Recipe Swipe

Project Proposal

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**Introduction**:

I am proposing the development of "Recipe Swipe," a mobile application that simplifies creating a personalized recipe book for users by using the swipe right or left mechanic. The app will provide a vast collection of recipes, allowing users to quickly swipe right on recipes they like and left on those they want to skip. Users can then browse their selected recipes in their personalized recipe book within the app.

**Project Overview:**

Recipe Swipe introduces a new interactive way to discover new recipes and an easily accessible personalized recipe book. The app will present recipes as cards that users can swipe through and save their favourite recipes to build a collection in their recipe book.

**Purpose and Functionality:**

* Browse Recipes: Users can swipe through a vast collection of recipes presented as cards.
* Save/Skip a Recipe: Users can save recipes to their recipe book by swiping right.
* Personalized Recipe Book: Users can access their saved recipes in a dedicated recipe book.
* Organization: The recipe book will organize recipes into categories for easy access.
* Detailed Recipe View: Tapping on a recipe card will display detailed information about the recipe, such as instructions, ingredients, and cooking time.

**Core Competencies:**

The project will demonstrate the following core competencies:

* Dart Language Best Practices: Implementing efficient and clean Dart code.
* Stateless and Stateful Widgets: Utilizing widgets appropriately.
* Routing and Navigation: Implementing navigation between different screens and components.
* Gesture Handling: Incorporating intuitive gestures for smooth user interaction.
* Application State Handling: Managing the application's state effectively for a smooth experience.
* Application Testing: Conducting unit and widget testing to ensure the app's stability.

**Additional Competencies:**

In addition to the required core competencies, the project will attempt the following additional competencies:

* Remote Storage (Firebase Firestore): Utilizing Firebase Firestore to store and retrieve recipes.
* Auth Services (Firebase Auth): Integrating Firebase Auth for user authentication and account management.
* Custom Animated Widget: Develop a unique animated widget to enhance the app's visual appeal.
* Local storage to store users’ saved recipes.

**Feasibility:** For the given three-week timeframe, here is the proposed timeline:

* Week 1:
  + Set up the basic app structure, including navigation, gesture handling, and recipe API access.
  + Implement a swipe-based interface for recipe browsing.
  + Create a custom animated widget to enhance UI interactions.
* Week 2:
  + Set up Firebase Firestore for remote storage of recipes.
  + Set up local storage.
  + Implement recipe-saving and organizing features.
  + Develop the detailed recipe view and animation.
* Week 3:
  + Integrate Firebase Auth for user authentication.
  + Conduct unit testing for core functionalities.
  + Perform widget testing and comprehensive app testing.

**Conclusion:**

Recipe Swipe is a mobile application that will provide users with an interactive way to explore and save their favourite recipes. The proposal outlines the required functionalities, additional competencies, and a feasible development plan within three weeks.