# Recipe App

A Windows Presentation Foundation (WPF) application for managing and displaying recipes. This app allows users to add recipes, display them, and filter them based on ingredients, food groups, or calorie count. Users can also see the total calories of a recipe and receive a warning if it exceeds 300 calories.

## Features

- Add new recipes with ingredients and steps.

- Display a list of recipes with details.

- Filter recipes by:

- Ingredient name

- Food group

- Maximum calories

## Prerequisites

- [.NET SDK](https://dotnet.microsoft.com/download) (version 6.0 or later)

- Visual Studio 2019 or later (with WPF support)

## Installation

1. \*\*Install the .NET SDK:\*\*

- Go to the [.NET download page](https://dotnet.microsoft.com/download) and download the latest SDK installer for your operating system.

- Follow the instructions to install the .NET SDK.

2. \*\*Clone the Repository:\*\*

- Open a terminal or command prompt.

- Run the following command to clone the repository:

```

git clone <repository-url>

```

- Replace `<repository-url>` with the URL of your repository.

3. \*\*Open the Project:\*\*

- Open Visual Studio.

- Select "Open a project or solution".

- Navigate to the cloned repository folder and select the `.sln` file.

## Usage

1. \*\*Run the Application:\*\*

- Press `F5` in Visual Studio to build and run the application.

2. \*\*Add a Recipe:\*\*

- Click the "Add Recipe" button.

- Enter the recipe name, ingredients, and steps in the pop-up windows.

- Click "Save Recipe" to save the recipe.

3. \*\*Display Recipes:\*\*

- Click the "Display Recipes" button to see a list of all recipes.

- Select a recipe to see its details.

4. \*\*Filter Recipes:\*\*

- Enter an ingredient name, select a food group, or enter a maximum number of calories in the filter section.

- Click the "Filter Recipes" button to see the filtered list of recipes.

## Code Structure

- `MainWindow.xaml`: Defines the main UI layout.

- `MainWindow.xaml.cs`: Contains the code-behind for the main window, handling UI interactions and data manipulation.

- `AddRecipeWindow.xaml`: Defines the UI for adding a new recipe.

- `AddRecipeWindow.xaml.cs`: Contains the code-behind for the Add Recipe window.

- `IngredientWindow.xaml`: Defines the UI for adding a new ingredient.

- `IngredientWindow.xaml.cs`: Contains the code-behind for the Add Ingredient window.

- `StepWindow.xaml`: Defines the UI for adding a new step.

- `StepWindow.xaml.cs`: Contains the code-behind for the Add Step window.

## Contributing

1. Fork the repository.

2. Create a new branch (`git checkout -b feature-branch`).

3. Make your changes.

4. Commit your changes (`git commit -am 'Add new feature'`).

5. Push to the branch (`git push origin feature-branch`).

6. Create a new Pull Request.

## License

This project is licensed under the MIT License. See the `LICENSE` file for details.

## Acknowledgements

- The .NET Foundation

- Microsoft for developing WPF and Visual Studio