**CS302L: SE Term Project**

| Team number | 10 |
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| Project Title | Virtual Recipe Analyzer |
| Document | SE Project Concept Document |
| Existing Work | There are existing recipe websites and apps that allow users to search for and save recipes based on their preferences. However, there is limited work on platforms that analyze the feasibility and health details of user-generated recipes. |
| Differences | Our project differs from existing platforms by focusing on the analysis of user-generated recipes. Users can select ingredients, specify quantities, and receive feedback on the feasibility of the recipe, considering compatibility and nutrition. Additionally, the system provides health details and nutritional information for the recipe. |
| Technologies | Node.js, React.js, Express.js, MongoDB |
| Customers | Home cooks, Beginner cooks, Health-conscious individuals |

**Description**

The Virtual Recipe Analyzer Web App addresses the challenge of simplifying cooking by enabling users to experiment with different ingredients and analyze their recipes. Many existing recipe platforms offer search and save functionalities, but they lack a comprehensive analysis of user-generated recipes. Our project provides users with real-time feedback on the feasibility and health details of their recipes. While other platforms offer recipe discovery, we enable users to make informed cooking decisions based on their ingredient preferences, dietary restrictions, and health goals.

**Profile of Users**

Home Cooks: Users who enjoy cooking at home and want to create recipes with ingredients they have on hand.

People with Dietary Restriction: Users following specific diets (e.g., vegan, gluten-free) seeking recipes that comply with their dietary restrictions.

Health-Conscious Individuals: Users interested in understanding the nutritional value of their meals.

Beginner Cooks: Users with limited cooking experience who need guidance on creating balanced and feasible recipes.

**Technology Stack**

Front-end: React.js for a dynamic and interactive user interface.

Back-end: Node.js with Express.js for API development.

Database: MongoDB for storing user accounts, recipes, and ingredient data.