PERSONALIZED RECIPE BOOK.

DONE BY

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Abstract :

In an era where home cooking is gaining popularity, individuals often find it challenging to keep their recipes organized and easily accessible. The aim of the **Personalized Recipe Book** project is to develop a user-friendly application that allows users to store, manage, and share their favorite recipes. The core objectives include providing a secure platform for personal recipe storage, facilitating recipe management through intuitive interfaces, and enabling users to share their culinary creations via WhatsApp. This project targets users of all skill levels, ensuring an inclusive and enjoyable cooking experience.

Current solutions for recipe management often lack user-centric design and seamless sharing capabilities. Many existing applications are cluttered or difficult to navigate, hindering the user's ability to efficiently find and organize recipes. Additionally, the lack of integrated sharing features limits users' ability to share their culinary discoveries with family and friends. This project addresses these gaps by focusing on user experience, ease of access, and robust sharing functionalities that leverage modern communication platforms.

The proposed development involves several key modules, including a **User Management System** for secure registration and authentication, a **Recipe Management Module** for CRUD operations on recipes, and a **Sharing Module** that integrates WhatsApp for recipe sharing. The architecture employs a normalized database to efficiently manage user and recipe data, ensuring that each recipe is linked to its respective user. By utilizing **Django and MySQL for backend development**, the project benefits from a structured and scalable framework, while the front end employs **HTML**, **CSS**, and **JavaScript** to create a responsive and engaging user interface.

To implement this project, a combination of tools and software will be used, including MySQL for database management, Django for backend development, and modern web technologies for the front end. Additionally, AJAX will facilitate dynamic interactions between the front end and back end, enhancing user experience by allowing real-time updates without page reloads. Overall, the **Personalized Recipe Book** aims to provide a comprehensive solution for recipe organization and sharing, making home cooking more enjoyable and accessible.

Problem Identification

In a world where home cooking is becoming increasingly popular, many individuals struggle to keep their recipes organized and easily accessible. The goal of the **Personalized Recipe Book** project is to develop a user-friendly application that allows users to store, manage, and share their favorite recipes. Key objectives include:

- **Personal Recipe Storage**: Providing users with a secure platform to store their unique recipes.
- **Recipe Management**: Enabling users to view, edit, and delete their recipes easily.
- **Sharing Functionality**: Allowing users to share their recipes via WhatsApp, facilitating social interaction and collaboration.
- **User-Centric Design**: Ensuring the application is intuitive and accessible for users of all skill levels.

Normalized Database Tables

To efficiently manage user data and recipes, the following normalized database tables have been created:

Recipes Table

The recipes table is designed to hold essential information about each recipe:

```
CREATE TABLE recipes (
    id INT AUTO_INCREMENT PRIMARY KEY,
    recipe_title VARCHAR(200) NOT NULL,
    description TEXT NOT NULL,
    ingredients TEXT NOT NULL,
    instructions TEXT NOT NULL,
    user_id INT NOT NULL,
    FOREIGN KEY (user_id) REFERENCES User(id)
);
```

- **id**: A unique identifier for each recipe.
- **recipe_title**: The name of the recipe.
- **description**: A brief overview of the recipe.
- **ingredients**: A list of ingredients required for the recipe.

- **instructions**: Step-by-step cooking instructions.
- **user_id**: A foreign key linking the recipe to the user who created it.

User Table

The User table is structured to manage user credentials securely:

```
CREATE TABLE User (
   id INT AUTO_INCREMENT PRIMARY KEY,
   username VARCHAR(150) NOT NULL UNIQUE,
   password VARCHAR(128) NOT NULL,
   email VARCHAR NOT NULL,
   phone INT(10)
);
```

- **id**: A unique identifier for each user.
- **username**: A unique username for identification.
- **password**: A securely hashed password for authentication.
- **email**: A unique email address for each user, allowing for notifications, password resets, and user identification.
- **phone**: A contact number for the user.

Database Connectivity

The application uses a reliable database management system, such as MySQL, for data storage and retrieval. Key aspects of the database connectivity include:

- **Efficient Connections**: Implementing connection pooling techniques to ensure fast data access.
- **Data Integrity**: Utilizing foreign keys and normalization to maintain data consistency.
- **Error Handling**: Implementing robust error handling mechanisms to manage database-related issues effectively.

Backend Development

The backend of the Personalized Recipe Book is developed using Django, a high-level Python web framework that encourages rapid development and clean, pragmatic design. Key features include:

- **RESTful API**: The backend exposes RESTful API endpoints for user registration, login, and recipe management (CRUD operations). This separation of concerns allows for a clear interface between the front end and back end.
- **User Authentication**: Secure user authentication is implemented using Django's built-in authentication system, ensuring that user data is protected.
- **Data Handling**: The backend handles data processing, validation, and storage operations, ensuring a smooth interaction with the database.
- **Integration with Front End**: The backend communicates with the front end via AJAX calls, facilitating dynamic updates without refreshing the page.

Front-End Tool and Design

The front end of the Personalized Recipe Book is developed using HTML, CSS, and JavaScript, focusing on a seamless user experience. Key features include:

- **Search Bar**: A search function for users to quickly find recipes by title or ingredient.
- **Forms for Recipe Management**: Easy-to-use forms for adding, editing, and deleting recipes.
- **WhatsApp Sharing**: A feature that allows users to share recipes directly via WhatsApp, enhancing social connectivity.
- **Responsive Design**: Ensuring the application is usable across various devices, from smartphones to desktops.

Solution Implementation

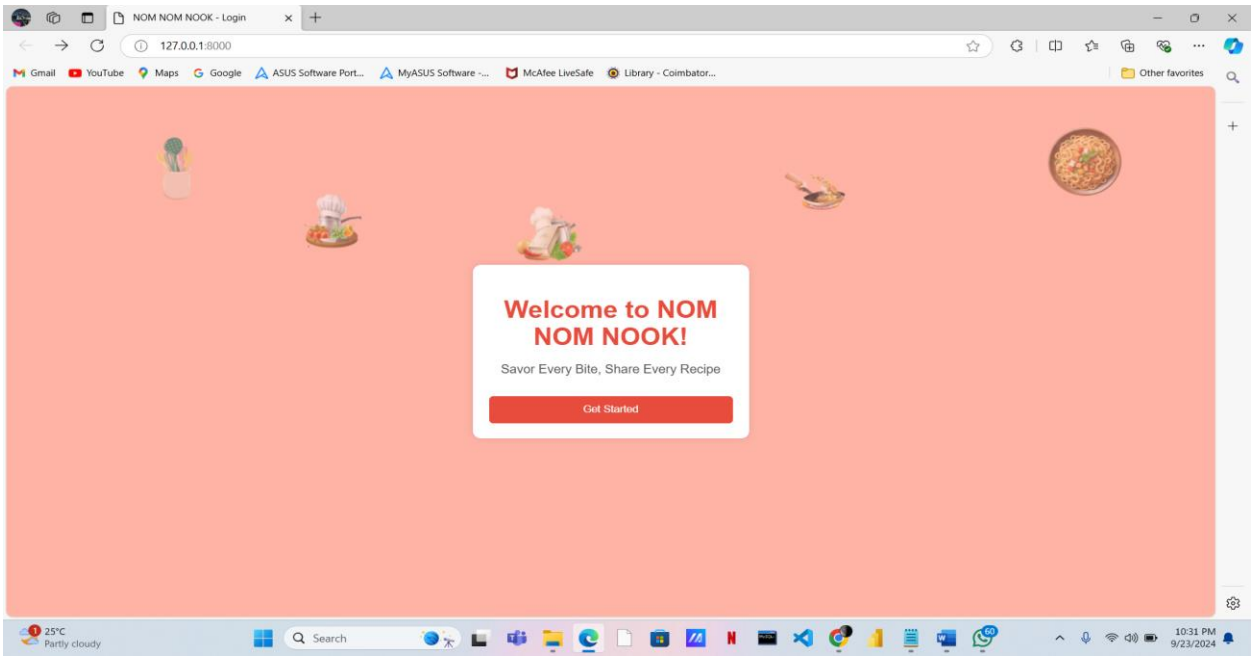
The implementation of the Personalized Recipe Book includes several essential features:

- **User Registration and Authentication**: Users can create accounts, log in securely, and manage their recipe collections. Passwords are securely hashed for privacy.
- **CRUD Operations**: The application supports Create, Read, Update, and Delete operations for managing recipes.
- **User-Friendly Interface**: Designed for ease of use, with clear navigation and visually appealing layouts.

- **WhatsApp Integration**: Users can easily share their recipes through WhatsApp, making it simple to share culinary creations with friends and family.

OUTPUT :

Login :



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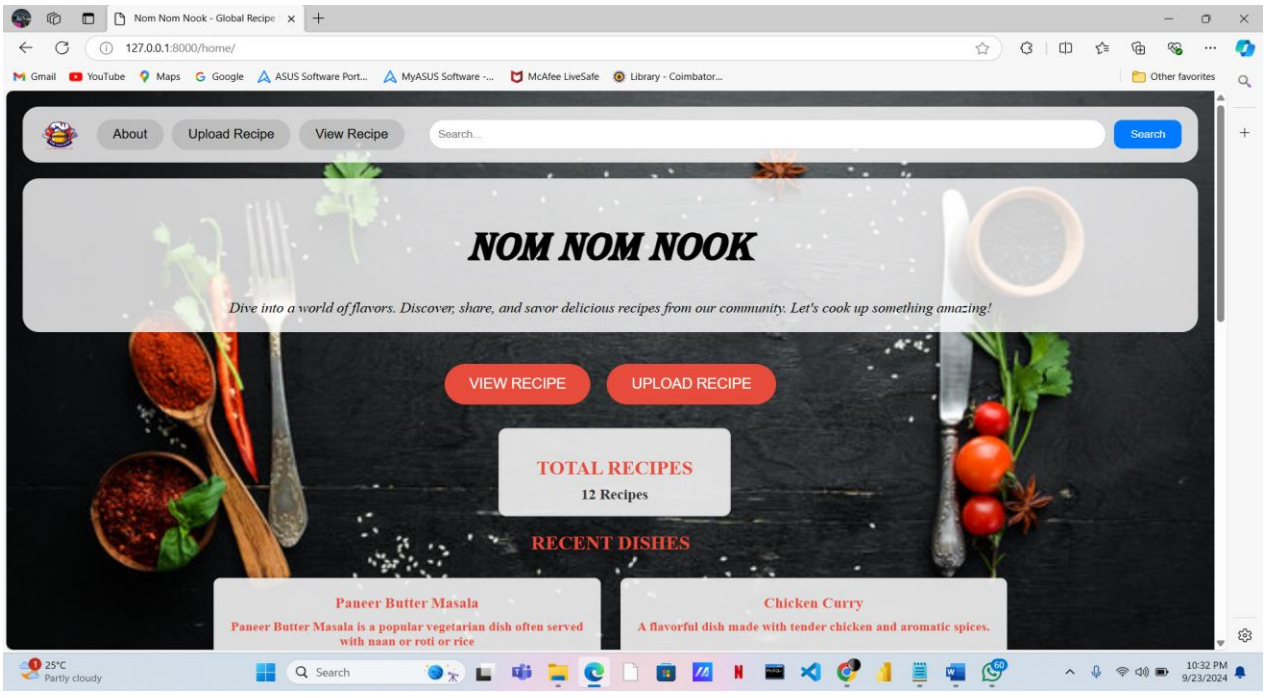

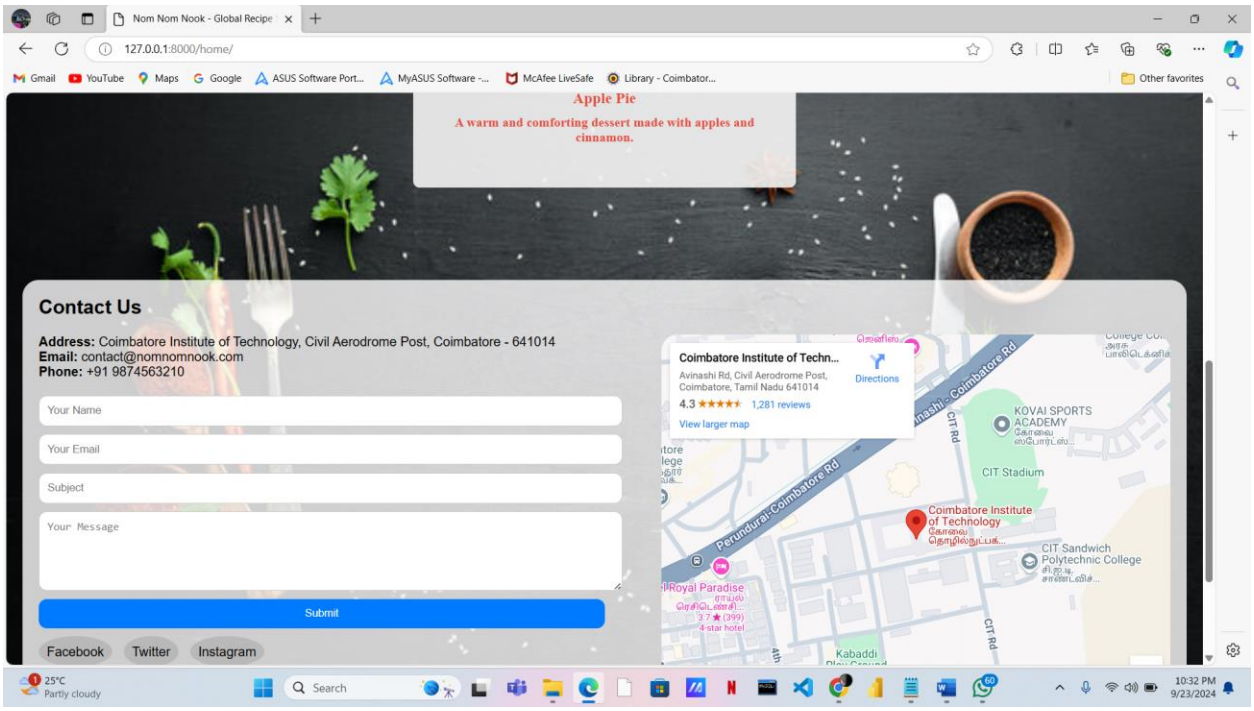
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Apple Pie
A warm and comforting dessert made with apples and cinnamon.
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Email: contact@nomnomnook.com
Phone: +91 9874563210
Your Name
Your Email
Subject
Your Message
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Directions
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CIT Stadium
Coimbatore Institute of Technology
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CIT Rd
Kabaddi
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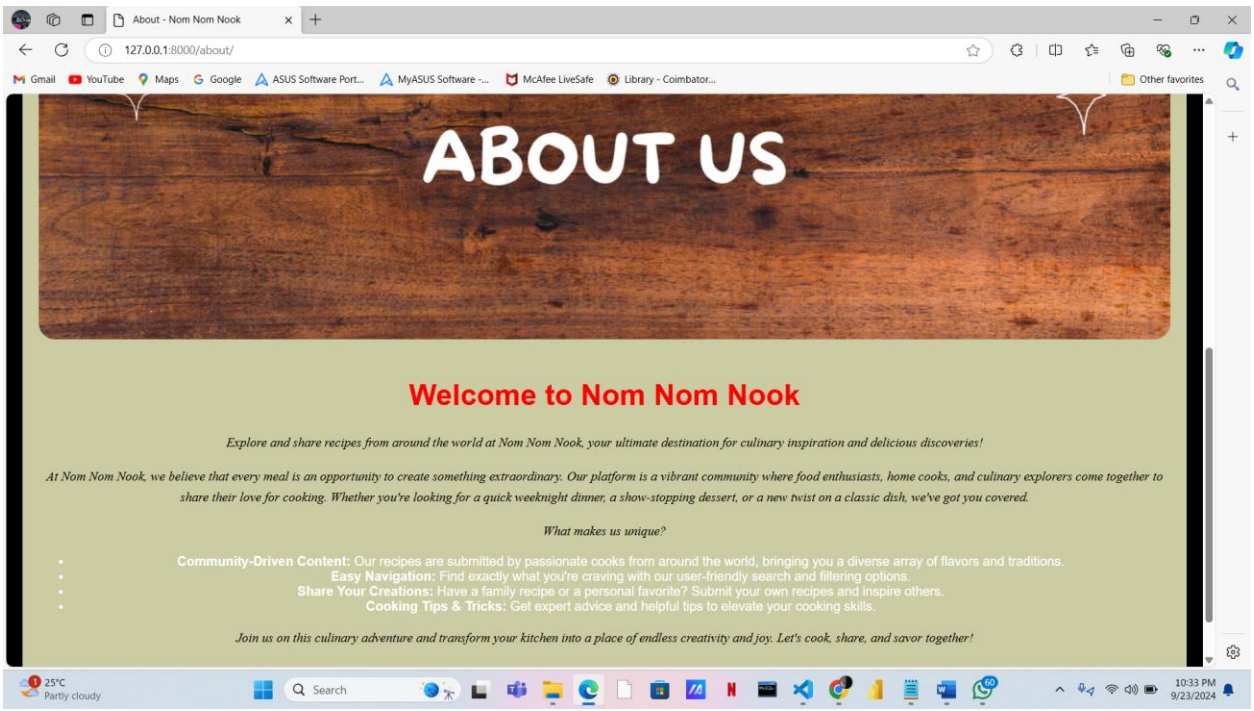
About - Nom Nom Nook
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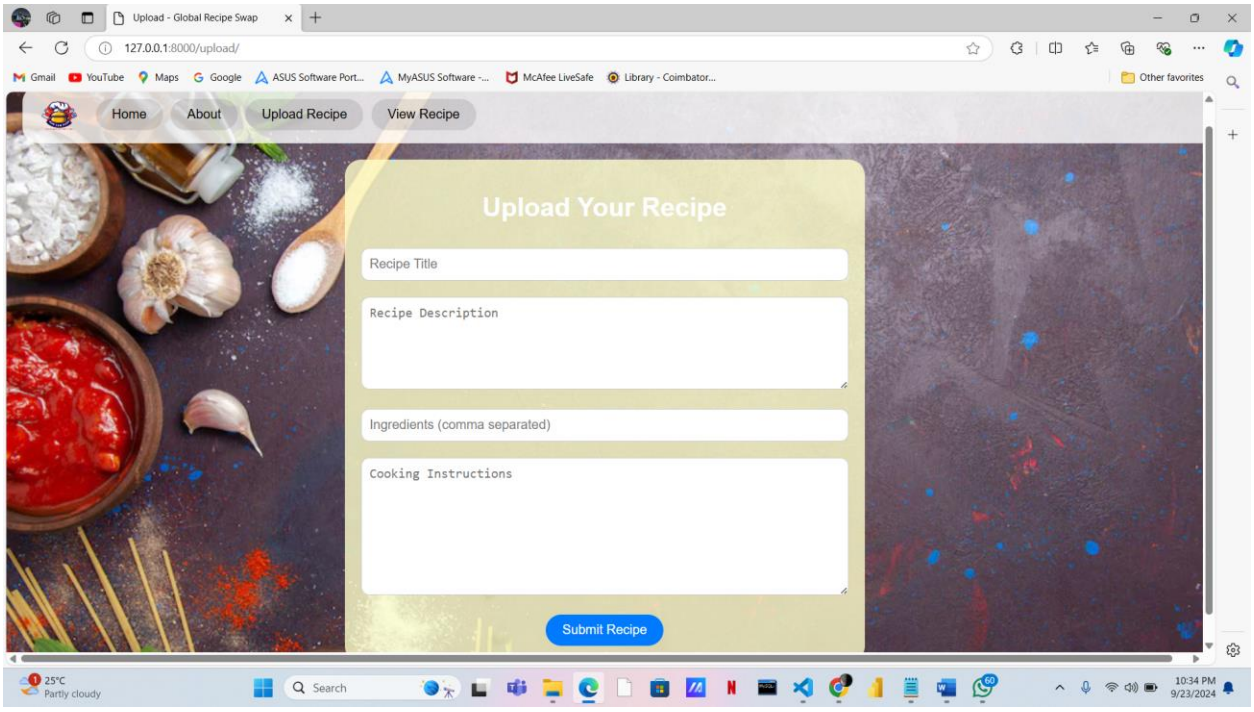
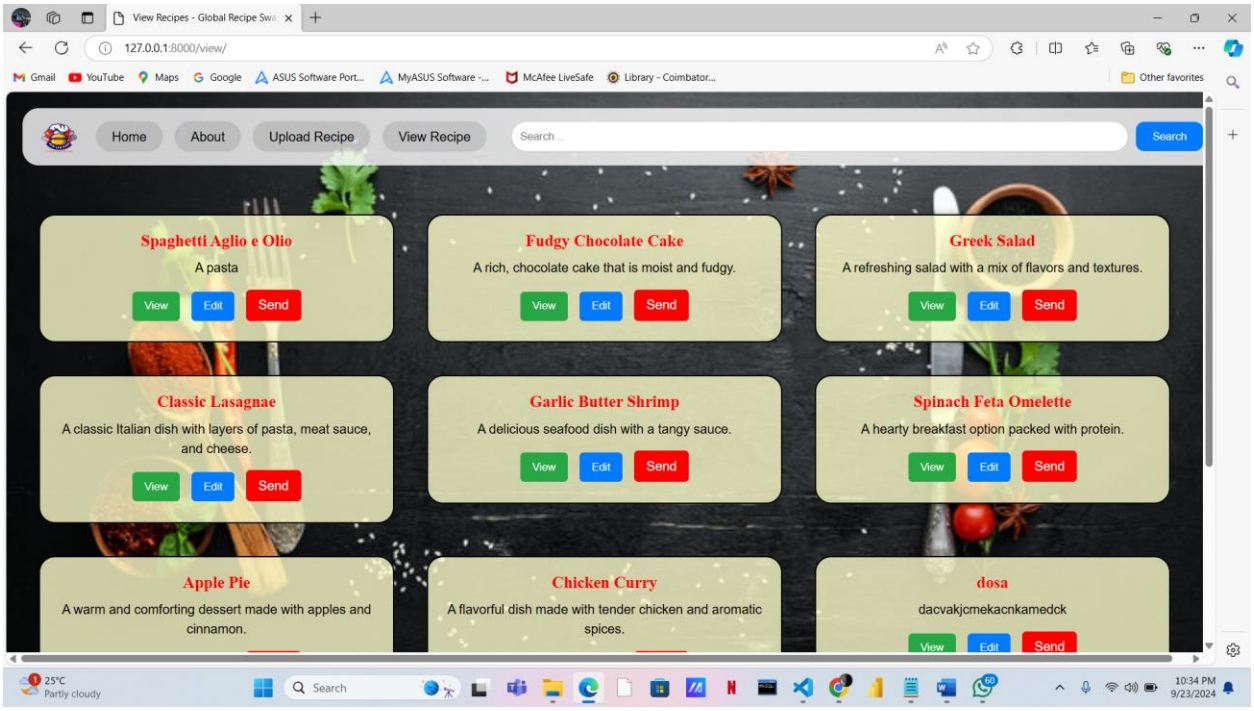
ABOUT US
Welcome to Nom Nom Nook
Explore and share recipes from around the world at Nom Nom Nook, your ultimate destination for culinary inspiration and delicious discoveries!
At Nom Nom Nook, we believe that every meal is an opportunity to create something extraordinary. Our platform is a vibrant community where food enthusiasts, home cooks, and culinary explorers come together to share their love for cooking. Whether you're looking for a quick weeknight dinner, a show-stopping dessert, or a new twist on a classic dish, we've got you covered.
What makes us unique?
Community-Driven Content: Our recipes are submitted by passionate cooks from around the world, bringing you a diverse array of flavors and traditions.
Easy Navigation: Find exactly what you're craving with our user-friendly search and filtering options.
Share Your Creations: Have a family recipe or a personal favorite? Submit your own recipes and inspire others.
Cooking Tips & Tricks: Get expert advice and helpful tips to elevate your cooking skills.
Join us on this culinary adventure and transform your kitchen into a place of endless creativity and joy. Let's cook, share, and savor together!
Search

Upload recipe :



View Recipe :



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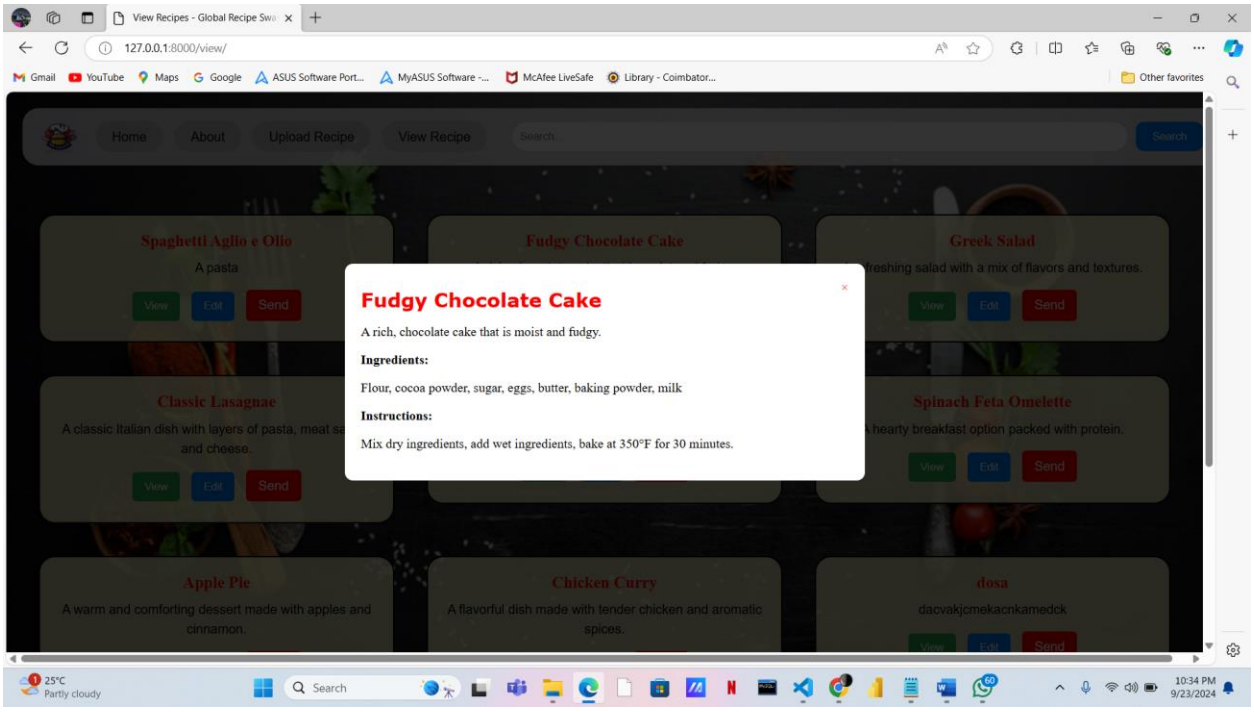
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Spaghetti Aglio e Olio
A pasta
Fudgy Chocolate Cake
Greek Salad
Fudgy Chocolate Cake
A rich, chocolate cake that is moist and fudgy.
Ingredients:
Flour, cocoa powder, sugar, eggs, butter, baking powder, milk
Instructions:
Mix dry ingredients, add wet ingredients, bake at 350°F for 30 minutes.
Classic Lasagnae
Spinach Feta Omelette
Apple Pie
A warm and comforting dessert made with apples and cinnamon.
Chicken Curry
A flavorful dish made with tender chicken and aromatic spices.
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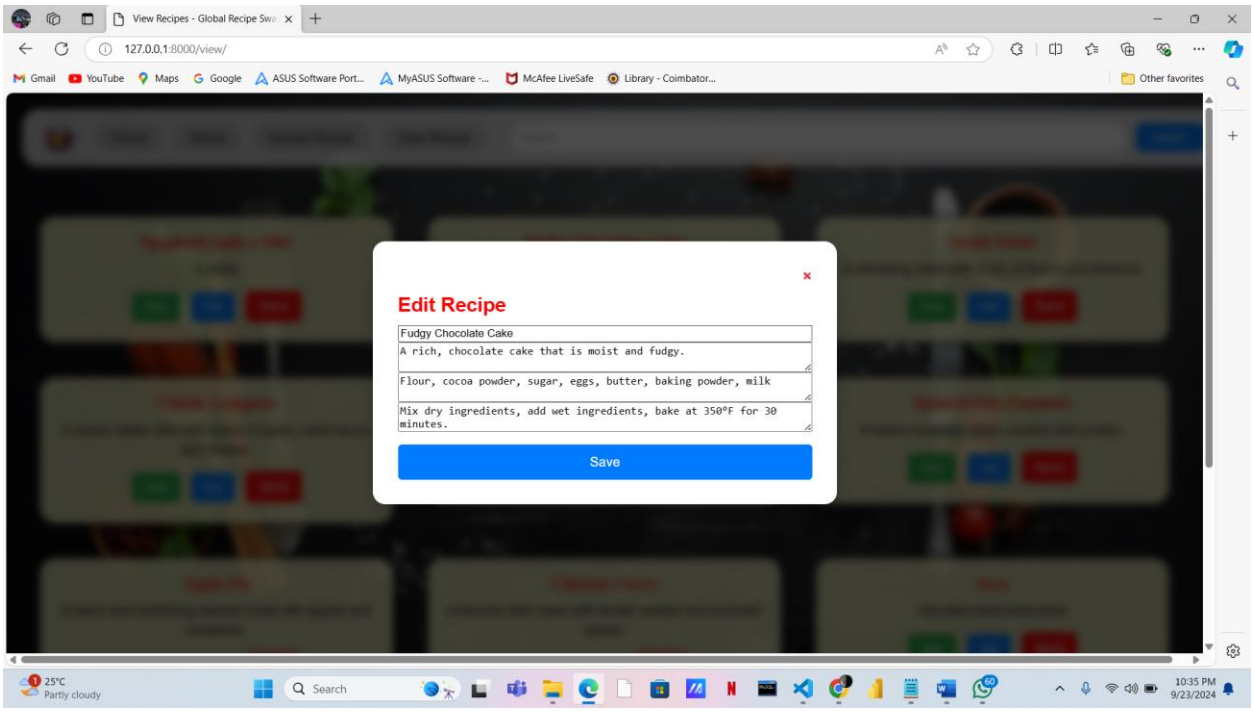
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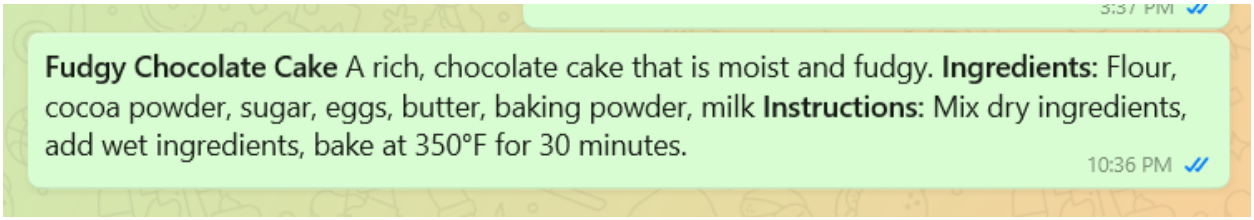
Edit Recipe
Fudgy Chocolate Cake
A rich, chocolate cake that is moist and fudgy.
Flour, cocoa powder, sugar, eggs, butter, baking powder, milk
Mix dry ingredients, add wet ingredients, bake at 350°F for 30 minutes.
Save

Send :


3:37 PM
Fudgy Chocolate Cake A rich, chocolate cake that is moist and fudgy. **Ingredients:** Flour, cocoa powder, sugar, eggs, butter, baking powder, milk **Instructions:** Mix dry ingredients, add wet ingredients, bake at 350°F for 30 minutes.
10:36 PM