

# User Requirement Specification Document

## Individual Project

Recipeasy

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# 1. User Requirements

## i. Non-Functional Requirements

No	General Requirements	MosCoW
1	Usability	Must
2	Security	Should
3	Compatibility	Should
4	Maintainability	Could

## ii. Functional Requirements

No	App type	General Requirements	MoSCoW
FR-01	Desktop	User Log in (Desktop)	Must
FR-02	Desktop	Create new user (Admin)	Must
FR-03	Website	Register new account	Must
FR-04	Website	User Log in (Website)	Must
FR-05	Desktop	Edit existing users (Admin)	Must
FR-06	Website	Change account details	Must
FR-07	Desktop	Delete/Hide existing Users (Admin)	Must
FR-08	Website	Delete Account	Must
FR-09	Desktop/Website	Add new recipes	Must
FR-10	Desktop/Website	Edit existing recipes	Must
FR-11	Desktop/Website	Delete/Hide existing recipes	Must
FR-12	Website	Leave Comment on recipes	Should
FR-13	Website	Add recipe to favorites	Should
FR-14	Desktop/Website	Search for recipe by name	Should
FR-15	Desktop/Website	Filter by type	Should
FR-16	Website	User changes password	Could
FR-17	Website	System recommends recipes	Could

# 2. Use Cases

## i. Non-Functional Requirements

- **Usability**

The application must be easy to use for the client.

- **Security**

The application should be secure in order to avoid data leaks and other security attacks.

- **Compatibility**

The application Should wok on desktop hardware and mobile hardware.

- **Maintainability**

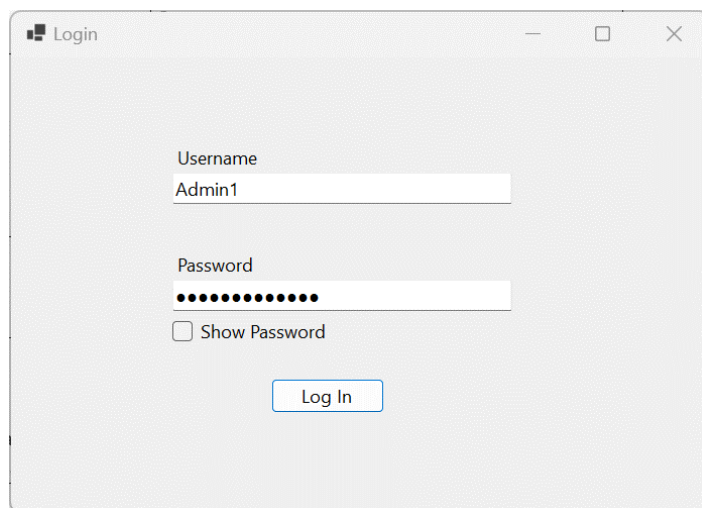
In case the application runs into a critical failure, the application could be fixed easily.

## ii. Functional Requirements

### UC-01. User Log in (Desktop)

Admin will need to log on in order to access the desktop application

Use case:	<b>UC-01:</b> User logs in (Desktop)
Functional Requirements	<b>FR-01</b>
Actor:	Admin
Pre-condition:	-
Main Success Scenario:	<ol style="list-style-type: none"><li>1. Actor starts desktop application</li><li>2. System shows login field</li><li>3. Actor fills in required field</li><li>4. System checks if the credentials are valid</li><li>5. System logs user into application</li></ol>
Extensions:	<p>4a) credentials invalid</p> <ol style="list-style-type: none"><li>1. Error message shown</li><li>2. Return to step 3</li></ol>



Picture 1.1 Admin creating new user on the desktop application

## UC-02. Create new users

A system administrator can add a new user to the database by providing essential details. They could add either admin user or normal user

Use case:	<b>UC-02:</b> Create New users
Functional Requirements	<b>FR-02</b>
Actor:	Admin
Pre-condition:	Admin needs to log in (desktop)
Main Success Scenario:	<ol style="list-style-type: none"><li>1. Actor requests to create new user</li><li>2. System shows field that required to be entered</li><li>3. Actor filled in required data</li><li>4. Actor clicks on add user</li><li>5. System checks input data</li><li>6. User added</li><li>7. End use case</li></ol>
Extensions:	<p>5a) Data not valid</p> <ol style="list-style-type: none"><li>1. System shows error</li><li>2. Return to step 3</li></ol>

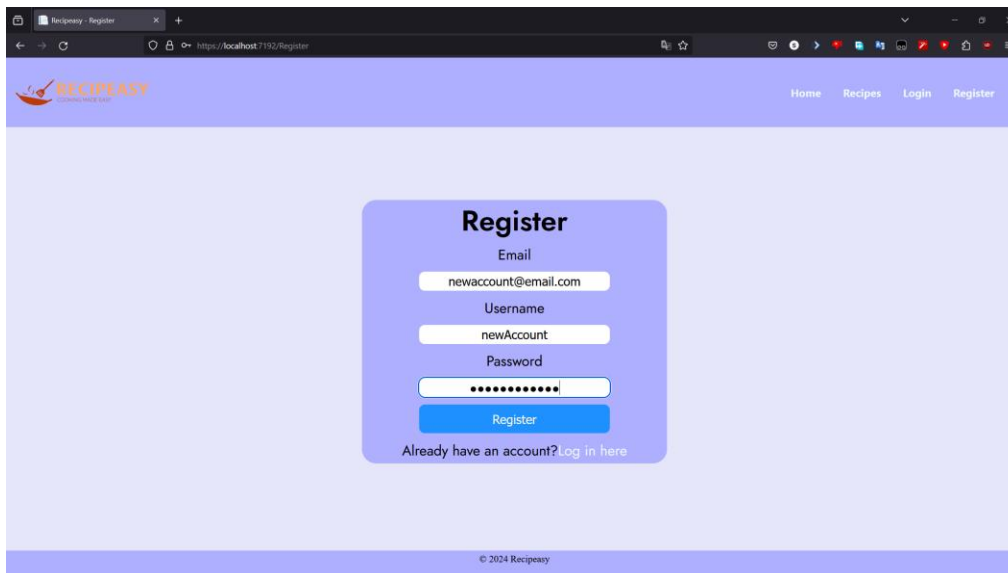
The screenshot shows a desktop application window titled 'MainForm'. It has a sidebar on the left with buttons for 'Users', 'Recipes', and 'Log out'. The main area has three tabs: 'Users', 'Modify', and 'Create', with 'Create' currently selected. The 'Create' tab contains a form with the following fields: 'Username' (with 'username' entered), 'Email' (with 'email@email.com' entered), 'New Password' (with 'password' entered), 'First Name', 'Middle Name', and 'Last Name' (all empty). There is an 'Admin' checkbox which is currently unchecked. A 'Create' button is at the bottom of the form.

Picture 2.1 Admin creating new user on the desktop application

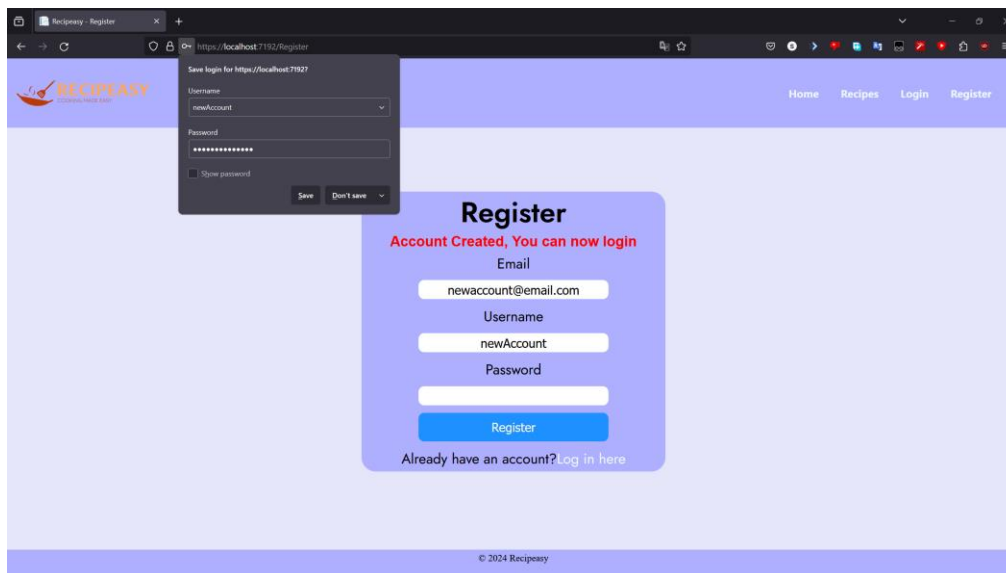
### UC-03. Register new account

User can register a new account through the website

Use case:	<b>UC-03:</b> Register new account
Functional Requirements	<b>FR-03</b>
Actor:	User
Pre-condition:	Website opened
Main Success Scenario:	<ol style="list-style-type: none"><li>1. Actor goes to register user</li><li>2. System shows required input field</li><li>3. Actor adds necessary details</li><li>4. Actor clicks on Register</li><li>5. System checks user input</li><li>6. System registers data</li><li>7. System shows success message</li><li>8. End use case</li></ol>
Extensions:	<p>5a) Data not valid</p> <ol style="list-style-type: none"><li>1. System shows error</li><li>2. Return to step 3</li></ol>



Picture 3.1 User can register an account on the website through the register page

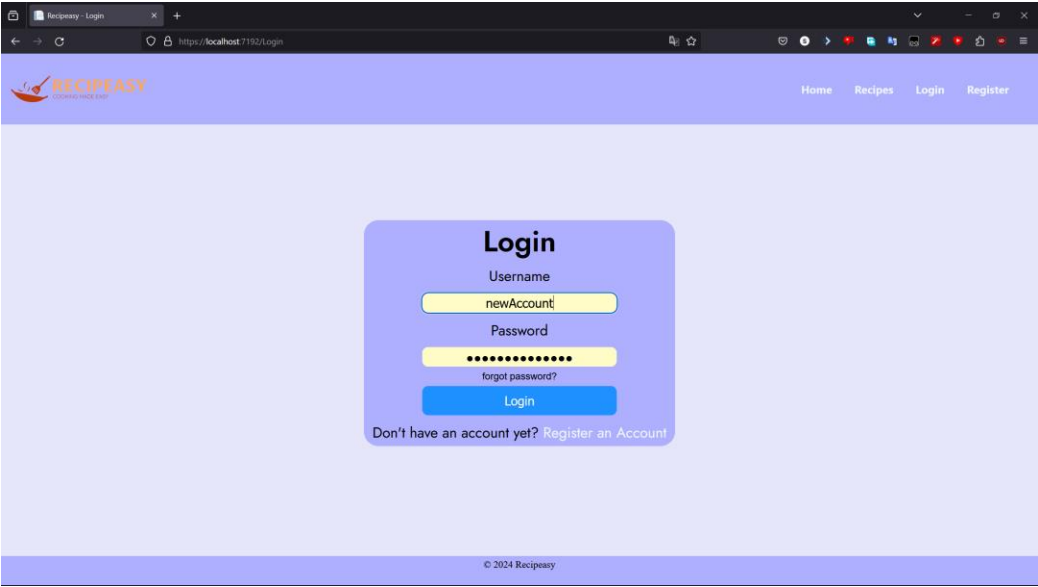


Picture 3.2 Message shown after creating an account

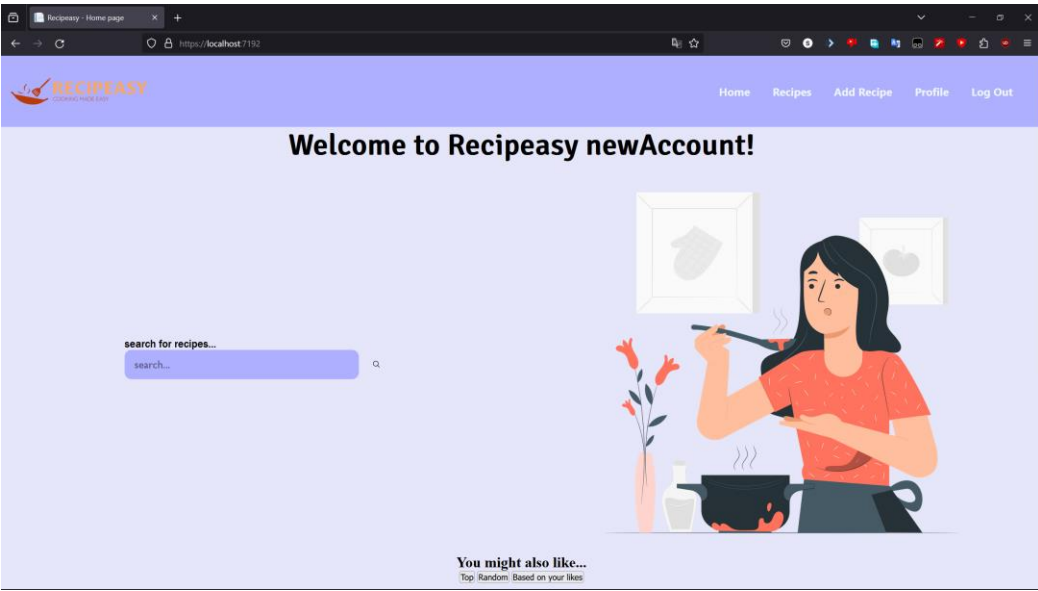
#### UC-04. User Log in (Website)

User will need to be able to log onto the website in order to use the application

Use case:	<b>UC-04: User Log in (Website)</b>
Functional Requirements	<b>FR-04</b>
Actor:	User
Pre-condition:	-
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor navigates to Login page</li> <li>2. System shows login field</li> <li>3. Actor fills in required field</li> <li>4. System checks if the credentials are valid</li> <li>5. System logs user into application</li> </ol>
Extensions:	4a) credentials invalid <ol style="list-style-type: none"> <li>1. Error message shown</li> <li>2. End use case</li> </ol>



Picture 4.1 Login Page



Picture 4.2 The index page after user has logged in

### UC-05. Edit existing user

Admin can edit user details

Use case:	UC-05: Edit existing user
Functional Requirements	FR-05
Actor:	Admin

Pre-condition:	Be logged in (desktop)
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor selects a specific user to edit</li> <li>2. System shows fields that are currently filled with the user's details</li> <li>3. Actor changes a detail from the wanted fields.</li> <li>4. System shows confirmation message</li> <li>5. Actor confirms changes</li> <li>6. System checks user input</li> <li>7. System displays new user details</li> <li>8. End use case</li> </ol>
Extensions:	<p>5a) Actor cancels operation</p> <ol style="list-style-type: none"> <li>1. Operation cancelled</li> <li>2. End use case</li> </ol> <p>6a) Data not valid</p> <ol style="list-style-type: none"> <li>1. System shows error</li> <li>2. Return to step 3</li> </ol>

MainForm

Users Modify Create

Users

Recipes

Log out

userId	username	firstname	middlename	lastname	email
3	nonono	nono	lalala	yoyoyo	nono@v
1003	JohnThijs	John		Thijs	JohnThi
1004	email@email	Empty			noemail
1005	power123				power@

Search by Name

Search

Refresh List

Modify

Hide



Picture 5.1 Admin selects desired user to modify

The screenshot shows a web application window titled 'MainForm'. It has a sidebar with 'Users' and 'Recipes' buttons. The main area has tabs for 'Users', 'Modify', and 'Create'. The 'Modify' tab is active, displaying a form for editing user details. The form fields are: User Id (1003), Username (JohnThijs), Email (JohnThijs@email.com), New Password (empty), First Name (John), Middle Name (empty), Last Name (Thijs), Admin (checkbox), and Active (checkbox). A 'Modify' button is located at the bottom right of the form.

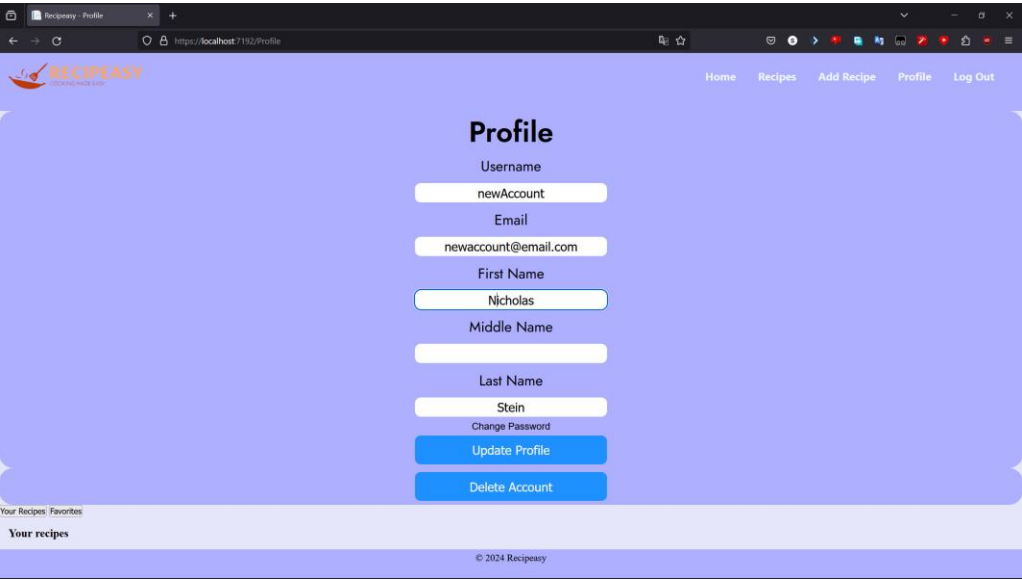
Picture 5.2 After selecting the user, admin is then redirected to the Modify User tab

### UC-06. Change account details

User can change their account details once they are logged on in the website

Use case:	<b>UC-06:</b> Change account details
Functional Requirements	<b>FR-06</b>
Actor:	User
Pre-condition:	Be logged in (Website)
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor navigates to profile page</li> <li>2. System shows current account details</li> <li>3. Actor changes a detail from the wanted fields.</li> <li>4. System shows confirmation message</li> <li>5. Actor confirms changes</li> <li>6. System checks user input</li> <li>7. System displays new account details</li> <li>8. End use case</li> </ol>
Extensions:	<p>5a) Actor cancels operation</p> <ol style="list-style-type: none"> <li>1. Operation cancelled</li> <li>2. End use case</li> </ol> <p>6a) Data not valid</p> <ol style="list-style-type: none"> <li>1. System shows error</li> </ol>

	2. Return to step 3
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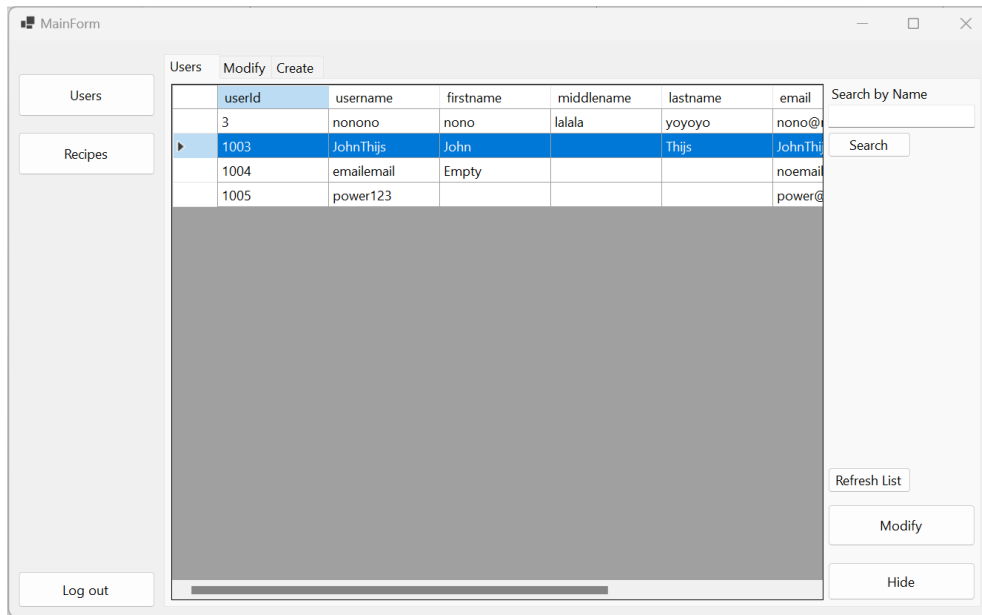


Picture 6.1 User changing their details in the profile page

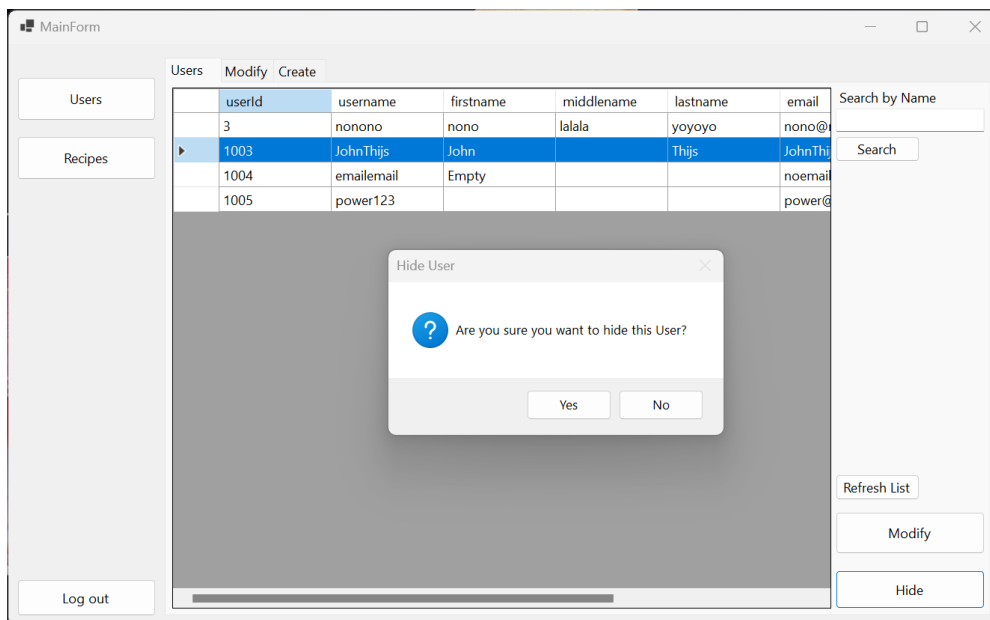
**UC-07. Delete existing users**

Admin is able to delete users from the desktop application

Use case:	<b>UC-07:</b> Delete existing user
Functional Requirements	<b>FR-07</b>
Actor:	Admin
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor requests to delete user</li> <li>2. System asks actor for confirmation</li> <li>3. Actor confirms</li> <li>4. User deleted</li> <li>5. End use case</li> </ol>
Extensions:	3a) Actor cancels the action <ol style="list-style-type: none"> <li>1. User is not deleted</li> </ol> End use case



Picture 7.1 Admin selects desired user to Delete/hide



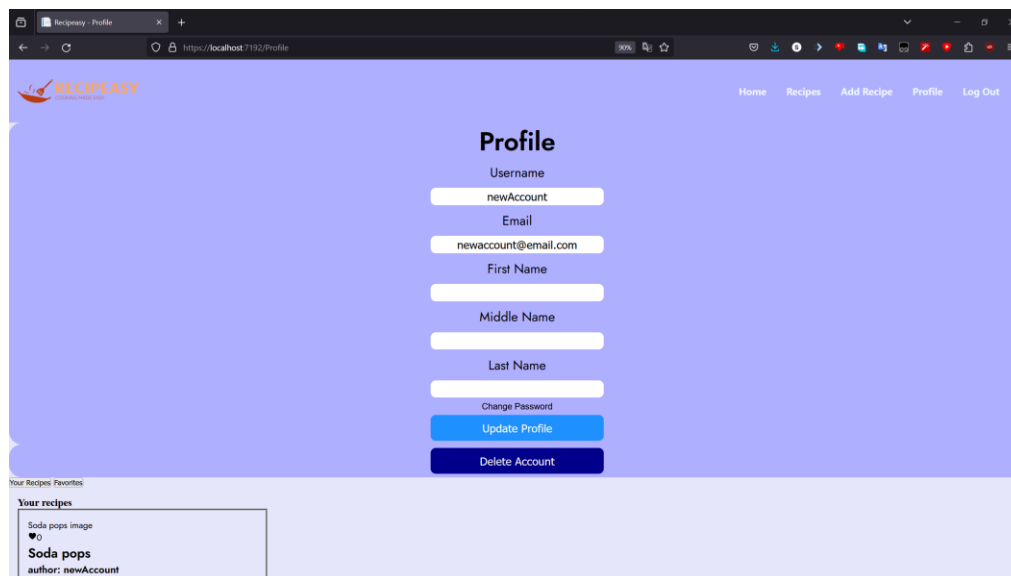
Picture 7.2 Confirmation message after clicking the Hide button (Bottom Right)

### UC-08. User Deletes Account

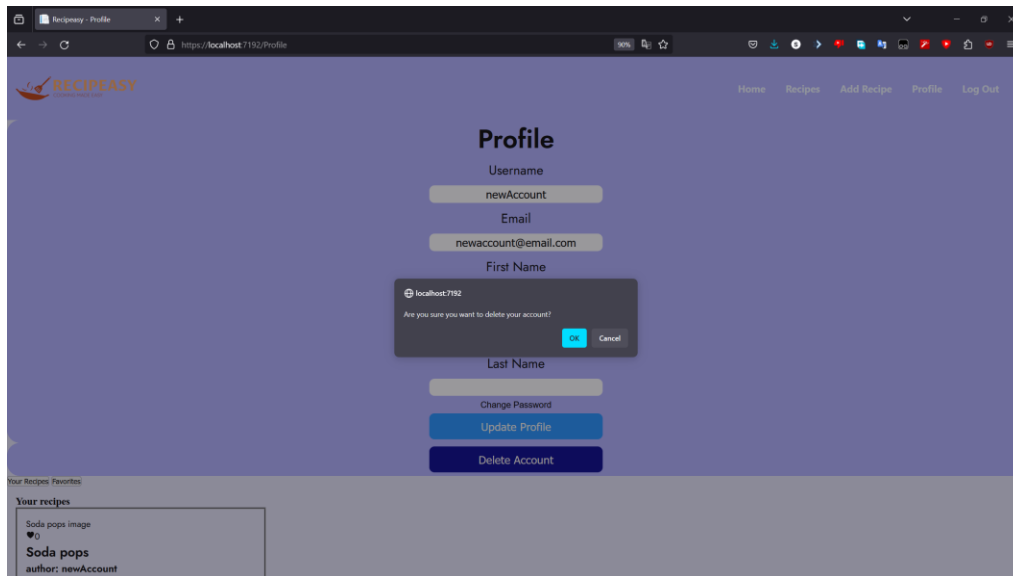
User can choose to the delete their account.

Use case:	<b>UC-08: User deletes account</b>
Functional Requirements	<b>FR-08</b>

Actor:	User
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor requests to delete account</li> <li>2. System gives confirmation message</li> <li>3. Actor confirms</li> <li>4. System deletes user account</li> <li>5. Actor redirected to Index page</li> <li>6. End use case</li> </ol>
Extensions:	3a) Actor cancels the action <ol style="list-style-type: none"> <li>1. User is not deleted</li> <li>2. End use case</li> </ol>



Picture 8.1 Highlighted in dark blue is the delete account button



Picture 8.2 Confirmation message to delete the account

### UC-09. Add new recipes

Both user and admin can add recipes into the application

Use case:	<b>UC-09:</b> Add new recipes
Functional Requirements	<b>FR-09</b>
Actor:	Admin, User
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor navigates to Add Recipe page</li> <li>2. System shows required fields</li> <li>3. Actor filled in required data</li> <li>4. Actor clicks on add recipe</li> <li>5. System checks input</li> <li>6. System adds recipe into database</li> <li>7. End use case</li> </ol>
Extensions:	5a) data is invalid <ol style="list-style-type: none"> <li>1. System shows error message</li> <li>2. Return to step 3</li> </ol>

The screenshot shows a desktop application window titled 'MainForm'. It has a sidebar with 'Users' and 'Recipes' buttons. The main area is divided into tabs: 'Recipes', 'Modify', and 'Create'. The 'Create' tab is active, showing a form for adding a new recipe. The form includes the following fields and sections:

- Recipe name:** Text input with 'mock recipe' entered.
- Recipe Type:** Dropdown menu with 'Maincourse' selected.
- Prep. time:** Spin box with '3' entered.
- Cooking time:** Spin box with '6' entered.
- Description:** Text area with 'mock recipe' entered.
- Ingredients:** Text area with 'mock' entered.
- Steps:** Text area with 'mock' entered.
- image:** Section with an 'Upload Image' button and 'No Image...' text.
- Main Course:** Section with a 'Cuisine type' dropdown (set to 'mock recipe'), a 'Serving' dropdown (set to 'mock'), and a 'Suggestion' dropdown.
- Dietary type(s):** Checkboxes for 'vegetarian', 'vegan', 'halal', and 'kosher'.
- Create Recipe:** A button at the bottom right of the form.
- Log out:** A button in the sidebar.

Picture 9.1 Admin creating new recipe on the desktop application

The screenshot shows a web browser window displaying the 'Recipeasy' website. The URL is 'https://localhost:7192/AddRecipe'. The page has a navigation bar with 'Home', 'Recipes', 'Add Recipe', 'Profile', and 'Log Out' links. The main content area is titled 'Add New Recipe' and contains a form with the following fields and sections:

- Recipe Name:** Text input with 'Soda pops' entered.
- Image:** Text input with 'Browse...' and 'No file selected.'
- Recipe Type:** Dropdown menu with 'Drink' selected.
- Description:** Text area with 'carbonated beverage' entered.
- Ingredients:** Text area with 'lemon zest, carbon dioxide, sugar, syrup' entered.
- Preparation Time (in minutes):** Spin box with '4' entered.
- Cooking Time (in minutes):** Spin box with '5' entered.
- Steps:** Text area with 'carbonate the water, add lemon zest, sugar, and syrup' entered.
- Alcoholic:** Checkbox (unchecked).
- Drink Type:** Text input with 'cold drink' entered.
- Glass Type:** Text input with 'normal glass' entered.
- Add Recipe:** A blue button at the bottom right of the form.

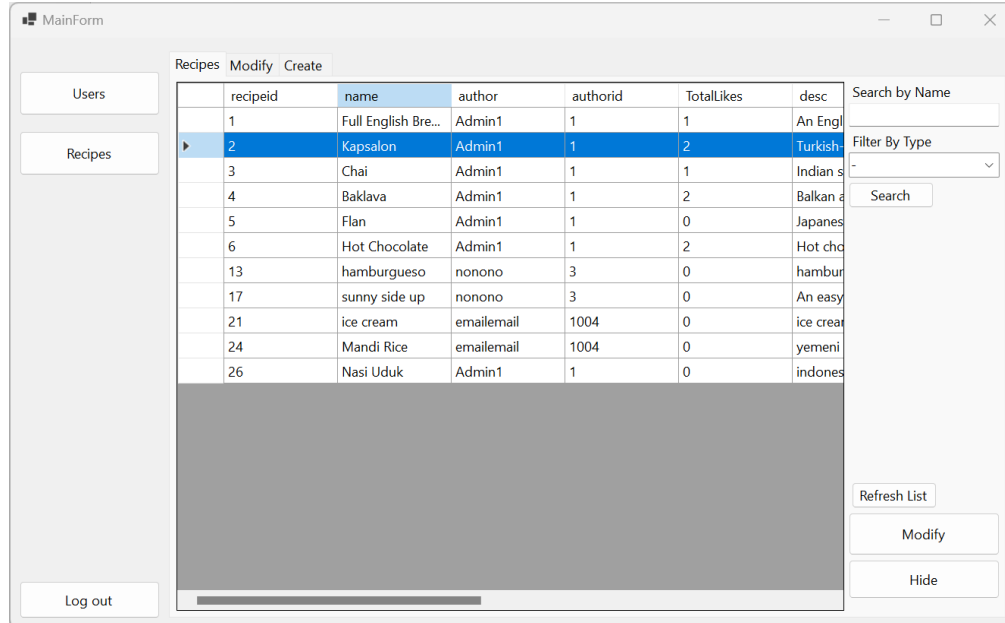
Picture 9.2 Creating recipe on the Website

### UC-10. Edit existing recipes

Both user and admin can edit recipes that they made. Admin can edit recipes that normal users made, but normal users will only able to edit recipes that they made

Use case:	<b>UC-10: Edit existing recipes</b>
Functional Requirements	<b>FR-10</b>

Actor:	Admin, User
Pre-condition:	Be logged in, On Website->Profile Page
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor selects a specific recipe to be edited</li> <li>2. System shows fields with current recipe details</li> <li>3. Actor changes details from the wanted fields.</li> <li>4. System shows confirmation message</li> <li>5. Actor confirms changes</li> <li>6. System checks input</li> <li>7. System displays that the user details has been changed</li> </ol>
Extensions:	<p>5a) Actor cancels operation</p> <ol style="list-style-type: none"> <li>1. Operation cancelled</li> <li>2. End use case</li> </ol> <p>6a) Data not valid</p> <ol style="list-style-type: none"> <li>1. System shows error</li> <li>2. Return to step 3</li> </ol>



Picture 10.1 Admin selects desired recipe to modify

The screenshot shows a Windows application window titled 'MainForm'. It has a sidebar with 'Users' and 'Recipes' buttons. The main area is divided into tabs: 'Recipes', 'Modify', and 'Create'. The 'Modify' tab is active, showing details for a recipe with 'Recipe Id' 2. The recipe name is 'Kapsalon', and the type is 'Maincourse'. It includes fields for 'Prep. time' (15) and 'Cooking time' (15). The description is 'Turkish-Dutch fusion food'. The ingredients are 'French Fries, vegetables, meat (Doner), Garlic sauce'. The steps are 'Lorem Ipsum'. There is an 'image' section with an 'Upload Image' button and the filename 'Kapsalon.jpg'. On the right, there's a 'Main Course' section with 'Cuisine type' set to 'Fusion' and 'Dietary type(s)' with checkboxes for 'vegetarian', 'vegan', 'halal' (checked), and 'kosher'. A 'Modify' button is at the bottom right, and a 'Log out' button is in the sidebar.

Picture 10.2 After selecting the recipe, admin is then redirected to the Modify User tab

The screenshot shows a web browser window with the address 'https://localhost:7192/Profile'. The page has a purple header with a 'Middle Name' field and buttons for 'Change Password', 'Update Profile', and 'Delete Account'. Below the header, there's a section titled 'Your recipes' with a list of recipes. The first recipe is 'Soda pops' by 'newAccount', described as a 'carbonated beverage' with ingredients 'lemon zest, carbon dioxide, sugar, syrup'. The 'Edit' button for this recipe is highlighted in dark grey. The footer shows '© 2024 Recipeasy' and the URL 'https://localhost:7192/RecipeDetails/Id/27'.

Picture 10.3 Highlighted in dark grey the edit button of a recipe



**Edit Recipe Details**

Recipe Name: Soda pops

Image: Browse... No file selected.

Recipe Type: Drink

Description: carbonated beverage

Ingredients: lemon zest, carbon dioxide, sugar, syrup

Preparation Time (in minutes): 4

Cooking Time (in minutes): 5

Steps: carbonate the water, add lemon zest, sugar, and syrup

Alcoholic: ☐

Drink Type: cold drink

Glass Type: normal glass

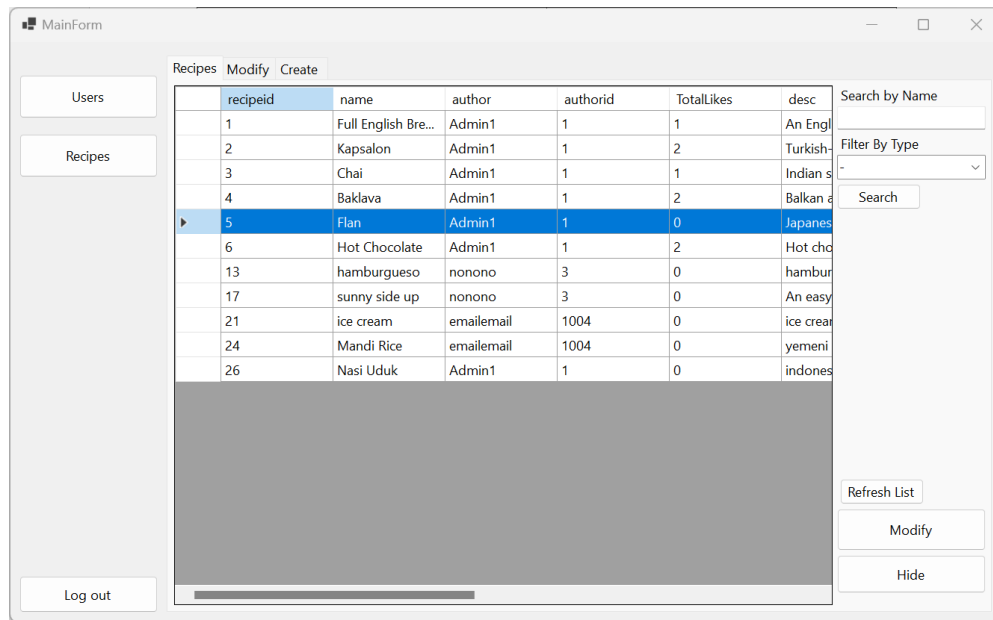
**Add Recipe**

Picture 10.4 Recipe details are filled in after clicking the edit button

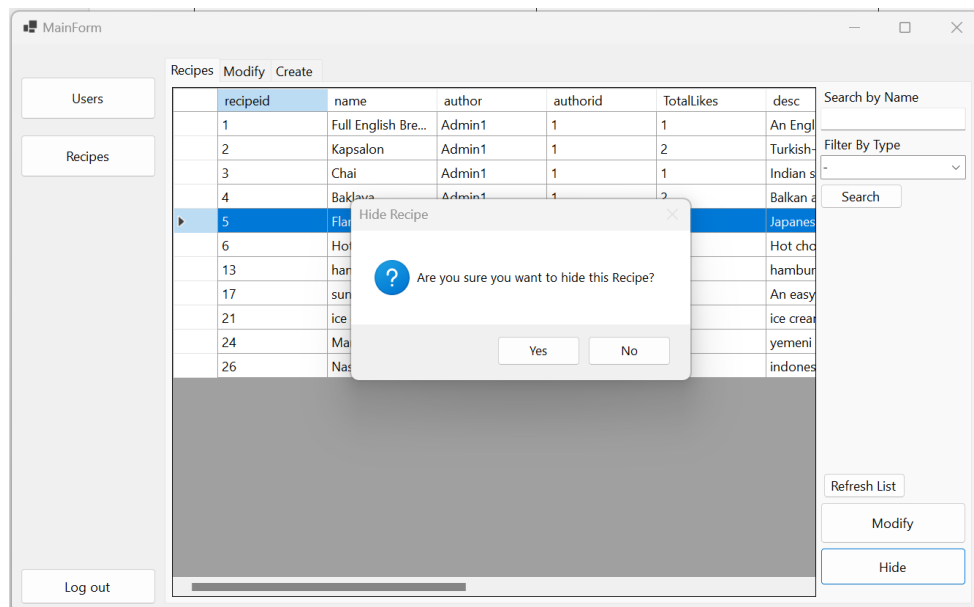
### UC-11. Delete existing recipe

Both user and admin can delete recipes that they made. Admin can delete recipes that normal users made, but normal users will only able to delete recipes that they made

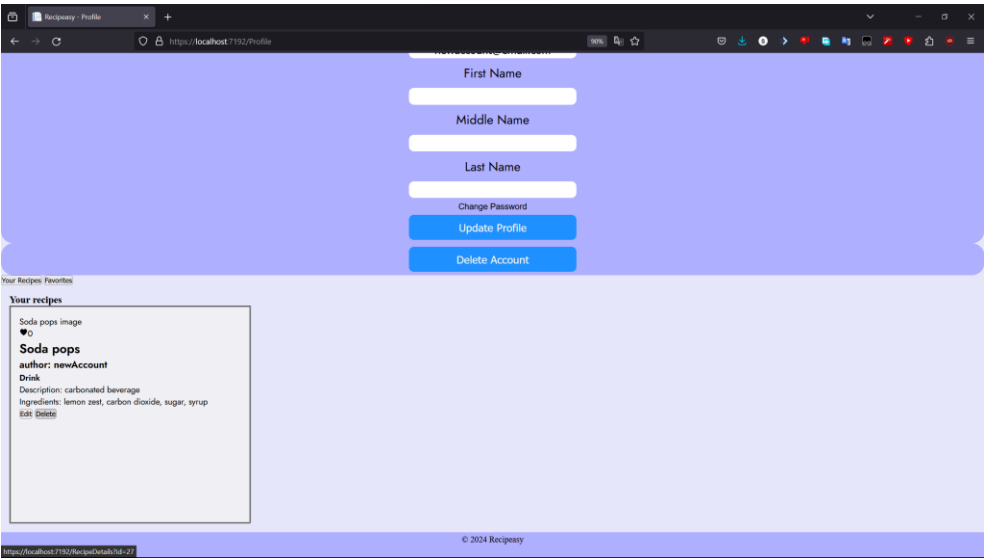
Use case:	<b>UC-11:</b> Delete existing recipe
Functional Requirements	<b>FR-11</b>
Actor:	Admin, User
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor requests to delete specific recipe</li> <li>2. System asks actor for confirmation</li> <li>3. Actor confirms</li> <li>4. System deletes recipe</li> <li>5. End use case</li> </ol>
Extensions:	3a) Actor cancels the action <ol style="list-style-type: none"> <li>1. recipe is not deleted</li> <li>2. End use case</li> </ol>



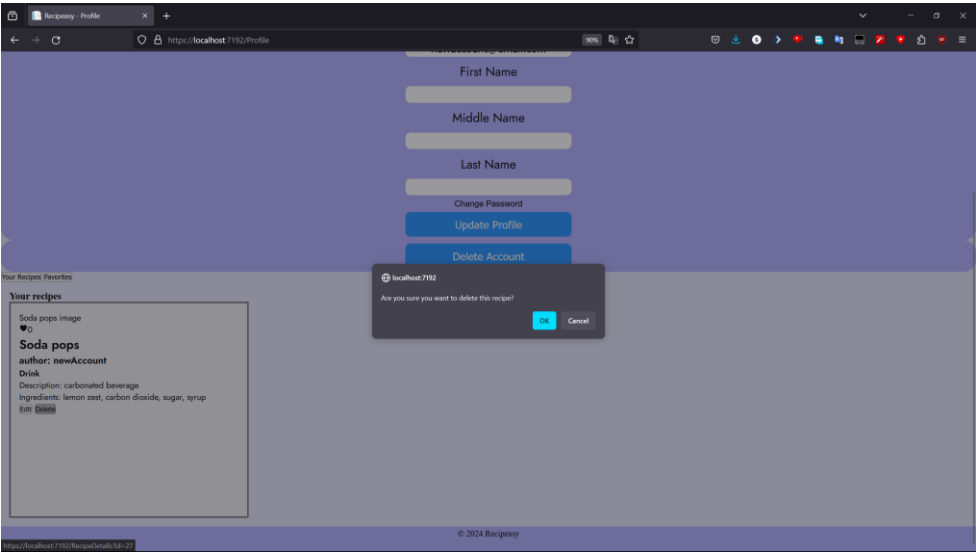
Picture 11.1 Admin selects desired recipe to Delete/hide



Picture 11.2 Confirmation message after clicking the Hide button (Bottom Right)



Picture 11.3 User can only delete their own recipe



Picture 11.4 confirmation message

**UC-12. Leave comment on recipes**

Both user and admin can leave comment(s) on any recipes

Use case:	UC-12: Leave comment on recipes
Functional Requirements	FR-12
Actor:	Admin, User
Pre-condition:	Be logged in

Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor selects a specific recipe to comment on</li> <li>2. System shows Recipe Details along with all previous comments</li> <li>3. Actor fills the comment box</li> <li>4. Actor clicks on Send Comment button</li> <li>5. System checks user input</li> <li>6. System stores comment in the database</li> <li>7. System shows comment on Details Page</li> <li>8. End Use Case</li> </ol>
Extensions:	<p>5a) invalid input</p> <ol style="list-style-type: none"> <li>1. System shows error message</li> <li>2. Return to step 3</li> </ol>

Cuisine Type: Fusion

**Compatible with:**  
Halal  
Gluten Free  
Lactose Free

**Suggestion for Recipe:**

**Steps:**  
Lorem Ipsum

**Comments**

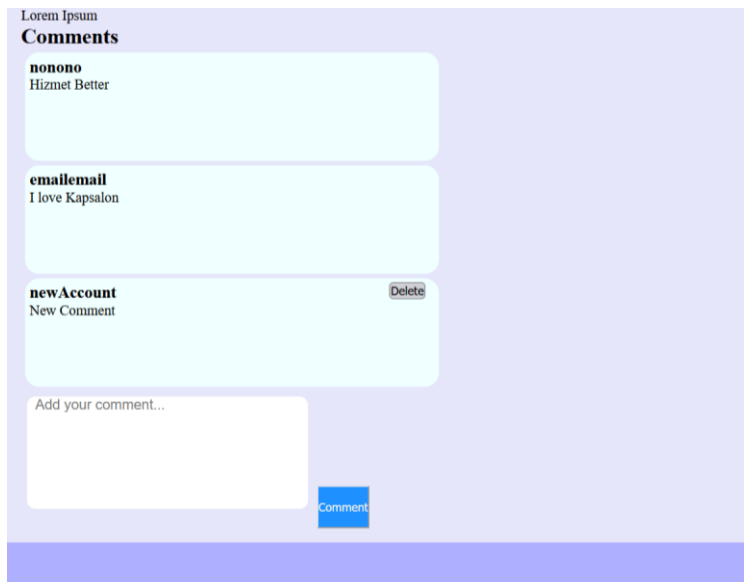
**nonono**  
Hizmet Better

**email@mail**  
I love Kapsalon

New Comment

Comment

Picture 12.1 Comment box (white background)

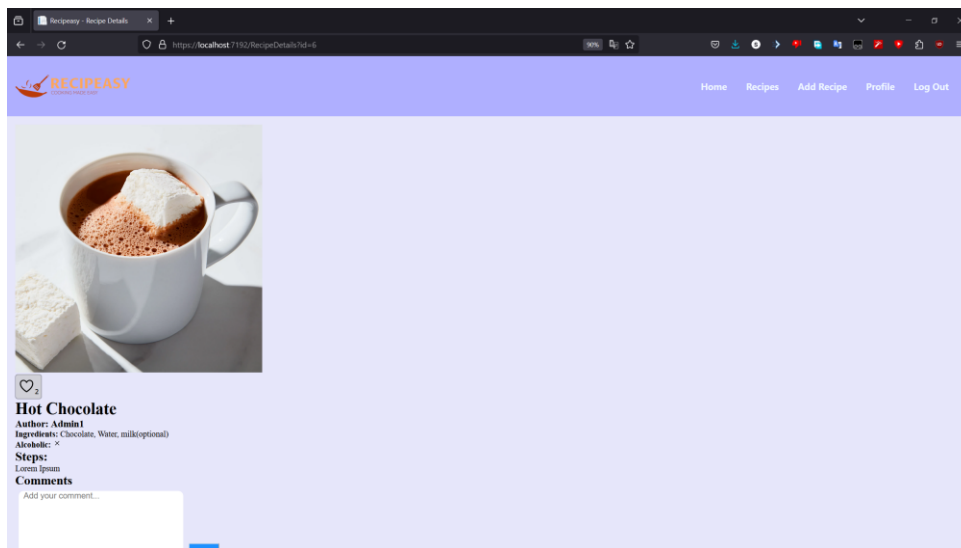


Picture 12.2 New comment added on the recipe

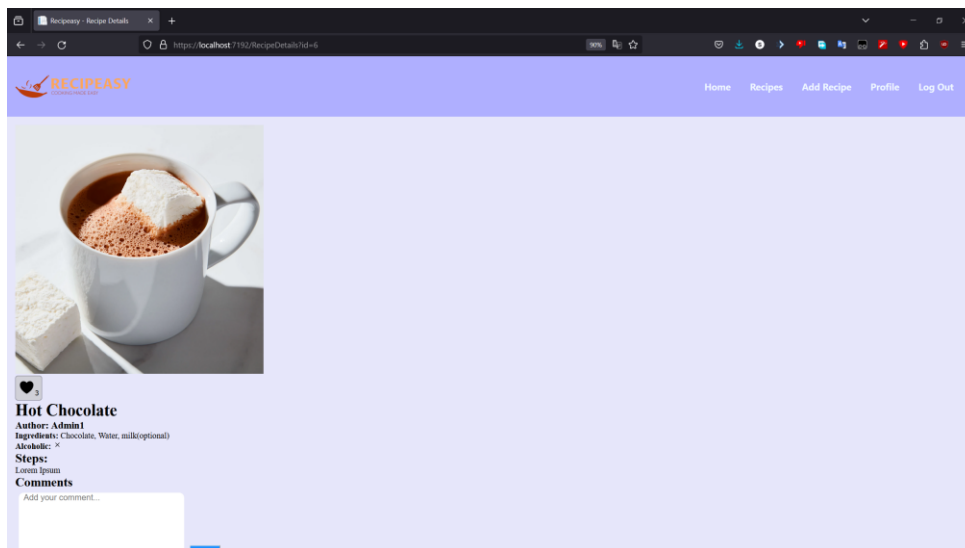
### UC-13. Add recipe to favorites

Both user and admin can add any recipes to their favorites

Use case:	<b>UC-13: Add recipe to Favorite</b>
Functional Requirements	<b>FR-13</b>
Actor:	Admin, User
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor selects a specific recipe to comment on</li> <li>2. System shows Recipe Details and the number of likes for the given recipe</li> <li>3. Actor clicks on the heart button</li> <li>4. System stores users like in the database</li> <li>5. System shows new number of likes for the given recipe</li> <li>6. End use case</li> </ol>
Extensions:	<p>3a) Actor clicks on the heart button again (dislike the recipe)</p> <ol style="list-style-type: none"> <li>1. System removes like of user</li> <li>2. System shows new number of likes for the given recipe</li> <li>3. End use case</li> </ol>



Picture 13.1 User has not liked the recipe. The heart is only outlined



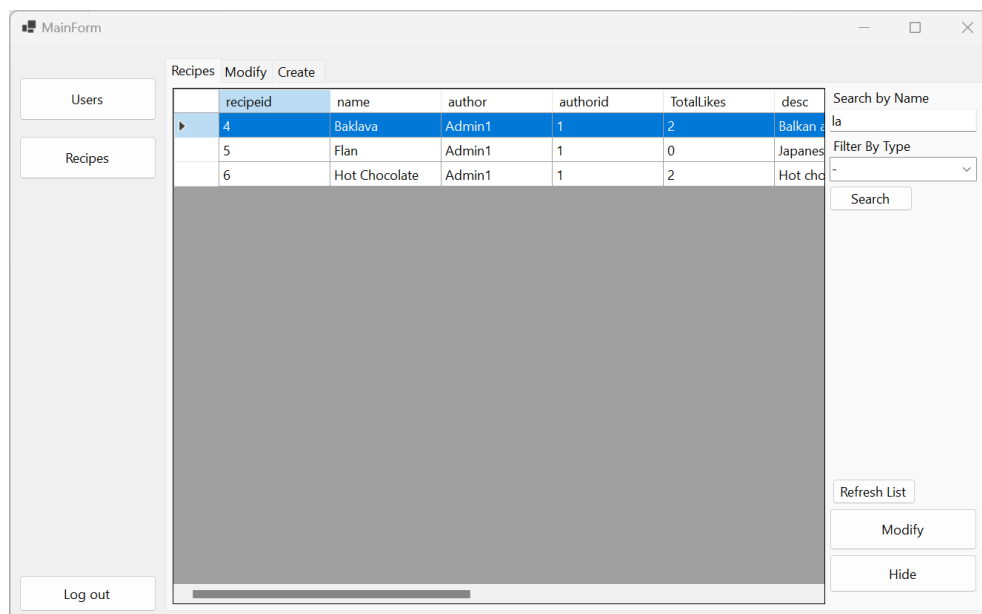
Picture 13.2 User has not liked the recipe. The heart is only outlined

#### UC-14. Search recipe by name

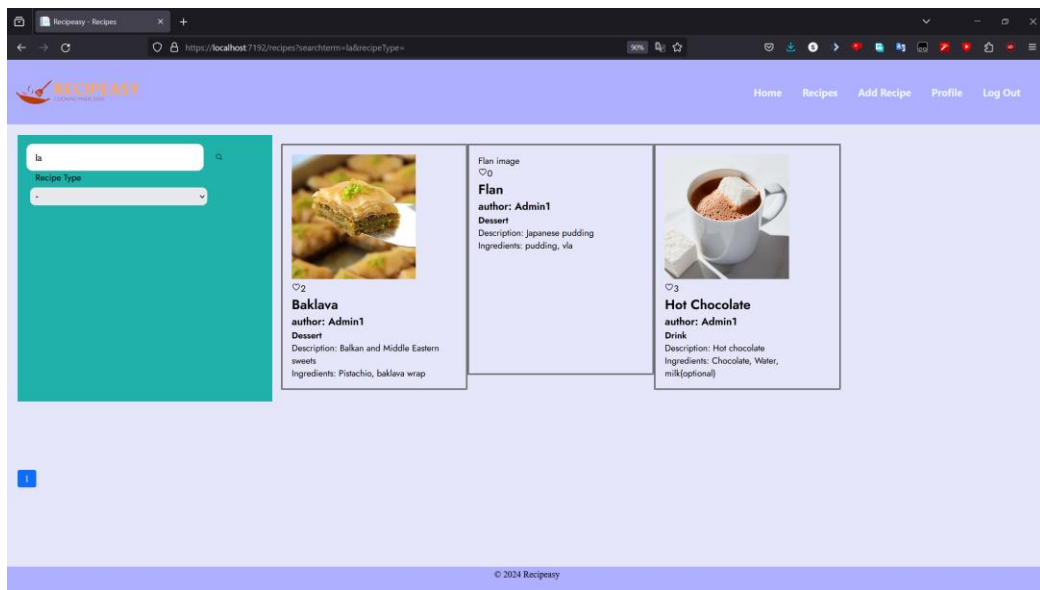
Both user and admin can search for specific recipes by name

Use case:	<b>UC-14: Search recipe by name</b>
Functional Requirements	<b>FR-14</b>
Actor:	Admin, User
Pre-condition:	Be logged in

Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor fills search box with specific keyword</li> <li>2. Actor clicks on the search button</li> <li>3. System filters recipe by name to get relevant recipes</li> <li>4. System shows relevant recipes to user</li> <li>5. End use case</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1a) Search box is empty <ol style="list-style-type: none"> <li>1. System removes all filters and show all recipes</li> <li>2. End use case</li> </ol> </li> </ol>



Picture 14.1 DataGrid only show recipes that contains “la” as written in the search box (Top Right)



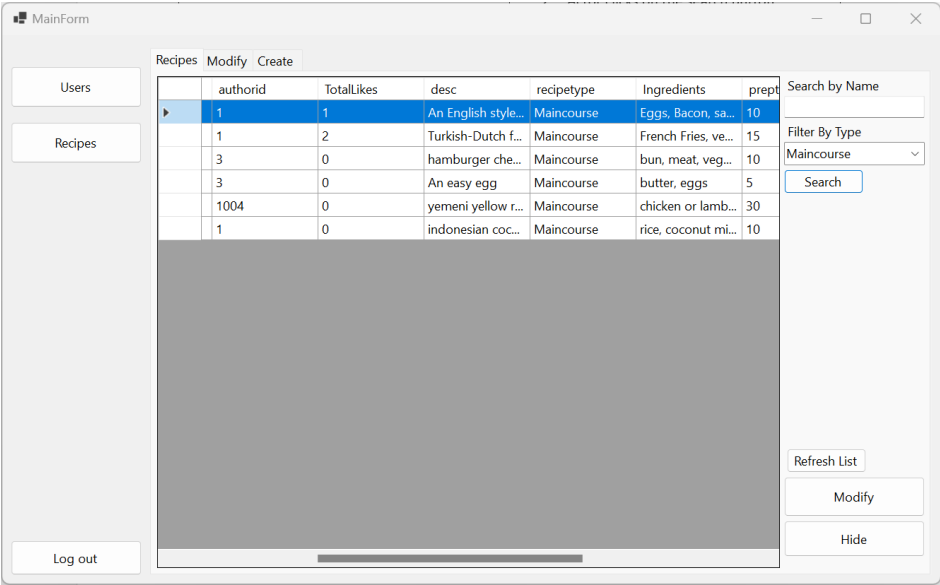
Picture 14.1 Recipes page only shows recipes that contains “la” as written in the search box (Top Left)

### UC-15. Filter by type

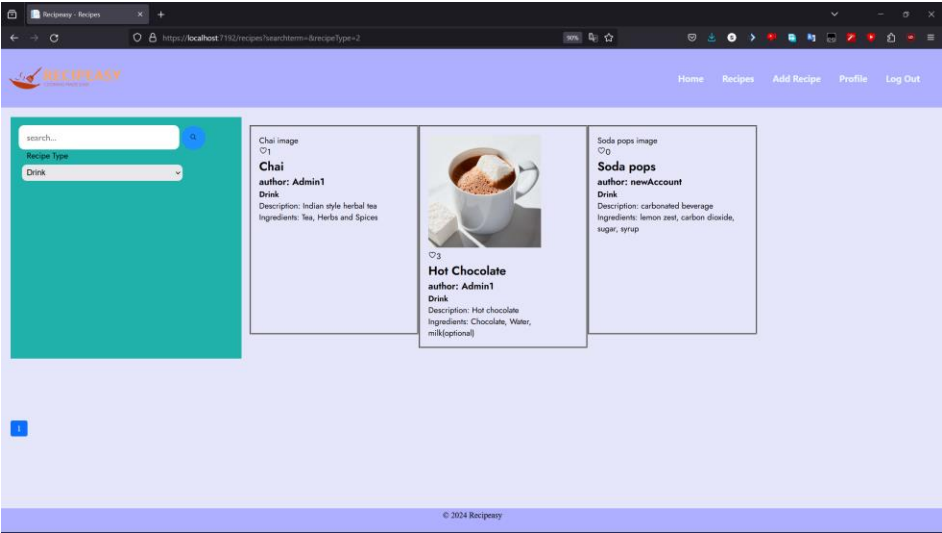
Both user and admin can filter recipes by the type of recipe they want to see

Use case:	<b>UC-15: Filter by type</b>
Functional Requirements	<b>FR-15</b>
Actor:	Admin, User
Pre-condition:	Be logged in
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor selects a specific recipe type that desired</li> <li>2. Actor clicks on the search button</li> <li>3. System filters recipe by type to get relevant recipes</li> <li>4. System shows relevant recipes to user</li> <li>5. End use case</li> </ol>
Extensions:	<p>1a)Filter Type is empty</p> <ol style="list-style-type: none"> <li>1. System removes all filters and show all recipes</li> <li>2. End use case</li> </ol>





Picture 15.1 DataGrid only show recipes that is the same recipe type as the filter (Top Right under search bar)



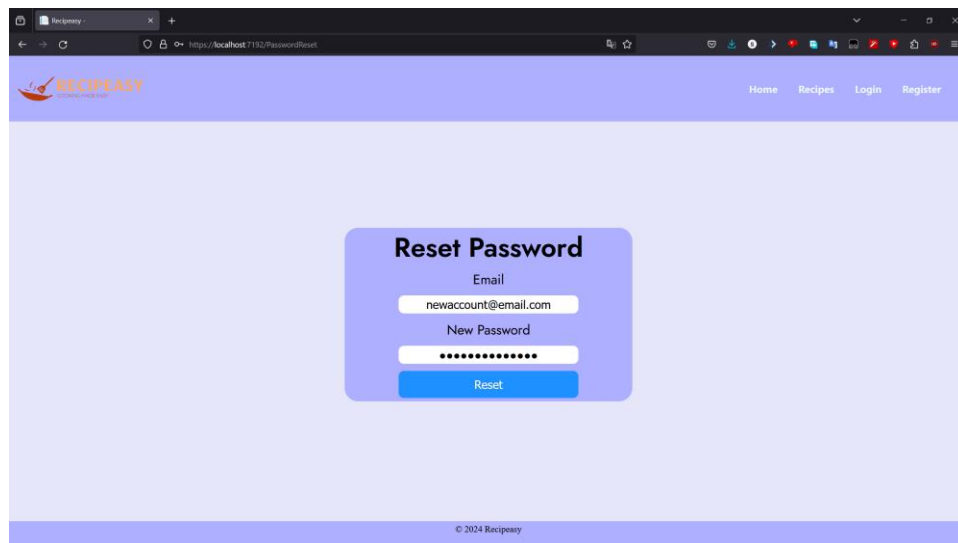
Picture 15.2 Website only show recipes that is the same recipe type as the filter (Left Middle)

**UC-16. User changes password**

Users can change their password by filling their email address and new Password in the reset password page

Use case:	<b>UC-16: User changes password</b>
Functional Requirements	<b>FR-16</b>
Actor:	User

Pre-condition:	-
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Actor navigates to reset password page</li> <li>2. System shows necessary fields to fill in</li> <li>3. Actor fills required fields</li> <li>4. Actor clicks on submit button</li> <li>5. System checks user input</li> <li>6. System resets password</li> <li>7. Actor is redirected to the Login Page</li> <li>8. End use case</li> </ol>
Extensions:	6a) Data not valid <ol style="list-style-type: none"> <li>1. System shows error message</li> <li>2. Return to step 3</li> </ol>



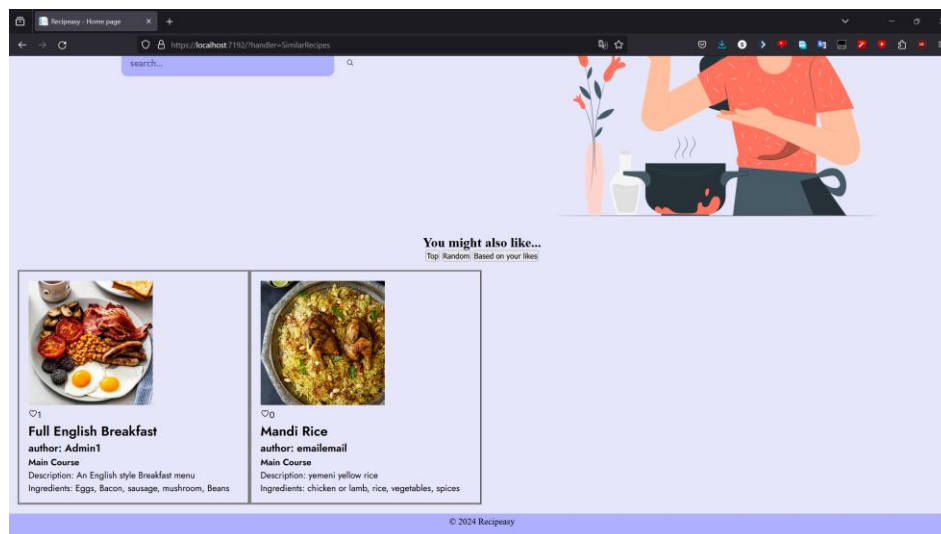
Picture 16.1 Password reset using email

### UC-17. System recommends recipes

System will recommend recipes based on the selected preference by the user

Use case:	<b>UC-17: System recommends recipes</b>
Functional Requirements	<b>FR-17</b>
Actor:	Admin, User
Pre-condition:	Be logged in (optional)

Main Success Scenario:	<ol style="list-style-type: none"> <li>1. System checks if user is logged in</li> <li>2. System shows recommendation preferences</li> <li>3. Actor clicks on Recommend “Based on your likes” button</li> <li>4. System checks user’s favorite recipes</li> <li>5. System shows recommended recipes based on user’s preference</li> <li>6. End use case</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1a) User is not logged in <ol style="list-style-type: none"> <li>1. System will not show “Based on your likes” button</li> <li>2. End use case</li> </ol> </li> <li>3a) User selects “Top Recipes” button <ol style="list-style-type: none"> <li>1. System will recommend recipes based on the numbers of likes</li> <li>2. End use case</li> </ol> </li> <li>3b) User selects “Random” button <ol style="list-style-type: none"> <li>1. System will recommend random recipes</li> <li>2. End use case</li> </ol> </li> <li>4a) User don’t have any favorited recipes <ol style="list-style-type: none"> <li>1. System will show a message saying “There are no recipes that can be recommended”</li> <li>2. End use</li> </ol> </li> </ol>



Picture 17.1 System shows recipes that can be recommended based on the user’s liking