

Recipe Management Application

How to Compile and Run the Software

1. Prerequisites:

- Visual Studio 2019 or later
- .NET Framework 4.7.2 or later

2. Compilation:

- Open the solution file (RecipeManagementApp.sln) in Visual Studio.
- In the Solution Explorer, right-click on the solution and select "Restore NuGet Packages".
- From the menu, select Build > Build Solution (or press F6).

3. Running the Application:

- In Visual Studio, press F5 or select Debug > Start Debugging from the menu.
- Alternatively, navigate to the bin/Debug folder in the project directory and run RecipeManagementApp.exe.

Changes Made

The Recipe Management Application has been transformed from a console-based program to a graphical user interface (GUI) application using Windows Presentation Foundation (WPF). This change significantly improves user experience and accessibility.

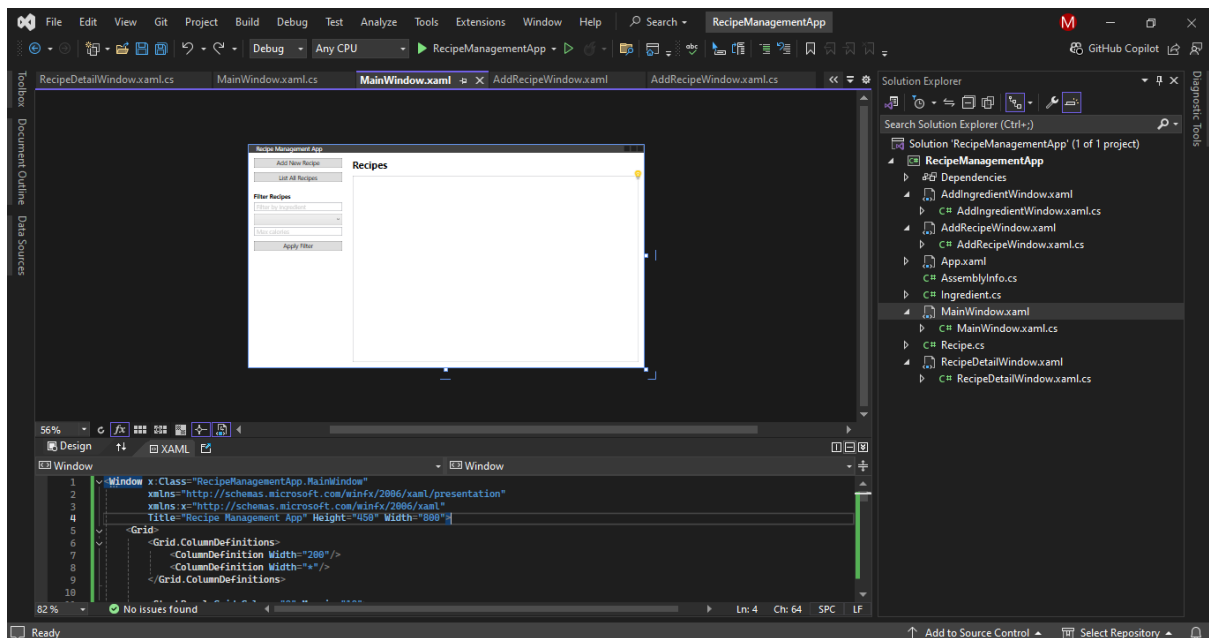
Key modifications include:

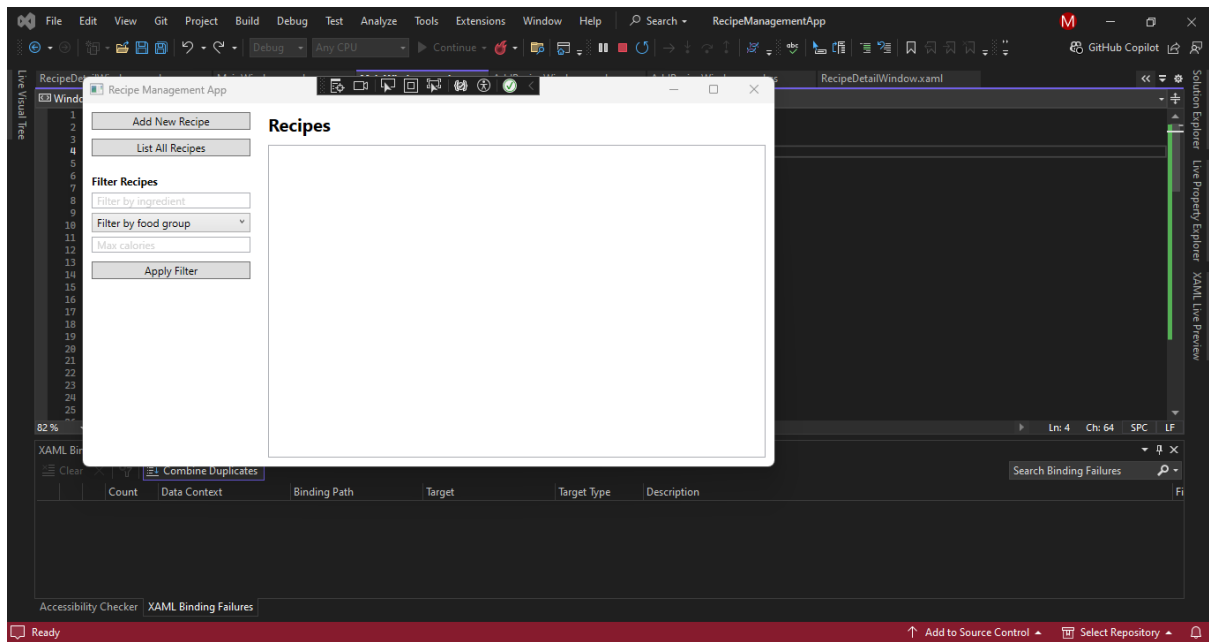
1. Implementation of a main window with intuitive controls for adding recipes, listing all recipes, and filtering recipes.
2. Addition of separate windows for adding new recipes and viewing recipe details.
3. Introduction of a filtering system allowing users to filter recipes by ingredient, food group, and maximum calories.
4. Enhanced visual presentation of recipes and their details.
5. Improved error handling and user feedback throughout the application.

These changes make the application more user-friendly and efficient for managing recipes, while maintaining all the core functionalities of the original console application.

User Manual

Main Window



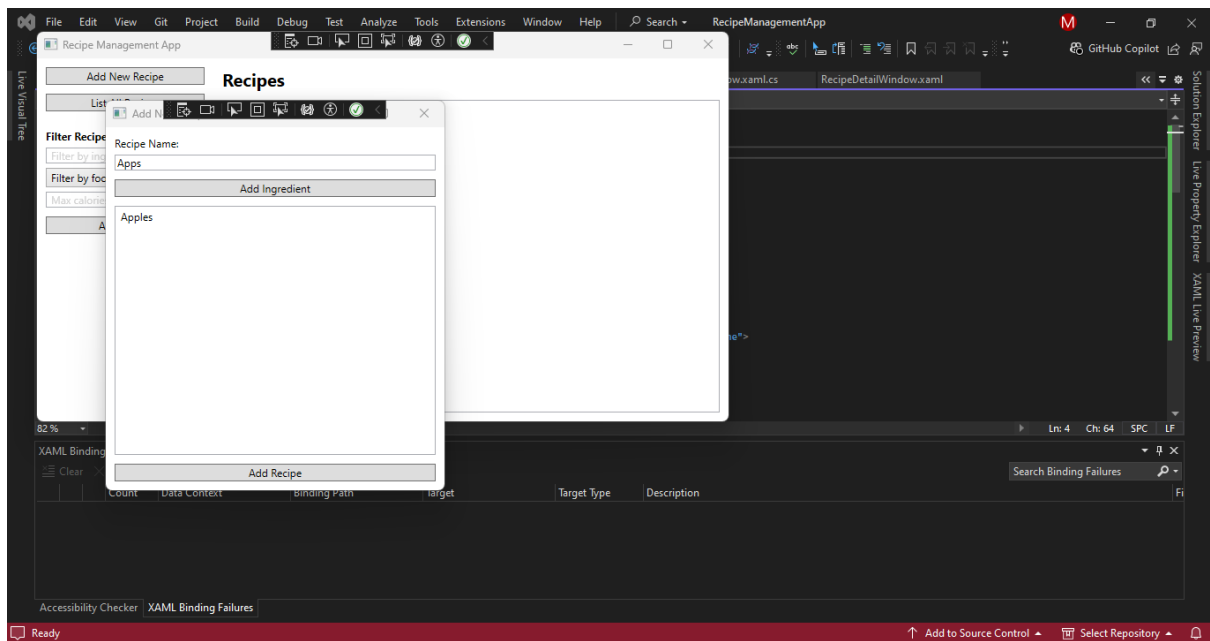
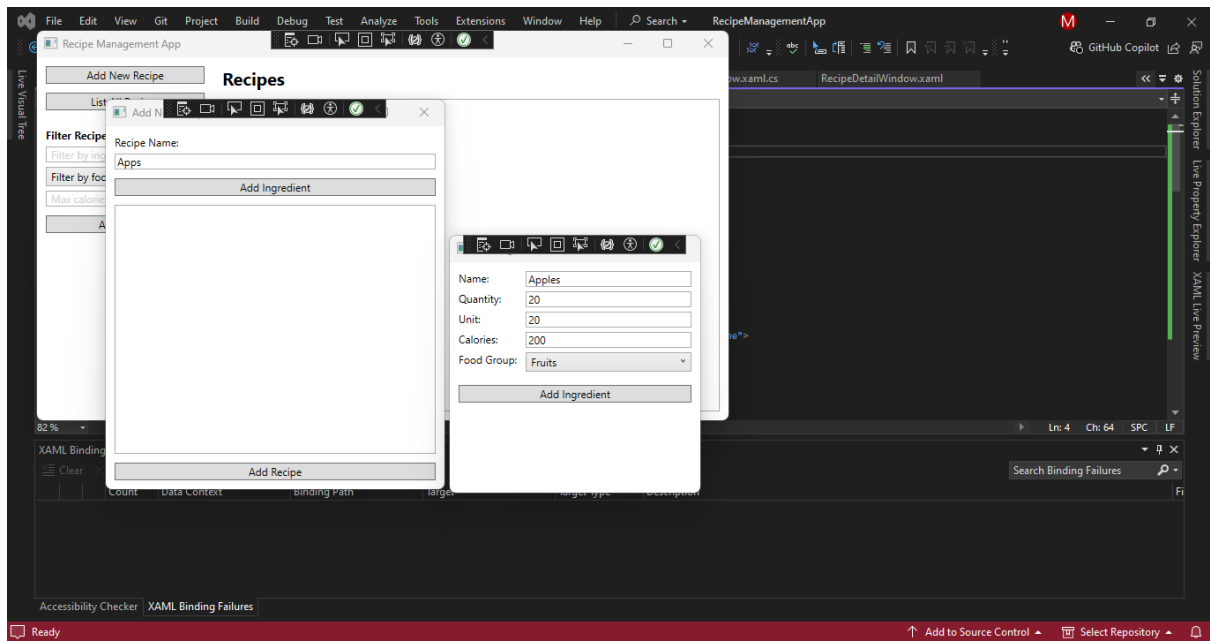


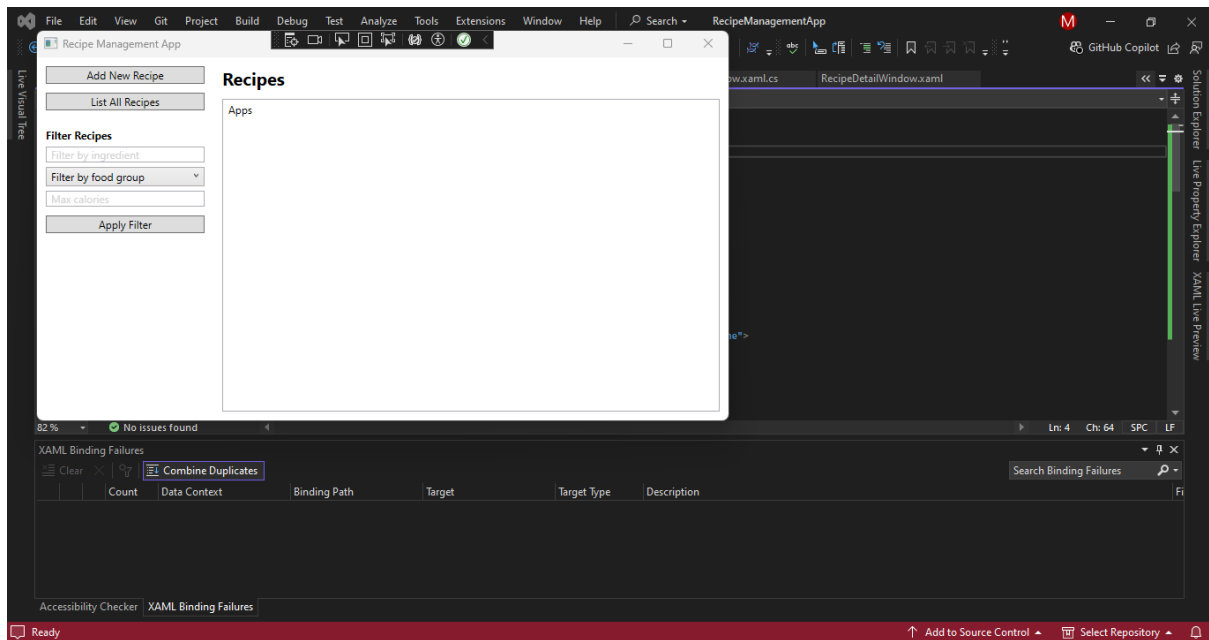
The main window of the Recipe Management Application consists of two main sections:

1. Left Panel: Controls for managing and filtering recipes
2. Right Panel: List of recipes

Adding a New Recipe

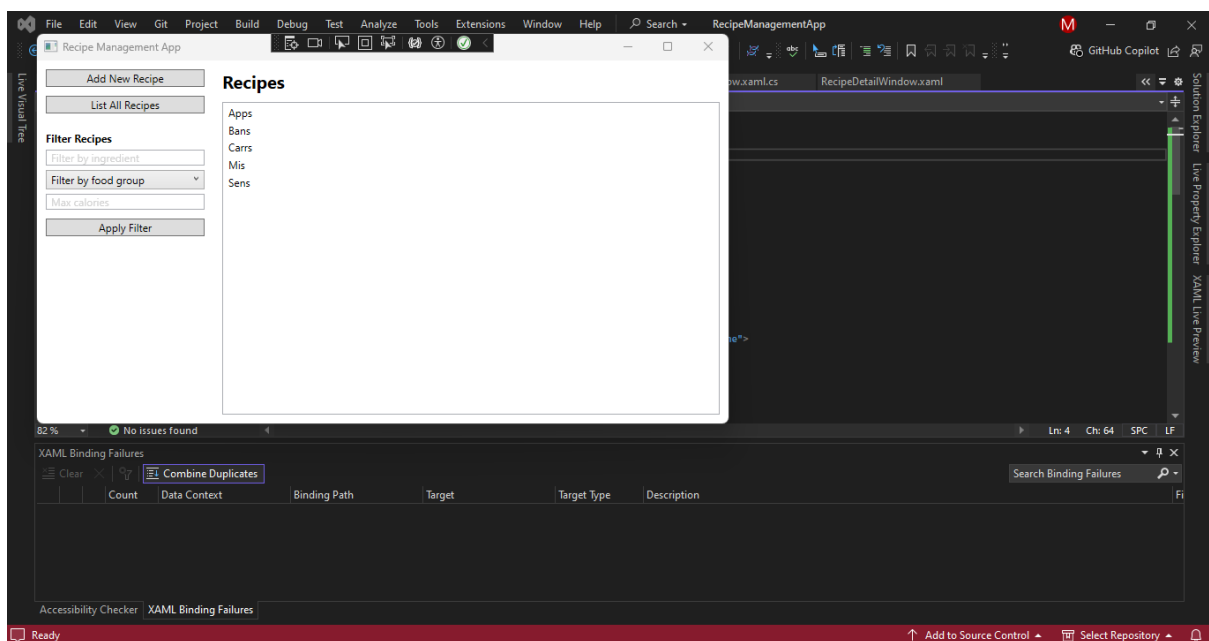
1. Click the "Add New Recipe" button in the left panel.
2. A new window will open for entering recipe details.





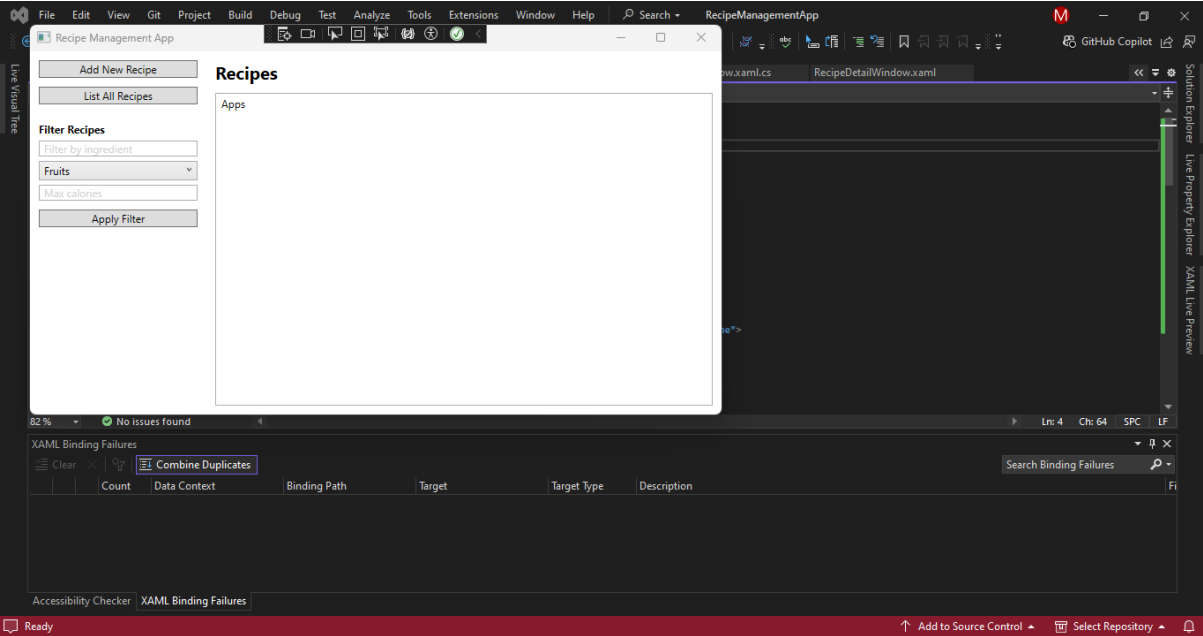
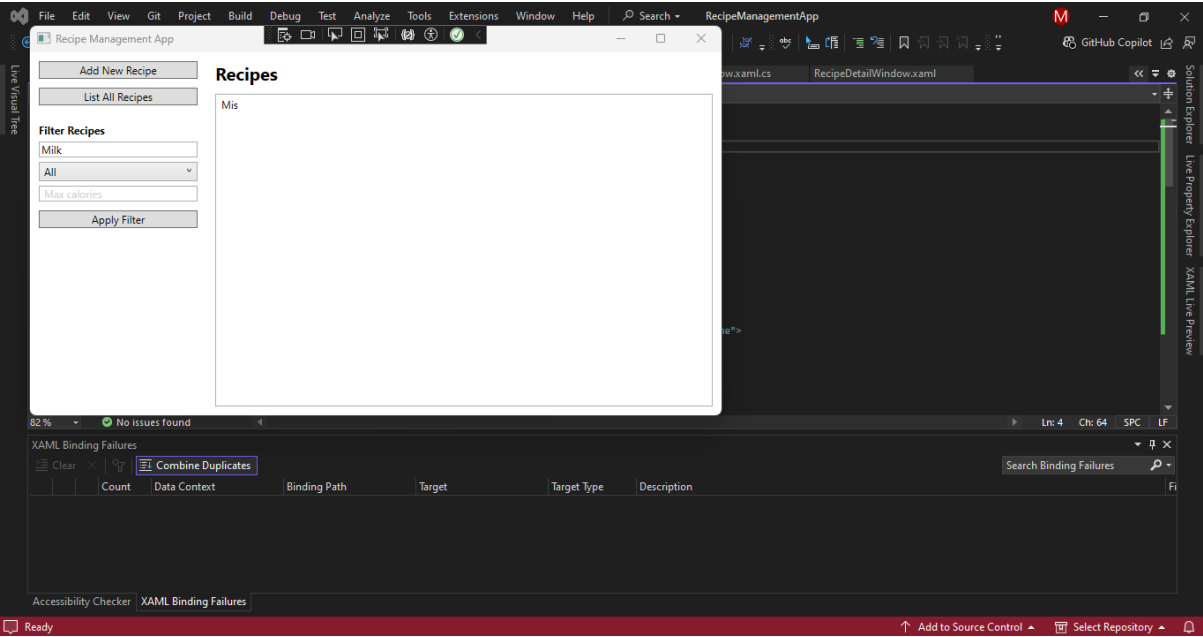
3. Enter the recipe name.
4. Add ingredients by clicking the "Add Ingredient" button and filling in the details in the pop-up window.
5. Add preparation steps in the provided text area.
6. Click "Save Recipe" to add the recipe to your collection.

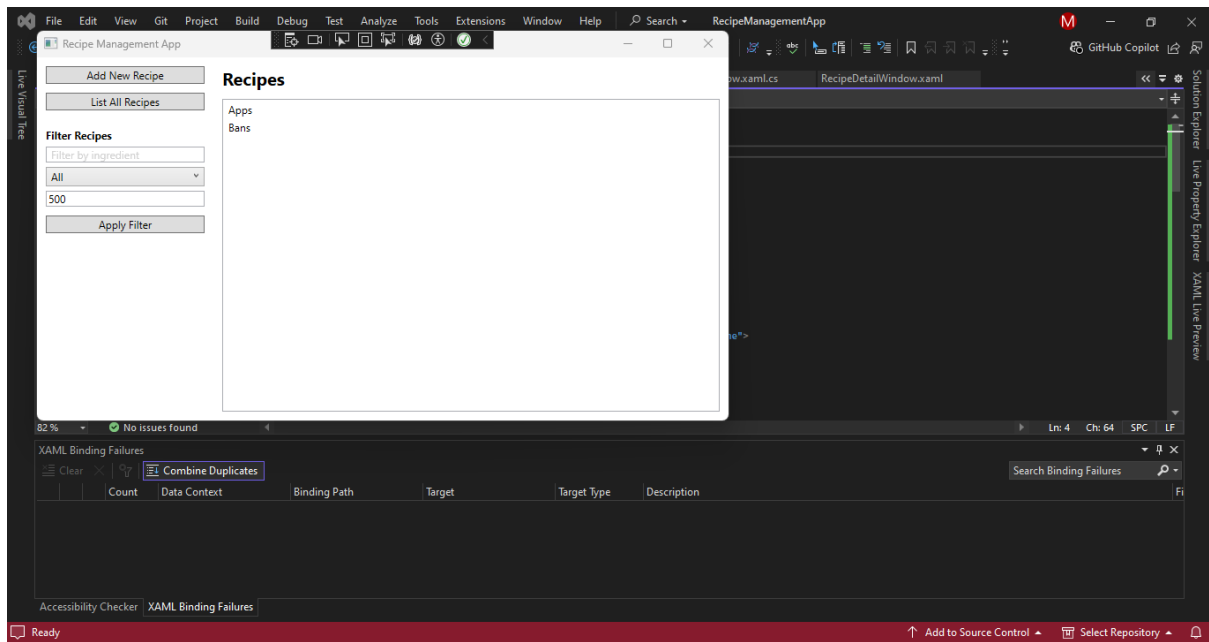
Listing All Recipes



- Click the "List All Recipes" button to display all recipes in alphabetical order.

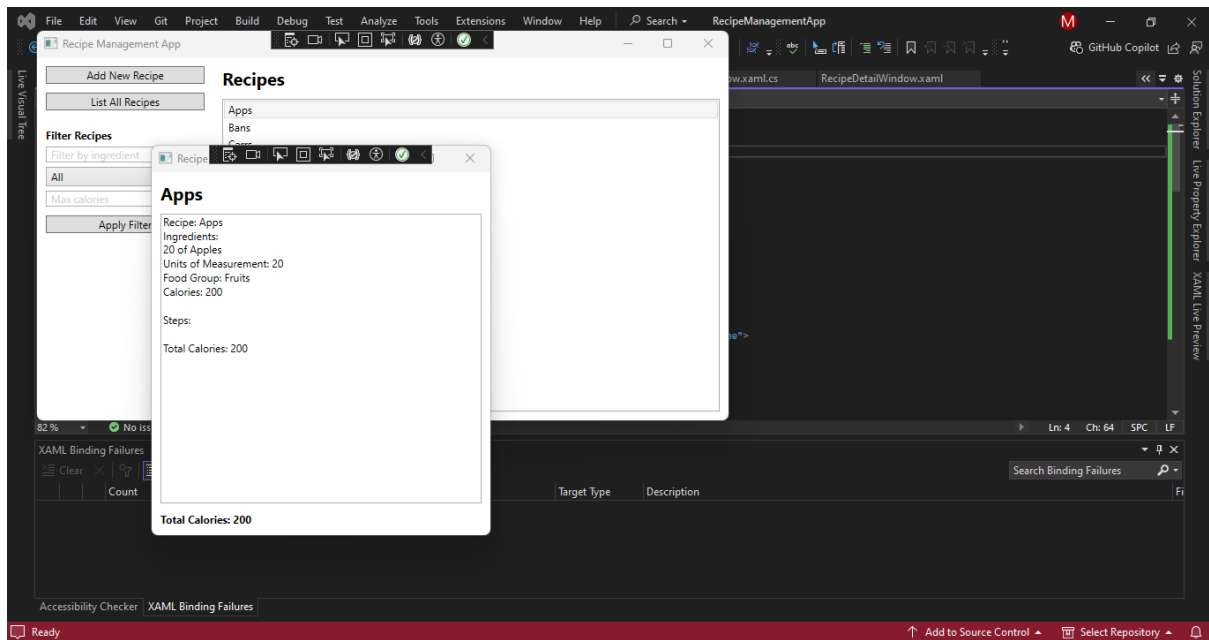
Filtering Recipes





1. Enter an ingredient name in the "Filter by ingredient" text box to find recipes containing that ingredient.
2. Select a food group from the dropdown menu to filter recipes by food group.
3. Enter a maximum calorie value in the "Max calories" text box to filter recipes below that calorie count.
4. Click the "Apply Filter" button to apply the selected filters.

Viewing Recipe Details



1. Select a recipe from the list in the right panel.
2. A new window will open, displaying the full details of the selected recipe.

Recipe Details Window

This window shows:

- Recipe name
- List of ingredients with quantities and units
- Preparation steps
- Total calorie count

Tips for Using the Application

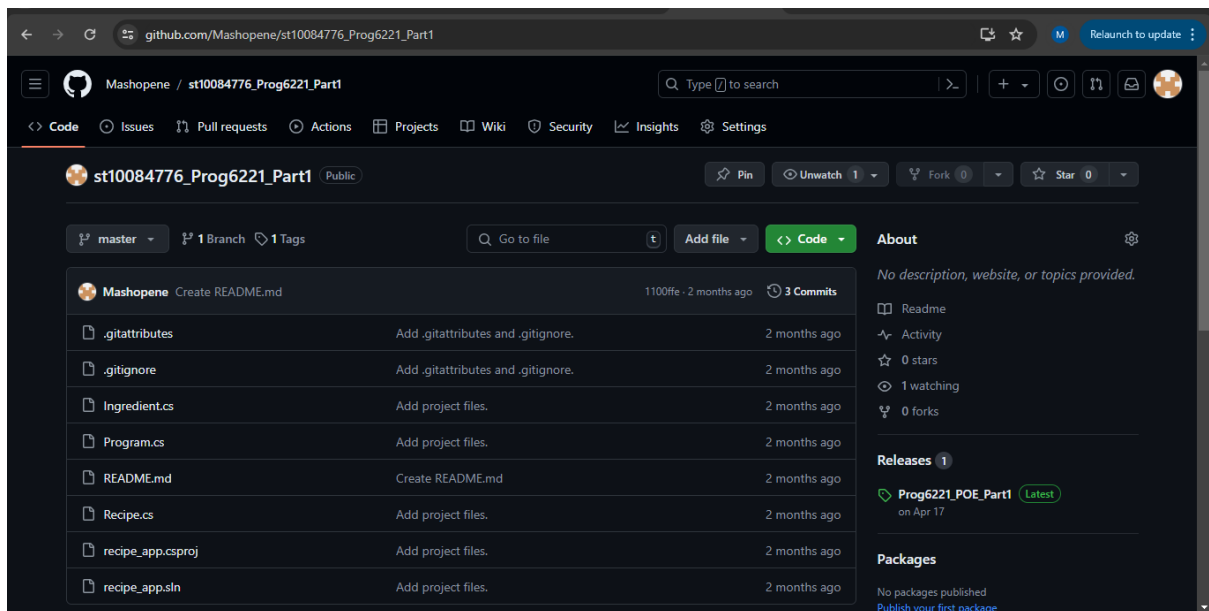
1. You can combine multiple filter criteria to refine your recipe search.
2. Clear all filters by clicking "List All Recipes".
3. The recipe list updates automatically when you add a new recipe.
4. Make sure to click "Apply Filter" after setting your filter criteria.

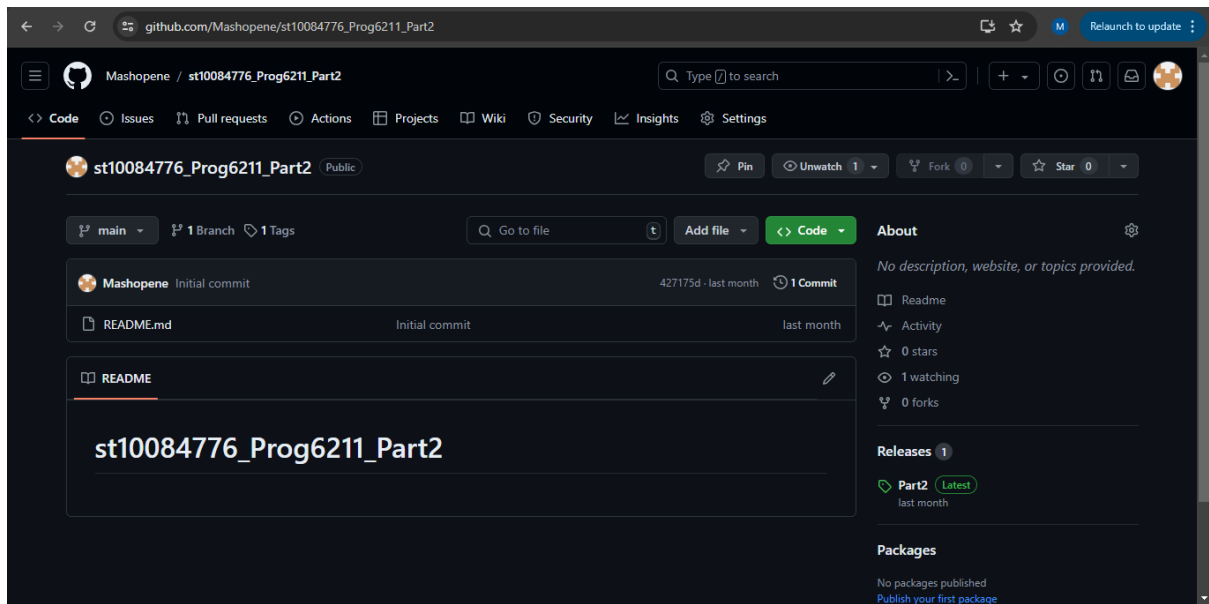
5. You can add as many ingredients and steps as needed for each recipe.

Error Handling

- The application will display error messages if you try to:
 - Add a recipe without a name
 - Add an ingredient without all required information
 - Enter invalid data (e.g., non-numeric values for quantities or calories)

Commit History Leading Up To The POE





- Commit History showing Part 1 and Part 2 leading up to the final POE

Conclusion

The Recipe Management Application provides an easy-to-use interface for managing your recipe collection. With features like adding detailed recipes, quick filtering, and clear recipe displays, it's designed to make your cooking and meal planning more efficient and enjoyable.

Github Repository Link

<https://github.com/Mashopene/POE>