# **Project Design Phase Solution Architecture**

Date	6 March 2025
Team ID	SWTID1741162030158629
Project Name	Cook book
Maximum Marks	4 Marks
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## **Solution Architecture:**

The solution architecture for the Recipe Application ensures a scalable, efficient, and user-friendly platform for discovering, saving, and managing recipes with real-time ingredient suggestions and nutritional information.

#### **Goals of the Solution Architecture:**

## **Identify the Best Tech Solution:**

• Utilize modern front-end frameworks (React.js) and APIs (TheMealsDB API) to provide a seamless and interactive recipe discovery experience.

#### **Define Structure & Characteristics:**

• Ensure a modular, scalable, and maintainable software architecture that supports future feature enhancements like personalized meal planning and AI-based recipe recommendations.

## **Outline Features & Development Phases:**

• Clearly define project milestones, including UI/UX design, API integration, database structuring, and deployment strategy.

## **Establish Specifications for Development & Delivery:**

- Provide well-defined guidelines for system architecture, API integrations, data flow, and recipe data handling.
- Implement a high-performance backend to support large-scale user requests for recipe searches, filtering, and personalized recommendations without delays.

