**Project Title:**

**RecipeMaster: Recipe Management System**

**Team Members:**

1. Member 1: Hetvi Shah

2. Member 2: Dhruv Modi

3. Member 3: Vinamra Bhavsar

4. Member 4: Jolly Christy

**Dataset Chosen:**

Dataset: A collection of recipes with ingredients, cooking methods, and nutritional information.

- Fields include:

- Recipe Name (name of the dish)

- Ingredients (ingredient name, quantity, unit)

- Cooking Instructions (step-by-step cooking procedure)

- Cuisine Type (e.g., Indian, Italian, Chinese)

- Meal Type(e.g., breakfast, lunch, dinner, snack)

- Nutritional Information(calories, fat, carbs, protein)

- Preparation Time(time taken to prepare the recipe)

- Difficulty Level(easy, medium, hard)

**Features & Task Distribution:**

**Feature 1: User Registration & Profile Setup**

Description: Users can register, log in, and create a profile to store their favorite recipes, meal preferences, and dietary restrictions (e.g., vegetarian, vegan, gluten-free).

Technologies: JWT, bcrypt, MongoDB

Assigned to: Member 1 (Hetvi Shah)

**Feature 2: Recipe Management (CRUD Operations)**

-Description: Allow users to add, update, delete, and view recipes. Each recipe will contain details like ingredients, cooking instructions, and nutritional info.

-Technologies: Node.js, Express.js, MongoDB

- Assigned to: Member 2 (Dhruv Modi)

**Feature 3: Ingredient Management**

- Description: Users can add, update, and delete ingredients used in their recipes. The system will allow for measurements like teaspoons, tablespoons, grams, etc.

- Technologies:\* Node.js, MongoDB, Express.js

- Assigned to:\* \*Member 3 (Vinamra Bhavsar)

**Feature 4: Search & Filter Recipes**

- Description: Users can search for recipes based on ingredients, cuisine type, meal type, or difficulty level. Advanced filters can help narrow down choices based on user preferences.

- Technologies: Express.js, MongoDB (full-text search)

- Assigned to: Member 4 (Jolly Christy)

**Feature 5: Meal Planning & Shopping List Generator**

- Description: Allow users to create weekly meal plans. The system will automatically generate a shopping list based on selected recipes for the week.

- Technologies: Node.js, MongoDB, PDF generation for shopping list

- Assigned to: Member 1 (Hetvi Shah)

**Feature 6: Nutritional Analysis & Recommendations**

- Description: Display the nutritional information for each recipe and suggest healthier alternatives based on users' dietary preferences or goals (e.g., low-calorie, high-protein).

- Technologies: Node.js, Express.js, Third-party APIs for nutritional analysis (e.g., Nutritionix API)

- Assigned to: Member 2 (Dhruv Modi)

**Feature 7: Rating & Review System**

- Description: Users can rate recipes and leave reviews. Other users can view ratings and reviews before deciding whether to try the recipe.

- Technologies: MongoDB, Express.js

- Assigned to: Member 3 (Vinamra Bhavsar )

**Feature 8: Social Sharing & Recipe Collection**

- Description:Users can share their recipes on social media and create personal collections (e.g., “Favorites,” “Tried and Tested,” “Family Recipes”).

- Technologies: Node.js, MongoDB, Social Media API Integration (Facebook, Twitter)

- Assigned to: Member 4 (Jolly Christy)

**Roles & Responsibilities:**

- Member 1 (Hetvi Shah):

- User Registration & Profile Setup

- Meal Planning & Shopping List Generator

- Member 2 (Dhruv Modi):

- Recipe Management (CRUD Operations)

- Nutritional Analysis & Recommendations

- Member 3 (Vinamra Bhavsar):

- Ingredient Management

- Rating & Review System

- Member 4 (Jolly Christy):

- Search & Filter Recipes

- Social Sharing & Recipe Collection