Tipplify UWP C++/CX Project Documentation

1. Introduction: The Tipplify project is a Universal Windows Platform (UWP) application developed using C++/CX. It is designed for managing and displaying various cocktail recipes. The project includes multiple files, each serving a specific purpose in the application's functionality.

2.Files:

- **2.1. MainPage.xaml:** The MainPage.xaml file defines the main user interface structure using XAML. It includes a grid layout with sections for adding recipes, a toggle button to expand/collapse the recipe addition panel, and a scrollable panel for displaying a list of recipes.
- **2.2. MainPage.xaml.cpp:** The MainPage.xaml.cpp file contains the C++/CX code-behind for MainPage.xaml. It handles the initialization of the main page and provides functions for changing content and navigating to other pages.
- **2.3. MainPage.xaml.h:** The MainPage.xaml.h file declares the MainPage class and its methods. It includes declarations for functions such as **ChangeContent**, **NavToMain**, and the MainPage constructor.
- **2.4. SelectionPage.xaml:** The SelectionPage.xaml file defines the user interface for the selection page, including a recipe addition panel, a toggle button, and a scrollable panel for displaying a list of recipes.
- **2.5. SelectionPage.xaml.cpp:** The SelectionPage.xaml.cpp file contains the C++/CX code-behind for SelectionPage.xaml. It handles the initialization of the selection page, loading recipes, and managing user interactions.
- **2.6. SelectionPage.xaml.h:** The SelectionPage.xaml.h file declares the SelectionPage class and its methods. It includes declarations for functions such as **ChangeRecipe**, **ExpandRecipe_click**, **LoadRecipes**, **AddRecipe**, and others.
- **2.7. WelcomePage.xaml:** The WelcomePage.xaml file defines the user interface for the welcome page, including an image, text blocks, and a button to navigate to the main page.
- **2.8. WelcomePage.xaml.cpp:** The WelcomePage.xaml.cpp file contains the C++/CX code-behind for WelcomePage.xaml. It handles the initialization of the welcome page and navigation to the main page.
- **2.9. WelcomePage.xaml.h:** The WelcomePage.xaml.h file declares the WelcomePage class and its methods. It includes a declaration for the **NavToMain** function.

3. Project Functionality:

- **3.1. Recipe Class:** The Recipe class is defined in SelectionPage.xaml.h and represents a cocktail recipe with properties such as Name, Description, Ingredients, and PhotoPath.
- **3.2. LoadRecipes Function:** The **LoadRecipes** function in SelectionPage.xaml.cpp reads JSON files containing recipe information from the local folder and populates the UI with recipe buttons.

- **3.3. ChangeRecipe Function:** The **ChangeRecipe** function in SelectionPage.xaml.cpp handles the event when a recipe button is clicked, allowing the user to view detailed information about a selected recipe on the main page.
- **3.4.** AddRecipe Function: The AddRecipe function in SelectionPage.xaml.cpp adds a new recipe to the local storage based on user input in the recipe addition panel.
- **3.5. ExpandRecipe_click Function:** The **ExpandRecipe_click** function in SelectionPage.xaml.cpp expands or collapses the recipe addition panel based on user interaction.
- **3.6. WelcomePage Functionality:** The WelcomePage.xaml.cpp file includes a **NavToMain** function that navigates the user to the main page when the "Jasne!" button is clicked.
- **4. Database Connectivity (commented out):** Database connectivity code using MySQL is commented out in SelectionPage.xaml.cpp. The code includes functions to connect to a MySQL database, but it is not actively used in the current project.
- **5. Project Flow:** The application starts with the WelcomePage, where users can navigate to the main page containing the list of recipes. Users can add new recipes, view detailed information about a recipe, and collapse/expand the recipe addition panel.
- **6. Conclusion:** The Tipplify project is a UWP application that provides a user-friendly interface for managing cocktail recipes. It utilizes C++/CX for the backend logic, XAML for the user interface, and includes functionality for adding, viewing, and interacting with recipes.

Note: This documentation provides an overview of the project's structure, functionality, and purpose. It can be used as a reference for understanding the codebase and making future modifications or enhancements to the application.