**Project Design Phase**

**Problem – Solution Fit Template**

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| Date | 6 March 2025 |
| Team ID | SWTID1741163381152156 |
| Project Name | CookBook: Your Virtual Kitchen Assistant |
| Maximum Marks | 2 Marks |
| Team leader | Aashish S |
| Team members | Arun Kumar P  Achutharam NR  Abhinand PM  Arjun R |

**Problem – Solution Fit Overview**

The Problem-Solution Fit ensures that the identified problem aligns with the needs of users and that the proposed solution effectively addresses it. This concept helps developers, marketers, and business strategists validate the necessity and effectiveness of their solution before further development.

**Purpose**

• Address the lack of a structured and personalized recipe discovery platform for users who seek healthy, quick, or ingredient-based meal options.  
• Provide an intuitive and engaging experience for users to search, save, and manage recipes based on dietary preferences and available ingredients.  
• Offer seamless navigation and real-time data retrieval from a trusted recipe API to enhance user experience.  
• Improve accessibility and engagement through an interactive UI, responsive design, and well-structured data flow.

**Problem Statement**

Many home cooks and food enthusiasts struggle to find organized, reliable, and customizable recipe recommendations. Existing platforms either require paid memberships, lack filtering options, or provide unstructured data, making it difficult for users to find meals that match their preferences, available ingredients, or dietary restrictions.

**Solution**

• A React.js-based Recipe Web Application that provides users with an easy-to-navigate interface to explore and save recipes.  
• Integration with a recipe API (TheMealsDB API) ensures users get up-to-date and detailed information on various recipes, ingredients, and nutritional values.  
• Axios-powered API requests ensure smooth data retrieval with minimal delays.  
• Categorization, filtering, and search functionalities improve accessibility and user engagement.  
• A scalable and responsive UI design ensures a seamless experience across different devices, catering to both home cooks and professional chefs.