Recipe Recommender
Turn Your Pantry into a Chef's Playground!!

What is Recipe Recommender?

Recipe Recommender is a smart application that suggests personalized recipes based on the ingredients you have. It uses data analysis and machine learning techniques to help users maximize their pantry, offering healthy, delicious meal ideas in seconds. Key features include:

- Personalized Ingredient-Based Suggestions: Automatically recommends recipes based on what users have on hand.
- Nutritional Information: Provides a nutritional breakdown of recipes for health-conscious users.
- User Profiles: Save and access your favorite recipes with a personalized profile.
- Search Recipes by Name: Quickly find recipes by entering a dish name.
- Recipe Bookmarking: Bookmark and store your go-to recipes for future use.

What's New? (Version i)

- Sleek User Interface for Seamless Experience: Intuitive navigation with improved design for easy interaction.
- Detailed Nutritional and Calorie Tracking: New feature allowing users to monitor their dietary intake.
- Social Sharing Functionality: Share recipes with friends and family via integrated social platforms.
- Enhanced Recipe Search Capabilities: Faster and more accurate search functionality based on ingredient input.
- User Profiles for Personalized Experience: Users can now create profiles, save favorites, and revisit them anytime.

Future Scope(Version i+1)

- UI for Login and Landing Pages: A revamped login screen (without a "Forgot Password" option) and an engaging landing page to improve user experience.
- User Profiles: Expanding user profiles to include dietary preferences and personalized recipe suggestions.
- Dynamic Ingredient Recommendations: Real-time ingredient suggestions based on user input and preferences.
- Dockerization: Containerizing the application for easier deployment and scalability across platforms.
- Mobile Layout Optimization: Responsive design improvements for mobile devices, enhancing usability on smartphones and tablets.
- Advanced Calorie and Nutritional Tracking: Further refinement of nutritional analysis, enabling users to track calories, macros, and dietary goals.
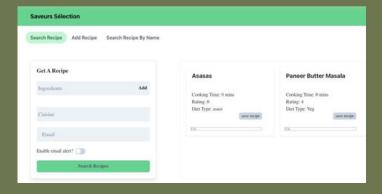
Milestone for Version (i+1)

- Milestone 1: Develop a secure login system with minimal features for a smoother user experience (e.g., skip "forgot password" functionality).
- Milestone 2: Implement dynamic ingredient recommendations using machine learning algorithms for real-time suggestions.
- Milestone 3: Containerize the application using Docker to enhance portability and simplify deployments.
- Milestone 4: Design a mobile-friendly UI to ensure seamless use across different devices.
- Milestone 5: Expand calorie and nutritional tracking with a comprehensive nutrition API integration.
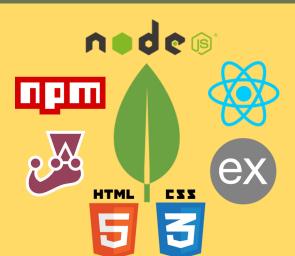
Testing and Validation

Our Recipe Recommender is backed by rigorous testing:
- 30+ Comprehensive Test Cases: Ensuring all core functionalities are covered, from ingredient input to recipe generation.
- Module Testing:
  - Ingredient Input: Validates smooth input handling, including edge cases.
  - Recipe Accuracy: Ensures precise and relevant recipe suggestions.
  - User Profiles: Secures profile creation and retrieval of saved recipes.
- Functional Testing: Simulates real-world scenarios to ensure smooth user experience across features.
- Regression Testing: Ensures new updates don't break existing functionality.

You can find the test cases here - Link

Cook Here

Group 60

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