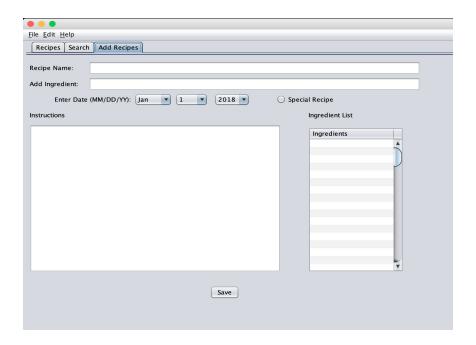
# **Criterion B - Solution Overview**

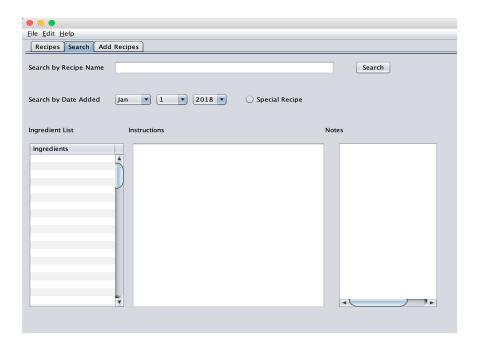
## Input and Output List

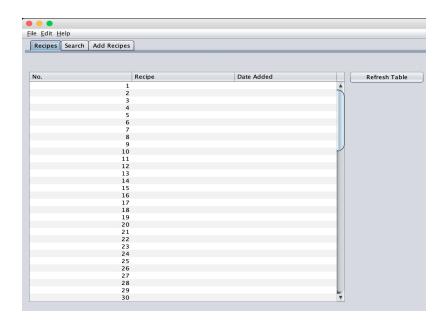
Input	Data Type	Normal Range etc.	Example
Recipe Name	String	N/A	Kimchi Fried Rice
Add Ingredients	String	N/A	Kimchi
Enter Date (Month)	String	Jan - Dec	Jan
Enter Date (Date)	Int	1 - 31	1
Enter Date (Year)	Int	2020 - 3000	2020
Type of Dish	String Array	N/A	Side Dish, Meat
Instruction	String	N/A	1. Chop 1 onion. Thinly slice two onions and garlic, which will later be added.
Number of Recipes Needed	Int	1 - 10	5
Output	Data Type	Normal Range etc.	Example
Recipe Name	String	N/A	Kimchi Fried Rice
Ingredients List	String	N/A	Kimchi
Enter Date (Month)	String	Jan - Dec	Jan
Enter Date (Date)	Int	1 - 31	1
Enter Date (Year)	Int	2020 - 3000	2020
Type of Dish	String Array	N/A	Side Dish, Meat
Instruction	String	N/A	1. Chop 1 onion. Thinly slice two onions and garlic, which will later be added.
Number of Recipes Needed	Int	1 - 10	5
Search Results	String	N/A	Kimchi Fried Rice Onion Soup

## **Prototyping Process**

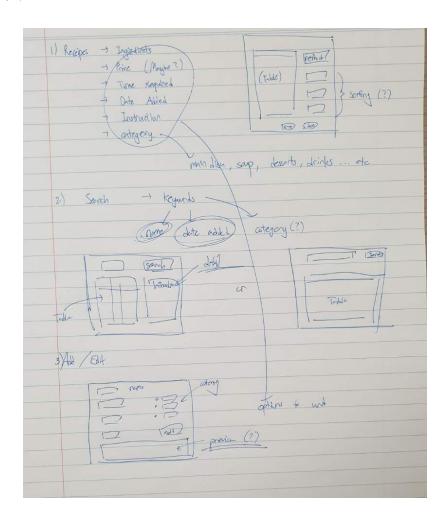
## Initial Prototype:



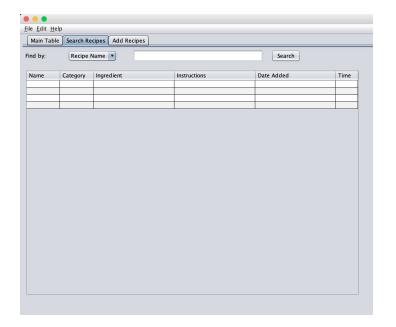


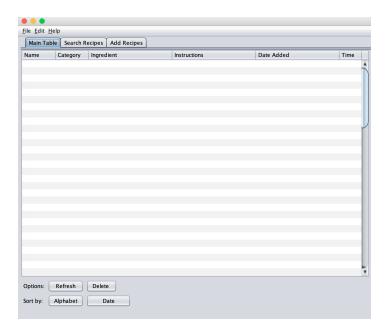


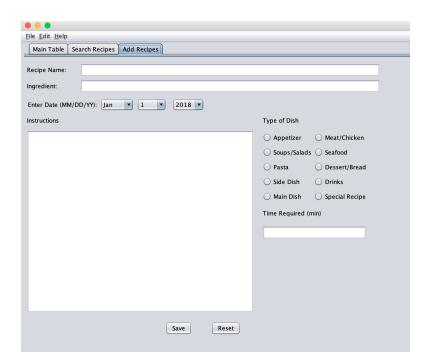
#### Client Annotation:

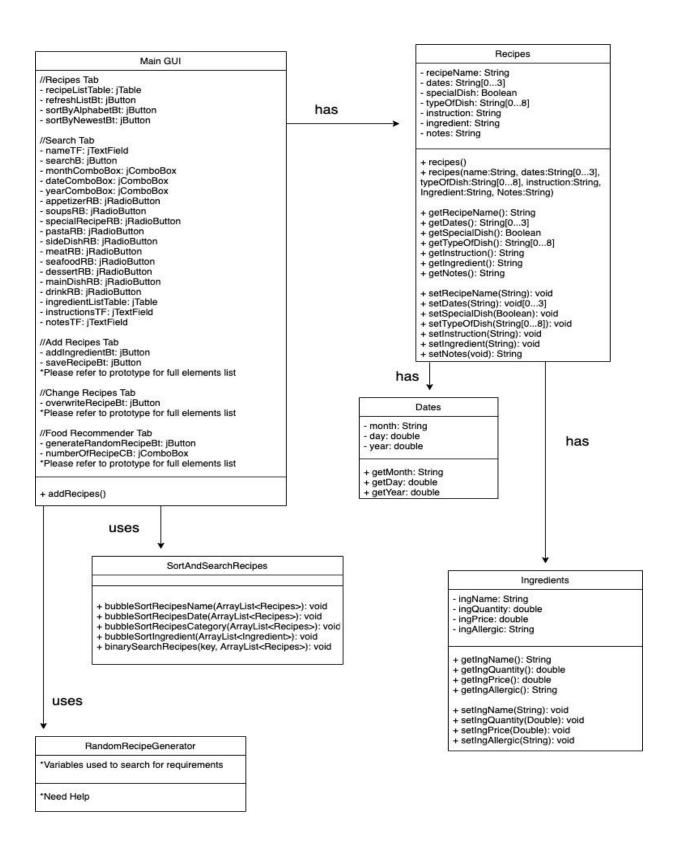


### Final Prototype









#### Chronological Development

#### #1 GUI Coding

Create the Swing icons and widgets that are displayed to a user and organize them inside a screen window Define functions that will process user and application events

Associate specific user events with specific functions.

#### #2 Write the Function Class Template

Create all necessary attributes and objects for the program Write the code for necessary functions

#### #3 Make SortAndSearch class

Assign appropriate sorts and write the code Test the program out using data available

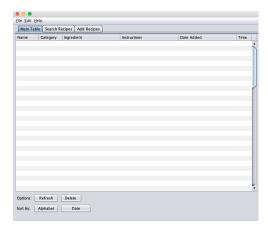
#### #4 - Final Program

A totally complete final program should implement higher-level logic as described in the flowchart above.

#### #5 - Final Testing

This stage includes the end-user testing the final program.

#### **Testing Plan**



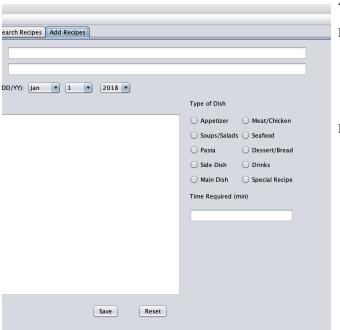
#### Recipes

#### Inputs

- Recently added recipes will show up by clicking the Refresh Table.
- The table will be organized in Alphabetical order by clicking Sort by Alphabet.
- The table will be organized in Recent order by clicking Sort by Newest.

#### Internal functioning

- The updated data of tutors is sorted alphabetically or dates.



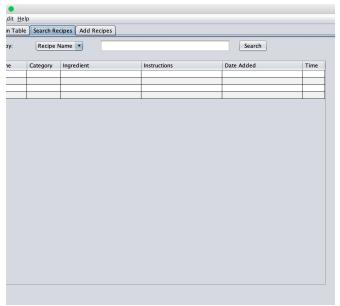
#### Add Recipes

#### Inputs

- The Recipe attributes such as Recipe Name, Ingredients, Date, Instruction and Notes would be saved.
- The new recipe will be added to the memory by clicking the Save button.

#### Internal functioning

- The new recipe data of recipe will be recorded to the Recipe list.



#### Search

#### Inputs

 Recipe Name and/or Date Added and/or Category are entered and searched by clicking the Search button.

### Internal functioning

- The program shows the search result of specific recipes and its attributes such as ingredients, instruction and notes.

Input	Normal	Border	Abnormal	Extreme
Recipe Name	Onion Soup	No Name Input → no name results in a	Numbers	Very long name → No limit on what is allowed here.
		re-entry Warning	→ Warning	

		message	Message, and not taken in/parsed	
Ingredient	Onion	No Ingredient Input → no ingredient results in a re-entry Warning message	Czech etc. characters  → Warning Message, and not taken in/parsed	Very long name → No limit on what is allowed here.
Instruction	1. Chop 1 onion. Thinly slice two onions and garlic, which will later be added.	No Instruction Input  → no instruction results in a re-entry Warning message	N/A	N/A
Type of Dish	Main Dish	None selected → no type of dish results in a re-entry Warning message  All selected → all type of dish results in a re-entry Warning message	N/A	N/A
Dates	Jan/01/2020	None selected → no dates results in a re-entry Warning message	N/A	N/A
Number of Recipes	1	None selected → no number of recipes results in a re-entry Warning message	N/A	N/A

Word Count: 619