Smart cooking assistant web application - Use Case Tables

| Use Case Number | UC 01 |
|-----------------|---|
| Use Case Name | User registration |
| Actors | User |
| Description | A new user creates an account by filling out a registration form. |
| Preconditions | User is on the registration page. |
| Postconditions | User is saved in the database as unverified; BMI is calculated. |
| Trigger | User submits a registration form. |

| Use Case Number | UC 02 |
|-----------------|---|
| Use Case Name | User login |
| Actors | User |
| Description | A verified user logs in using their email and password. |
| Preconditions | Users must be registered and verified. |
| Postconditions | Access to the user dashboard is granted. |
| Trigger | User enters login credentials. |

| Use Case Number | UC 03 |
|-----------------|--|
| Use Case Name | Password Recovery |
| Actors | User |
| Description | User receives a reset link after requesting password recovery. |
| Preconditions | User enters a valid email. |
| Postconditions | User receives a reset email with a link. |
| Trigger | User clicks 'Forgot Password'. |

| Use Case Number | UC 04 |
|-----------------|--|
| Use Case Name | Profile Update |
| Actors | User |
| Description | Users update profile details like weight or goals. |
| Preconditions | User is logged in. |
| Postconditions | Updated info is saved; BMI recalculated. |
| Trigger | User saves profile changes. |

| Use Case Number | UC 05 |
|-----------------|--|
| Use Case Name | BMI Calculation |
| Actors | System |
| Description | Calculates BMI based on height and weight. |
| Preconditions | User provides height and weight. |
| Postconditions | BMI is saved to profile. |
| Trigger | User submits height/weight. |

| Use Case Number | UC 06 |
|-----------------|---|
| Use Case Name | Recipe Suggestions Based on Available Ingredients |
| Actors | User, Al Chatbot |
| Description | Chatbot suggests recipes based on the user's available ingredients. |
| Preconditions | User provides ingredients. |
| Postconditions | Suggested recipes are shown. |
| Trigger | User submits height/weight. |

| Use Case Number | UC 07 |
|-----------------|--|
| Use Case Name | Chatbot Remembers User Preferences |
| Actors | User, Al Chatbot |
| Description | Chatbot personalizes suggestions based on saved preferences. |
| Preconditions | User has saved preferences. |
| Postconditions | Preferences are used in responses. |
| Trigger | Chatbot receives user requests. |

| Use Case Number | UC 08 |
|-----------------|---|
| Use Case Name | Dynamic Recipe Discovery |
| Actors | User, Al Chatbot |
| Description | User asks 'What should I cook?', chatbot responds with suggestions. |
| Preconditions | User is logged in. |
| Postconditions | Personalized recipes are displayed. |
| Trigger | User asks for a meal idea. |

| Use Case Number | UC 09 |
|-----------------|--|
| Use Case Name | User Feedback on Chatbot Recommendations |
| Actors | User, Al Chatbot |
| Description | User rates chatbot suggestions. |
| Preconditions | User views chatbot response. |
| Postconditions | Feedback is logged. |
| Trigger | Users give ratings or comments. |

| Use Case Number | UC 10 |
|-----------------|---|
| Use Case Name | Access Step-by-Step Cooking Guide (Premium) |
| Actors | Premium User, AI ChatBot |
| Description | Premium users get interactive cooking instructions. |
| Preconditions | User is premium and selects a recipe. |
| Postconditions | Guide is shown with text/audio steps. |
| Trigger | Guide is shown with text/audio steps. |

| Use Case Number | UC 11 |
|-----------------|--|
| Use Case Name | Dynamic Cooking Adjustment |
| Actors | Premium User, AI ChatBot |
| Description | Cooking guide adapts based on user input. |
| Preconditions | Guide is active. |
| Postconditions | Instructions adjust as needed. |
| Trigger | User interacts with the guide (pause, repeat). |

| Use Case Number | UC 12 |
|-----------------|--|
| Use Case Name | Al Timer & Time Estimates |
| Actors | User, Al ChatBot |
| Description | System shows prep and cook times, and sets timers. |
| Preconditions | User selects a recipe. |
| Postconditions | Timers are running; time is shown. |
| Trigger | Recipe guide step is reached. |

| Use Case Number | UC 13 |
|-----------------|--|
| Use Case Name | Alternate Cooking Methods |
| Actors | User, Al System |
| Description | Al offers different preparation methods. |
| Preconditions | Users request alternatives. |
| Postconditions | New method is displayed. |
| Trigger | User asks for a different method. |

| Use Case Number | UC 14 |
|-----------------|--|
| Use Case Name | Save & Favorite Recipes |
| Actors | User |
| Description | User saves or favorites recipes for later. |
| Preconditions | User views a recipe. |
| Postconditions | Recipe is added to favorites. |
| Trigger | User clicks save or favorite. |

| Use Case Number | UC 15 |
|-----------------|---|
| Use Case Name | Request Recipe Modifications (Premium) |
| Actors | Premium User, Al System |
| Description | Al modifies recipes to fit dietary goals. |
| Preconditions | User opens a recipe. |
| Postconditions | Modified version is displayed. |
| Trigger | User requests modification. |

| Use Case Number | UC 16 |
|-----------------|--------------------------------------|
| Use Case Name | Track Recipe History |
| Actors | User, System |
| Description | System logs when recipes are cooked. |
| Preconditions | User cooks a recipe. |
| Postconditions | Recipe is time stamped and stored. |
| Trigger | User marks the recipe as cooked. |

| Use Case Number | UC 17 |
|-----------------|---------------------------------------|
| Use Case Name | Generate Shopping List (Premium) |
| Actors | Premium User |
| Description | Creates a categorized shopping list. |
| Preconditions | User selects recipes. |
| Postconditions | List is generated and stored. |
| Trigger | User clicks 'Generate Shopping List'. |

| Use Case Number | UC 18 |
|-----------------|--|
| Use Case Name | Manual Ingredient/Recipe Entry |
| Actors | User |
| Description | Users add custom ingredients or recipes. |
| Preconditions | User is logged in. |
| Postconditions | Custom entry saved and categorized. |
| Trigger | User submits a new ingredient/recipe. |

| Use Case Number | UC 19 |
|-----------------|---|
| Use Case Name | Meal Tracking & Nutrition Reports |
| Actors | User, System |
| Description | App tracks meals and shows calorie summaries. |
| Preconditions | App tracks meals and shows calorie summaries. |
| Postconditions | Meal data logged and visualized. |
| Trigger | User finishes cooking a meal. |

| Use Case Number | UC 20 |
|-----------------|---|
| Use Case Name | Al Recommendations for Nutrition Balance |
| Actors | User, Al System |
| Description | Al suggests meals to balance nutrient intake. |
| Preconditions | Meal tracking data exists. |
| Postconditions | Suggestions are shown. |
| Trigger | System detects imbalance in nutrients. |