**User Requirements Specification**



**CookUp Companion**

CONTENTS

[ABOUT THIS DOCUMENT 1](#_Toc164352129)

[USER ROLES AND FUNCTIONS 1](#_Toc164352130)

[FUNCTIONAL: 1](#_Toc164352131)

[ABOUT THIS DOCUMENT 4](#_Toc164352132)

[USER ROLES AND FUNCTIONS 4](#_Toc164352133)

[FUNCTIONAL: 4](#_Toc164352134)

[NON-FUNCTIONAL REQUIREMENTS: 5](#_Toc164352135)

[ **NFR-01: Scalability** 5](#_Toc164352136)

[ The system must efficiently handle an increasing number of users and content without degradation of performance. 5](#_Toc164352137)

[ **NFR-02: Performance** 5](#_Toc164352138)

[ Ensure fast response times and efficient data handling during high traffic periods. 5](#_Toc164352139)

[ **NFR-03: Accessibility** 5](#_Toc164352140)

[ The application should be usable by a wide audience, including those with disabilities. 5](#_Toc164352141)

[ **NFR-04: Security** 5](#_Toc164352142)

[ Implement robust security measures to protect user data and ensure privacy. 5](#_Toc164352143)

[USE CASES 5](#_Toc164352144)

# ABOUT THIS DOCUMENT

This document outlines the user requirement specifications for CookUp Companion, a culinary software solution designed to enhance user experience in cooking through recipe recommendations, community interactions, and personalized culinary content. It aims to detail the functionalities, roles, and permissions for different user types within the platform.

# USER ROLES AND FUNCTIONS

The application will support different types of users, each with specific functions and permissions:

1. Admin (Desktop application) Users who manage the platform, ensuring smooth operations and compliance with content guidelines.
2. Moderator (Desktop application) Users who manage the reports from the users with content guidelines.
3. User (Web application) Users who browse recipes, create and share their recipes, and interact with community content

# FUNCTIONAL:

FR-01: User Profile Management.

Users can register, login, and update their profiles.

FR-02: User Authentication and Access Control

separate access of certain functions and features depending on their role .

FR-03: Recipe Management users can

manages their liked and saved recipes schedule meal planning.

FR-04: Interactions with Recipes

Users can like recipe, comment and also participate in average like ration in order to recommend the recipe to more people.

FR-05: Recipe sorting and recommendations. Option to sort displayed recipe to the user in different way one of which is to show similar recipes based of the liked and saved recipes to the user.

FR-06: Recipe Creation and Management

Users can create, edit, and manage their recipes, including uploading photos, cooking steps, instructions, small description and the ingredients needed for the recipe.

FR-07: Community Interaction

Users can share recipes.

FR-08: Users Management

Administrators can ban users, delete and update user.

In addition they can edit recipe information.

FR-09: Users Management

User can save ingredients in to-do list when he/she does to shopping

.

# NON-FUNCTIONAL REQUIREMENTS:

# **NFR-01: Scalability**

# The system must efficiently handle an increasing number of users and content without degradation of performance.

# **NFR-02: Performance**

# Ensure fast response times and efficient data handling during high traffic periods.

# **NFR-03: Accessibility**

# The application should be usable by a wide audience, including those with disabilities.

# **NFR-04: Security**

# Implement robust security measures to protect user data and ensure privacy.

# USE CASES

**Use Case 1: User Log-in (Web Application)**

**FR-01: Actors:** Potential User

**Preconditions:** User is on the registration page.

**Main Success Scenario:**

1. User fills in the registration form with personal information.
2. User sets a username and password.
3. System verifies that the username and email are unique and the password is secure.
4. User submits the form.
5. System registers the user.

**Postconditions:** User is registered and can log in.

* **Extensions:**
  1. **5a. Username is already taken:**
     + System displays an error message.
     + User is prompted to choose a different username.

**5b. Email is already taken:**

* + - System displays an error message.
    - User is prompted to choose a different username.

**Use Case 2: User Log-in (Web Application)**

## FR-02

**Actors**: User

## Main Success Scenario:

* 1. User navigates to the login page.
  2. System asks for login credentials.
  3. User enters credentials.
  4. System validates the credentials.

**Postconditions**: User gains access to the system.

## Extensions:

* 4a Invalid Credentials:
  + 1. System displays error message.
    2. Go back to step 3.

**Use Case 3: User Log-in (Desktop Application)**

## FR-02

**Actors**: Admin, Moderator

**Preconditions:** Admin, Moderator has installed the CookUpCompanion Desktop Application

## Main Success Scenario:

1. Admin, Moderator navigates to the login form.
2. System asks for login credentials.
3. Admin, Moderator enters credentials.
4. System validates the credentials.

**Postconditions**: User gains access to the system.

## Extensions:

* 4a Invalid Credentials:
  1. System displays error message.
  2. Go back to step 2

**Use Case 4: Manage Access Control**

**FR-02: User Authentication and Access Control**

**Actors:** User, Admin

**Preconditions:** User is trying to access a restricted area.

**Main Success Scenario:**

1. User requests access to a feature or area.
2. System checks user's role and permissions.
3. System grants or denies access based on user's role.

**Postconditions:** User either accesses the feature or receives a denial message.

* **Extensions:**
  1. **3a. Access denied:**
     + System informs the user they do not have the necessary permissions.

**Use Case 5: Schedule Meal Planning**

**FR-03**

**Actors:** User

**Preconditions:** User is logged in and has recipes saved or liked.

**Main Success Scenario:**

* 1. User accesses the meal planning feature.
  2. User selects recipes to add to their meal plan for the week.
  3. User saves the meal plan.

**Postconditions:** User has a scheduled meal plan.

**Extensions:**

* 1. **3a. Incomplete recipe data:**
     + System notifies the user that certain recipes lack sufficient detail.

**Use Case 6: Manage and Save Recipes**

**FR-03: Recipe Management**

**Actors:** User

**Preconditions:** User is logged in and viewing a recipe.

**Main Success Scenario:**

1. User clicks the "Save" button to add a recipe.
2. System saves the recipe to the user’s profile.

**Postconditions:** Recipe is saved and accessible in user profile.

* **Extensions:**
  1. **2a. System fails to save the recipe:**
     + System displays an error message.

**Use Case 7: Participate in Recipe Rating**

**FR-04: Interactions with Recipes**

**Actors:** User

**Preconditions:** User is logged in and viewing a recipe.

**Main Success Scenario:**

1. User rates a recipe by selecting like or dislike.
2. System calculates the new average rating and updates the display.
3. Save what information so later on it feed the algoritam

**Postconditions:** Recipe rating is updated based on user input.

* **Extensions:**
  1. **2a. System fails to save the recipe rating:**
     + System fails to save the recipe.

**Use Case 8: Showing recipe nutrition score**

**FR-05**

**Actors:** User

**Preconditions:** User is logged in.

**Main Success Scenario:**

* 1. User selected recipe.
  2. The table with nutrition score is filled with data from the api.

**Postconditions:** User finds and engages with recipes nutrition that match their preferences.

**Extensions:**

* 1. **3a. Api calls for the day are ended:**
     + System show 0 for the each categeory.

**Use Case 9: Search and Filter Recipes**

**FR-05**

**Actors:** User

**Preconditions:** User is logged in.

**Main Success Scenario:**

1. User enters search criteria recipe name in the search bar.
2. System displays a list of recipes that match the criteria.
3. User selects a recipe to view more details.

**Postconditions:** User finds and engages with recipes that match their preferences.

**Extensions:**

* 1. **3a. No results found:**
     + System suggests modifying search criteria or displays popular recipes.

**Use Case 10: Find Similar Recipes**

**FR-05: Recipe Sorting and Recommendations**

**Actors:** User

**Preconditions:** User is viewing a recipe they like.

**Main Success Scenario:**

1. User clicks on “Recommended”.
2. System analyzes you liked recipes and give the user recipe of the other user that have your liked recipe in there liked recipe list.
3. System displays a list of recipes with similar characteristics.

**Postconditions:** User is presented with recipes similar to their interests.

* **Extensions:**
  1. **3a. No similar recipes found:**
     + System informs the user and suggests alternative options.

**Use Case 11: Recommended Recipes**

**FR-05:**

**Actors:** User

**Preconditions:** User is viewing a recipe they like.

**Main Success Scenario:**

1. User clicks on “Recommended”.
2. System analyzes the they like and saved recipes.
3. System displays a list of recipes with similar products.

**Postconditions:** User is presented with recipes similar to their interests.

* **Extensions:**
  1. **3a. No similar recipes found:**
     + System informs the user and suggests alternative options.

**Use Case 12: Create and Publish a Recipe**

**FR-06: Recipe Creation and Management**

**Actors:** User

**Preconditions:** User is logged in and has recipe information ready.

**Main Success Scenario:**

1. User navigates to the “Create Recipe” page.
2. User enters recipe details including title, ingredients, steps, and photos.
3. User previews and submits the recipe for publishing.

System publishes the recipe to the community.

**Postconditions:** Recipe is added to the platform and is viewable by others.

* **Extensions:**
  1. **4a. Missing or invalid information:**
     + System prompts the user to correct the errors before submitting.

**Use Case 13: User share recipe**

**FR-07:**

**Actors:** User

**Preconditions:** User is trying to share recipe to their relevant.

**Main Success Scenario:**

1. User access the recipe he/she want to share.
2. User press the share button.
3. Recipe link is copy .

**Postconditions:** Notify that the link is copied.

**Use Case 14: Admin Content Moderation**

**FR-08**

**Actors:** Administrator

**Preconditions:** Administrator is logged in.

**Main Success Scenario:**

1. Admin reviews a queue of reported recipes and comments.
2. Admin assesses content against community guidelines.
3. Admin takes appropriate action: approve, delete.

**Postconditions:** Content is moderated to maintain community standards.

* **Extensions:**
  1. **4a. User disputes admin decision:**
     + Admin reviews the dispute and either upholds or reverses the decision.
     + System updates accordingly and notifies the user.

**Use Case 15: Update User Roles and Permissions**

**FR-08**

**Actors:** Administrator

**Preconditions:** Administrator is logged in.

**Main Success Scenario:**

1. Admin accesses the user management dashboard.
2. Admin selects a user to update their role (e.g., from User to Moderator).
3. Admin updates the user's role and permissions in the system.
4. System confirms the update and notifies the user.

**Postconditions:** User roles and permissions are updated to reflect new responsibilities.

* **Extensions:**
  1. **4a. Admin enters incorrect or invalid role data:**
     + System displays an error and prompts for correct input.

**Use Case 16: Ban or Suspend a User Account**

**FR-08: Users Management**

**Actors:** Administrator

**Preconditions:** A user has violated community guidelines.

**Main Success Scenario:**

1. Administrator reviews the violation report.
2. Administrator decides to ban or suspend the user account.
3. System updates the user’s status and restricts access.

**Postconditions:** User account is restricted based on admin’s decision.

* **Extensions:**
  1. **3a. Decision is appealed by the user:**
     + Admin reviews the appeal and may reverse the decision.

**Use Case 17: Adding Recipe Ingredients in the shopping cart**

**FR-09:**

**Actors:** User

**Preconditions:** User is viewing a recipe they like to cook.

**Main Success Scenario:**

User clicks on “Add recipe ingredient to the shopping cart”.

All ingredients from the recipe are sent to the shopping cart.

System updates the user’s shopping cart.

**Postconditions:** User is notify for the changes in the shopping cart.

* **Extensions:**
  + - **2.Problem occurred.**
      * Notify the user that there is problem for sending the ingredients to the cart.

**Use Case 18: Checking the shopping cart items**

**FR-09:**

**Actors:** User

**Preconditions:** User is shopping cart section.

**Main Success Scenario:**

User have bought product from the list.

User clicks on “check box for that product”.

System updates the user’s shopping list and remove the product.

**Postconditions:** User is notify for the changes in the shopping cart.

* **Extensions:**
  + - **2.Problem occurred.**
      * Notify the user that there is problem with removing the ingredients from the cart.