IT2143 Visual Programming

Group Project Report

Group B1

RECIPE BOOK
HAPPY BITE

Group Members:

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<u>Introduction</u>

In today's fast-paced lifestyle, managing meals efficiently and preparing nutritious recipes is a priority for many individuals. The Recipe Management and Meal Planning Application is designed to streamline the meal preparation process, making it easier for users to organize, discover, and plan their daily or weekly meals.

The application provides a comprehensive recipe database where users can add, edit, and delete their favourite recipes. Each recipe entry includes details such as ingredients, cooking instructions, and nutritional information.

Users can plan their meals effortlessly by selecting recipes from the database. The application offers a user-friendly calendar interface for organizing breakfast, lunch, dinner, and snacks. This feature facilitates a systematic approach to meal planning, helping users maintain a balanced and varied diet.

One of the standout features is the ability to generate a shopping list based on selected recipes. The application analyzes the ingredients required for chosen recipes and compiles a comprehensive grocery list. This not only saves time but also ensures users have all the necessary items on hand.

The application includes a powerful search functionality allowing users to find recipes based on ingredients, cuisine, or dietary preferences. Filters for vegetarian, vegan, gluten-free, or other dietary options make it easy for users to discover recipes that align with their preferences.

With an intuitive and visually appealing user interface, the application is accessible to users of all technical backgrounds. The navigation is designed to be straightforward, ensuring a seamless user experience

<u>Objectives</u>

We are planning a visual programming project regarding to recipe book name as Happy Bite, which involves creating a Windows application for a recipe book, it's essential to define clear objectives. Here are some potential objectives of our project:

1. **User-Friendly Interface:**
   - Design a user-friendly interface that allows users to easily navigate through recipes, search for specific recipes, and add new recipes.
2. **Recipe Management:**
   - Provide a platform for users to manage their recipes efficiently, including adding new recipes, editing existing ones, and deleting recipes.
3. **Categorization and Organization:**
   - Implement a system for categorizing recipes, allowing users to organize recipes by type (e.g., appetizers, main courses, desserts) or any other relevant criteria.
4. **Search and Filter Functionality:**
   - Enable users to search for recipes based on ingredients, cuisine, cooking time, or other criteria. Implement filters to make it easy for users to find specific recipes.
5. **Ingredient Tracking:**
   - Include features that help users manage their ingredients, such as a shopping list generator or the ability to check ingredient availability for a specific recipe.
6. **Meal Planning:**
   - Integrate features for meal planning, allowing users to schedule recipes for specific dates, create weekly meal plans, and generate shopping lists based on planned meals.
7. **User Authentication and Data Security:**
   - If applicable, implement user authentication to allow multiple users to have their own personalized recipe collections. Ensure data security and privacy.
8. **Feedback and Ratings:**
   - Incorporate a system for users to leave feedback or ratings on recipes. This can help others gauge the popularity and quality of a recipe.
9. **Accessibility and Responsiveness:**
   - Ensure that the application is accessible to users with different abilities. Design a responsive interface that works well on various screen sizes and resolutions.
10. **Database Integration:**

- Implement a database to store recipe data, allowing for scalability, data persistence, and efficient retrieval.

11. **Offline Mode:**

- Include functionality that allows users to access and use the application even when offline, ensuring a seamless experience regardless of internet connectivity.

Extra Objective: Optimize the application's performance to ensure fast loading times, smooth navigation, and efficient data retrieval, even when dealing with a large recipe database.

By clearly defining these objectives, you create a roadmap for the development of Happy Bite, guiding the team toward building a feature-rich, user-centric Windows application for a delightful cooking experience.

Methodology

Describes the methods and approaches used in the project. This includes details about data collection, tools, technologies, experiments, or any other processes used in the project.

I. **Requirement Gathering**

Video provides a powerful way to help you prove your point. When you click Online Video, you can paste in the embed code for the video you want to add. You can also type a keyword to search online for the video that best fits your document. To make your document look professionally produced, Word provides header, footer, cover page, and text box designs that complement each other. For example, you can add a matching cover page, header, and sidebar.

II. **Tools and Technologies**

For UI/UX design, consider tools like **Figma**, **Sketch**, or **Adobe XD** to create wireframes, mockups, and prototypes.

A relational database management system like **MySQL** or **PostgreSQL** for storing recipe data.

Implement version control systems such as **Git** (GitHub, GitLab, Bitbucket) to track changes, collaborate with others, and manage your source code.

.NETFRAMEWORK

C#

<u>Implementation</u>

- Clearly define the purpose and goals of our Recipe Book application.
- Identify the core functionalities we want to implement, such as adding, editing, and deleting recipes, meal planning, and generating grocery lists.
- Create user stories and use cases that outline how different types of users will interact with our application.
- Design the database schema to store recipe data. Consider tables for recipes, ingredients, categories, and user information.
- Install and configure your chosen development tools, including the IDE (e.g., Visual Studio Code), version control (Git), and a database management system.
- Conduct unit testing for individual components.
- Configure our database in a production environment.
- Implement monitoring tools to track application performance.
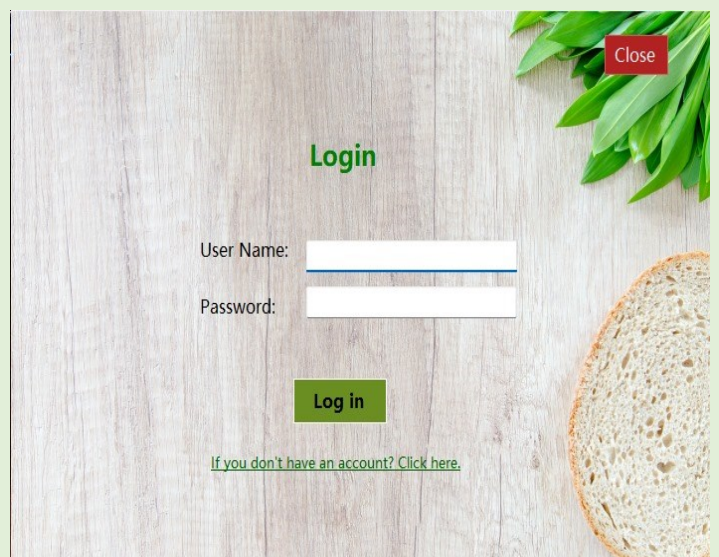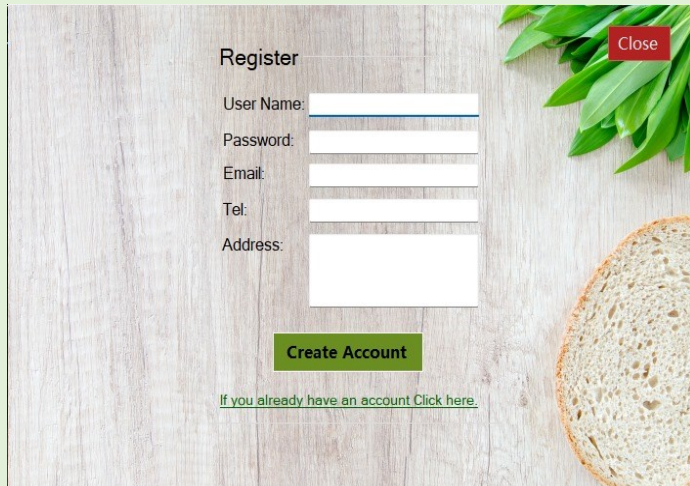- Document our code, APIs, and database schema.

I.   Interface Design
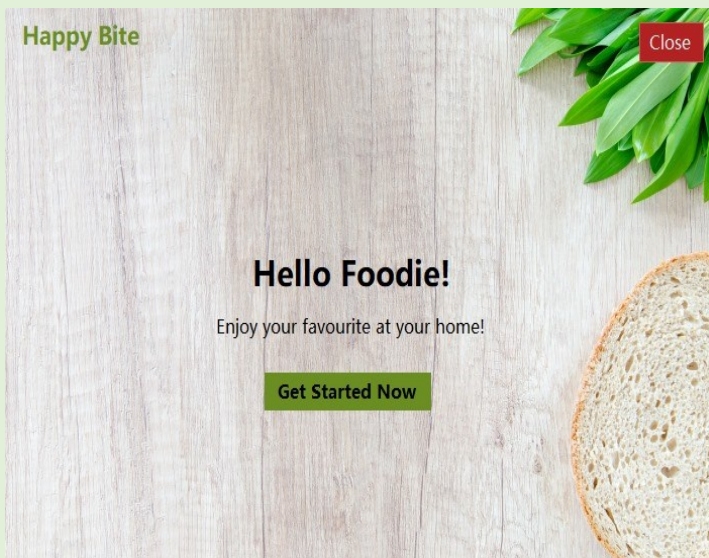
Main Interface of Happy Bite

- When we click the Get Started Now button we able to go to the Login page.

Login Interface

- If we have an account we can log in to Happy Bite using user name and password that we given when register. If you are new to here you can you can register using bellow link.
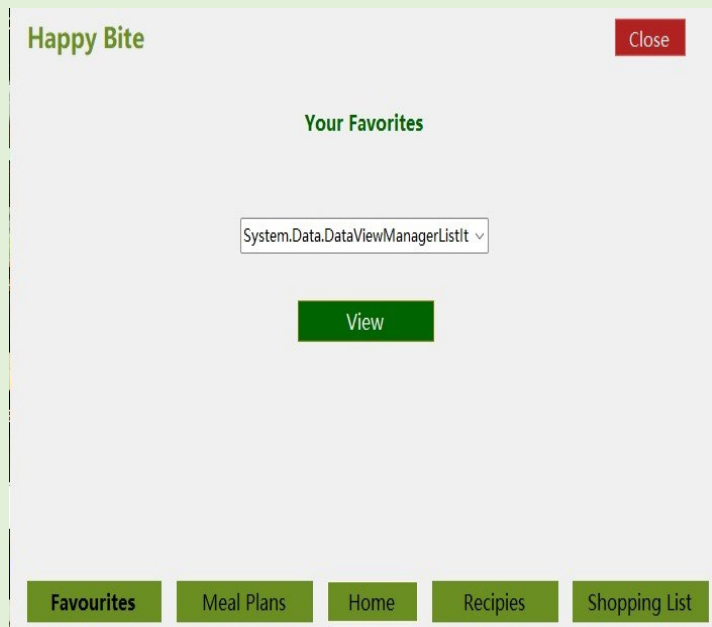
Register Interface

You can register using this form. For that you have to enter username, password, email, tel, address.

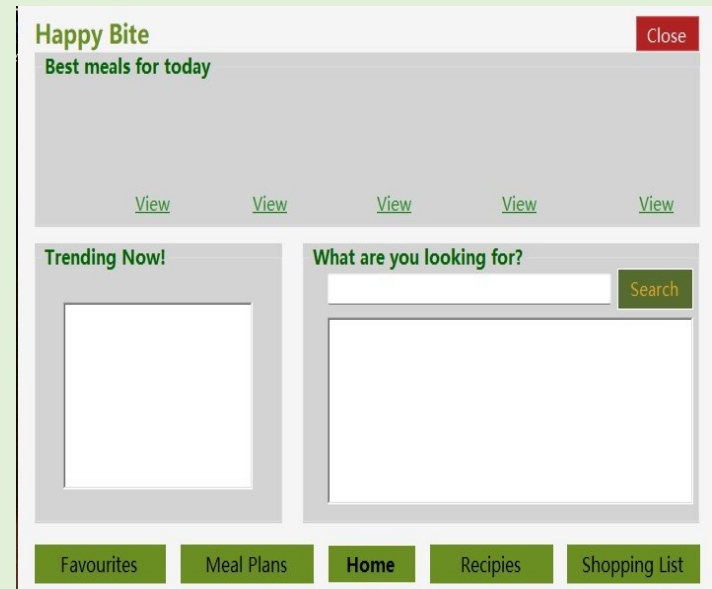**Happy Bite Interfaces**

II.   Database

For collecting data we used MYSQL database. Database is more important this when creating project like this.

III. Output

	ID	UserName	Password	Email	Tel	Address
1	1	Chamodi	abcd	Chamodi@gmail.com	719852311	Anu

<u>Conclusion</u>

The Recipe Book Application offer a holistic solution for individuals seeking a convenient and efficient way to manage their culinary preferences. By combining recipe management, meal planning, and grocery list generation, the application aims to simplify the cooking process and inspire users to explore new culinary horizons. Whether you are a seasoned home cook or just starting on your culinary journey, this application is designed to be your companion in the kitchen.

<u>References</u>

1. Youtube

2. StackOverflow

3. Microsoftlearn

4. W3schools