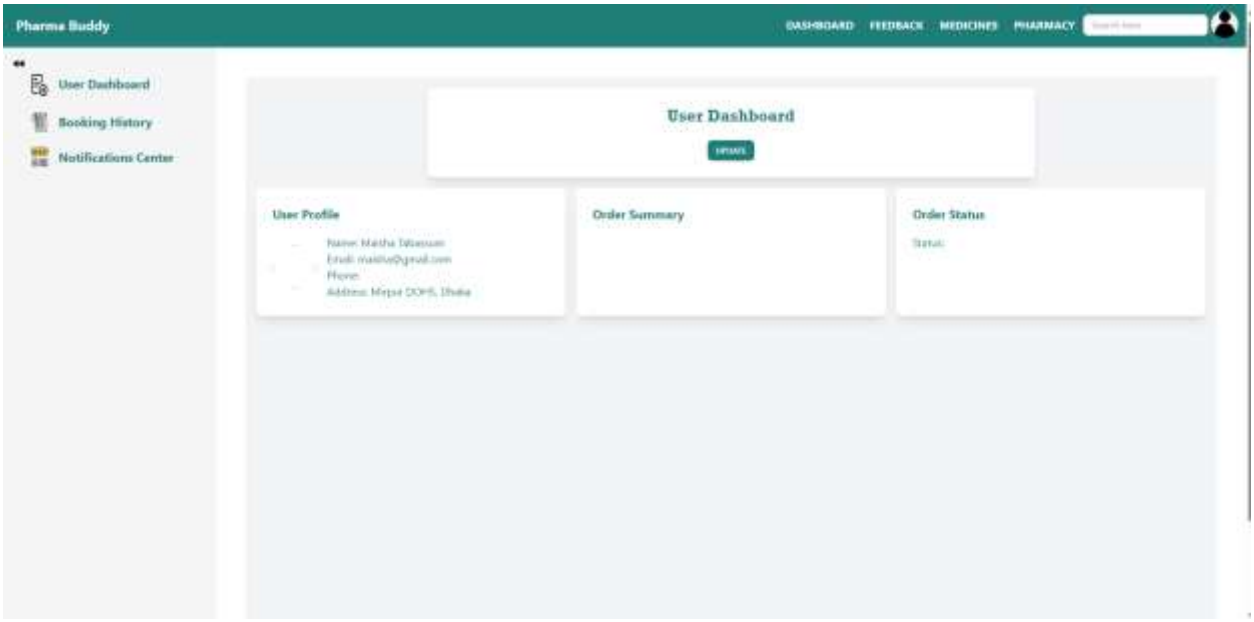


Registered Pharmacy UI

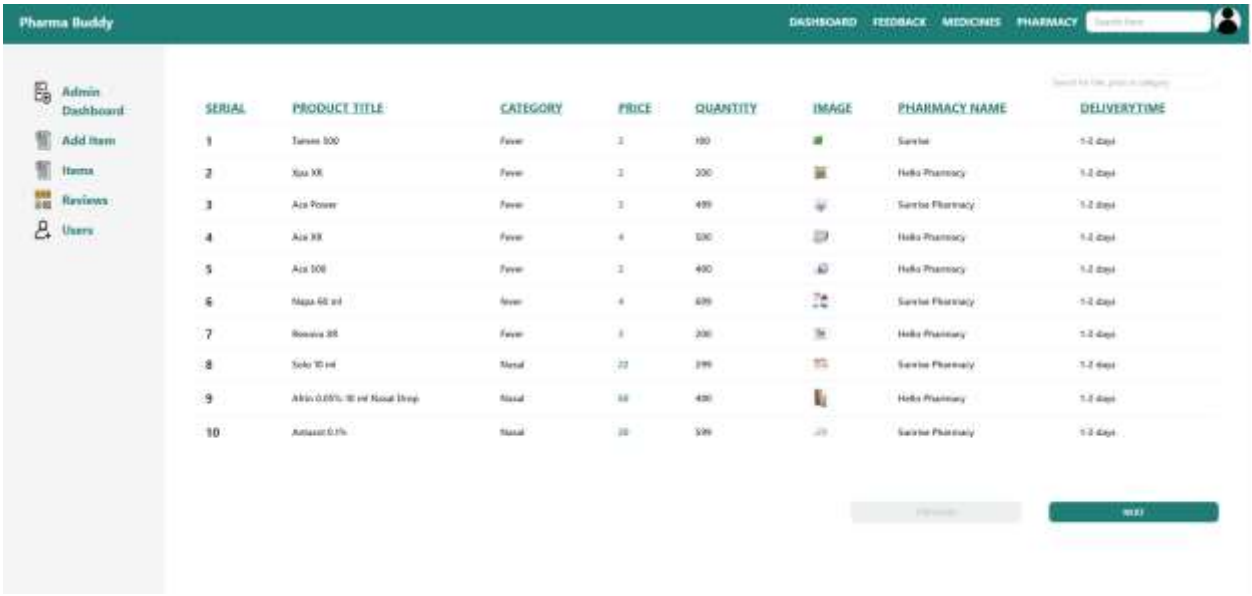
Pharmacy dashboard



User dashboard



Admin Dashboard



Work distribution

Versions → / Members ↓	Version 1 Features	Version 2 Features	Version 3 Features
Maisha Tabassum	View Medicine List (Customer) Pharmacy Dashboard (Add Meds)	Admin Dashboard (Feedback List) User can View existing Pharmacies	User View Medicines Under Pharmacies Sort by Price (Medicines)
Afra Anan	Add Medicine to Cart (Customer) Admin Dashboard (Medicine List)	Admin Dashboard (User List) User Feedback	Check Medicine Availability
Ahmad Abdullah	User Login (Customer)	User Login (Pharmacy)	Customer Purchase History Sort By Distances
Md Zakaria Hossain Emon	User Registration (Customer)	User Registration (Pharmacy)	Pharmacy Dashboard (Delete Meds) User Dashboard

Limitations:

1. The platform does not include a system for delivering products to users.

2.Users cannot change the language of the platform, limiting accessibility for non-English speakers.

3.The absence of a live chat feature restricts real-time communication between users and support.

4. As a web-based platform, it lacks the immediate reach and accessibility of a mobile app.

Future Work:

1.Consider developing a mobile app in the future to expand accessibility and reach a wider audience.

2.Implement features like live chat to improve real-time communication between users and support.

3.Introduce language-changing options to accommodate users who prefer languages other than English.

4.Consider empowering admins with the ability to manage accounts based on user ratings, ensuring platform quality.

5.Explore the possibility of integrating a product delivery system for added convenience.