Project charter: Recipe Book

1. Objectives

The primary objectives of the Recipe Book project are:

- To provide users with an intuitive platform to search for and discover new recipes.
- To enable users to share their own recipes with the community.
- To allow users to store and organize their personal recipes for easy access.
- To foster a community where users can interact, comment, and rate recipes.
- To offer an efficient search and categorization system for finding recipes based on ingredients, cuisine type, and dietary preferences.

2. Problems to Solve

1. Technical Challenges

Efficient Recipe Search & Filtering:

Implementing a robust search algorithm that allows filtering by ingredients, dietary preferences, cuisine, and cooking time.

Data Storage & Management:

Designing a scalable database structure to store user-generated recipes, images, and metadata efficiently.

User Authentication & Security:

Ensuring secure user authentication (OAuth, JWT, or other mechanisms).

Protecting user data, including stored recipes and personal preferences.

Handling Images & Media:

Storing and serving recipe images efficiently without affecting performance.

Scalability & Performance Optimization:

Ensuring the application can handle growing numbers of users and recipes without performance degradation.

Moderation & Content Quality Control:

Preventing spam, duplicate recipes, or inappropriate content through moderation mechanisms or Al-based content checks.

2. User Experience (UX) Challenges

Intuitive UI & Easy Navigation:

Making it easy for users to search, submit, and manage recipes without frustration.

User Engagement & Community Features:

Implementing features like comments, ratings, and favorites to keep users engaged.

Recipe Formatting & Standardization:

Ensuring consistent formatting for ingredients and cooking steps to avoid confusion.

3. Operational Challenges

Ensuring Data Integrity & Backup:

Implementing backup strategies to prevent data loss.

Legal Considerations & Copyright Compliance:

Making sure users do not copy recipes from copyrighted sources without permission.

User Support & Issue Resolution:

Providing a way for users to report issues, get support, and suggest features.

3. Goals and Expected Outcomes

Goals:

- Develop a responsive and user-friendly web application.
- Implement a secure user authentication system.
- Provide efficient search functionality with filtering options.
- Allow users to create personal accounts for storing and sharing recipes.
- Enable user interaction through ratings, comments, and favorites.
- Ensure scalability and performance optimization for handling multiple users.

Expected Outcomes:

- A fully functional web platform where users can browse, share, and store recipes.
- Increased user engagement through social and interactive features.
- A database of categorized and well-organized recipes.
- A community-driven recipe-sharing experience.

4. Target Audience

- Home cooks looking for new recipes.
- Food bloggers and culinary enthusiasts.
- People with dietary restrictions who need personalized recipe recommendations.
- Individuals who want to store and organize their personal recipes digitally.

5. Stakeholders

Project Team: Team members and roles defined in Team roles document.

End Users: Home cooks, food bloggers, health-conscious individuals etc.

Content Creators: Users contributing recipes and reviews.

6. Project Constraints

Time: Limited development period within the educational project timeline.

Resources: Limited team members and technical tools.

Budget: No or minimal funding for hosting.

Scope: Features must be kept manageable to fit within the timeline.