**CRC (CLASSES, RESPONSIBILITIES AND COLLABORATIONS)**

**FOOD RECIPE RECOMMENDATION SYSTEM**

**1. Class: Login**

**Class Description:** Handles user authentication and login functionality

**Associated Use Cases:** Login.

**Responsibilities:**

Authenticate user credentials (Login)

**Collaborations:**

Collaborates with the User class for user authentication during login.

**2. Class: User**

**Class Description:** Represents users of the food recipe recommendation system.

**Associated Use Cases:** Signup, Login, Input Ingredients, View Recipe, Select Recipe, and Logout.

**Responsibilities:**

Register an account (Signup)

Log in to the platform (Login)

Input ingredients for recipe recommendations (Input Ingredients)

View personalized recipe recommendations (View recommended Recipe)

Select a recipe for cooking (Select Recipe)

Log out from the platform (Logout)

**Collaborations:**

Collaborates with the Recipe System for viewing and selecting recipes.

Collaborates with the Recommendation System for receiving ingredient inputs and recipe recommendations.

**3. Class: Recipe system**

**Class Description:** Manages user accounts, stores recipe data, and handles recipe-related functionalities.

**Associated Use Cases:** Signup, Login, Input Ingredients, View Recipe, Select Recipe, Logout, Insert Recipe, Edit Recipe.

**Responsibilities:**

Manage user accounts and profiles (Signup, Login, and Logout)

Store and organize recipe data (Insert Recipe, Edit Recipe)

Handle user interactions related to recipe viewing and selection (View Recipe, Select Recipe)

**Collaborations:**

Collaborates with the User class for user account management and interactions.

Collaborates with the Admin class for recipe insertion and editing.

**4. Class: Search Recipe**

**Class Description:** Allows users to search for recipes based on various criteria.

**Associated Use Cases:** Search Recipe.

**Responsibilities**: Provide search functionality to find recipes based on ingredients, cuisine, dietary preferences, etc. (Search Recipe)

**Collaborations:** Collaborates with the Recipe System to retrieve and display search results.

**5. CLASS: RECOMMENDATION SYSTEM**

**Class Description:** Provides personalized recipe recommendations based on user inputs.

**Associated Use Cases:** Input Ingredients, View Recipe.

**Responsibilities:**

Receive ingredient inputs from users (Input Ingredients)

Analyze user data to understand preferences (Input Ingredients)

Apply recommendation algorithms to find suitable recipes (View Recipe)

Generate and provide personalized recipe recommendations to users (View Recipe)

**Collaborations:**

Collaborates with the User class to receive ingredient inputs and user preferences.

Collaborates with the Recipe System to access recipe data for recommendations.

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