

Recipe Manager

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1. About

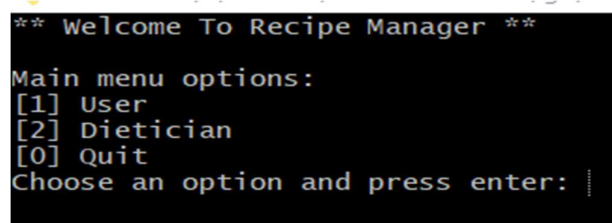
Recipe Manager is command line interface application. This application helps to view all the recipes in the list. It has two people in the application. They are User and the Dietician. They perform the tasks according to their roles. We can navigate to the application only by typing the required number from the option list. Typing 0 and pressing enter in any part of the application will send you back to the main menu. This application provides all the information of the recipes in the list.

2. Project Overview

The application is a command line interface (terminal) application that does not have a graphical user interface. The user only navigates by typing a number from an option list and then press enter to execute the command. Typing 0 and pressing enter in any part of the application will send you back to the main menu.

2.1 Project Roles

There are two persons in the project, who performs their roles. The main menu of this application shall be shown below:



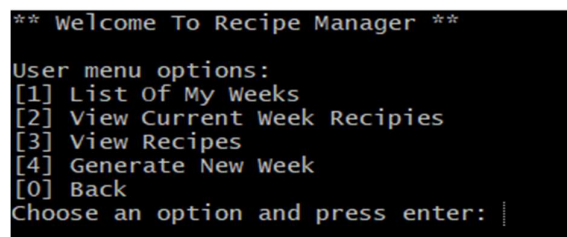
```
** Welcome To Recipe Manager **  
Main menu options:  
[1] User  
[2] Dietician  
[0] Quit  
Choose an option and press enter: |
```

2.1.1 User

When the user enters option # 1, the app must show the user. Then by entering the option 1, the tasks performed by the user shall be displayed in the terminal.

1. List of My Weeks
2. View Current Week Recipes
3. View Recipes
4. Generate New Week

The screenshot of this shall be shown below



```
** Welcome To Recipe Manager **  
User menu options:  
[1] List Of My Weeks  
[2] View Current Week Recipies  
[3] View Recipes  
[4] Generate New Week  
[0] Back  
Choose an option and press enter: |
```

2.1.2 Dietician

When the user enters option #2, the app must show the dietician. Then by entering the option 2, the tasks performed by the user shall be displayed in the terminal.

1. Create recipe

2. View recipe
3. Update recipe
4. All Recipes

The screenshot of this shall be shown below

```

** Welcome To Recipe Manager **
Dietician menu options:
[1] Create Recipe
[2] View Recipe
[3] Update Recipe
[4] All Recipes
[0] Back
Choose an option and press enter:

```

3. Implementation and Design

3.1 Technologies

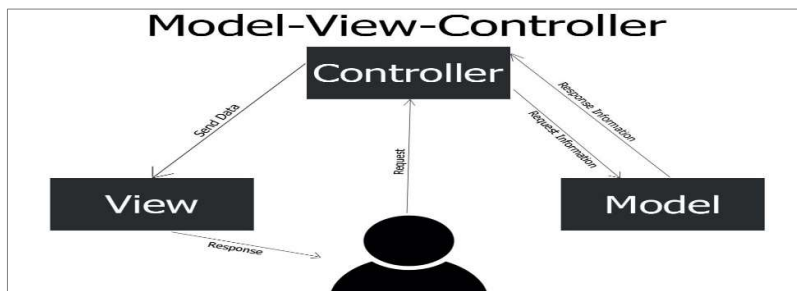
The following technologies are used in designing and developing the Recipe Manager application.

1. Java – Coding language for implementing the recipe manager application
2. Eclipse - IDE Purpose
3. Microsoft Visio - UML Diagram tool
4. Microsoft word – Document preparation

3.2 Design and Flow diagram

3.1.1 Architecture and design

Simple MVC architecture shall be followed in designing the Recipe Manager application, see below.



The Model contains only the pure application data, it contains no logic describing how to present the data to a user.

The View presents the model's data to the user. The view knows how to access the model's data, but it does not know what this data means or what the user can do to manipulate it.

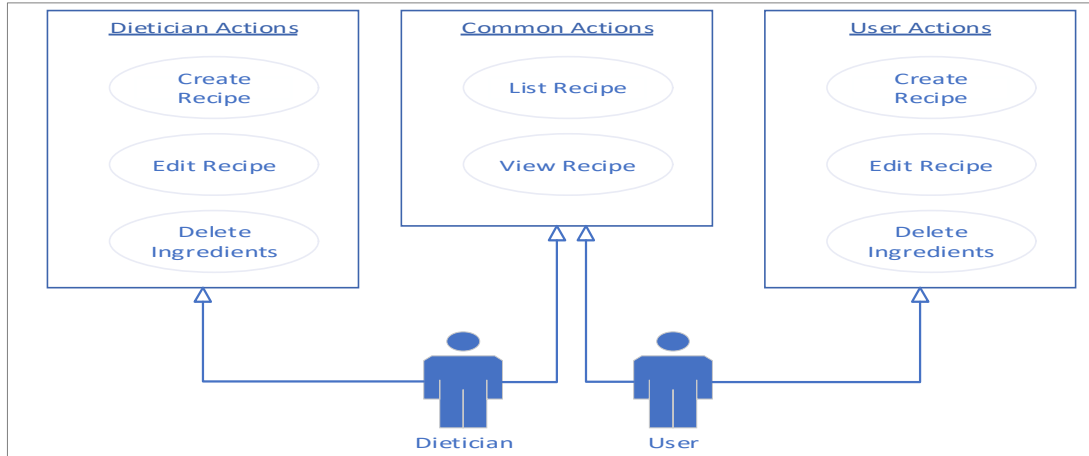
The Controller exists between the view and the model. It listens to events triggered by the view (or another external source) and executes the appropriate reaction to these events. In most cases, the

reaction is to call a method on the model. Since the view and the model are connected through a notification mechanism, the result of this action is then automatically reflected in the view.

Next, the view module is mainly responsible for preparing the menus by using controller cache data based on the *User* choice.

3.2.1 Usecase diagram

A Use case diagram is a graphical depiction of a user's possible interactions with a system. Here there are two persons .They are User and Dietician. The below diagram shows the interaction of user and dietician with the system.



3.2.2 Class Diagram

This section shall be explained about the relationship between different classes.

Model: All the model classes shall be followed java bean's structure and implemented JAXB API

Controller: Here there are three controllers in the application. They are User Controller, Dietician Controller, Main Controller and Base Controller These interact with the Base Controller and controls the application.

View: The *RecipemanagerView.java* is responsible for building the user interface and displayed in the terminal/console based on the user inputs and performs the validation checks. We have also four views. They are User View, Dietician View, Main view, Base view.

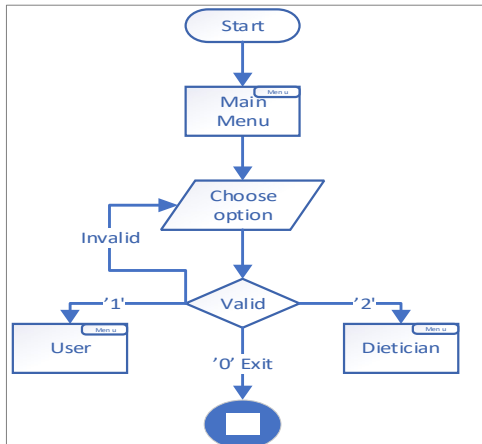
- 1 Meu Context enumeration shall be used for constants purpose and holds the menus title.
- 2 Measurement enumeration shall be holding constant measurement purpose in the recipe pool.

3.2.4 Flow Chart of Recipe Manager

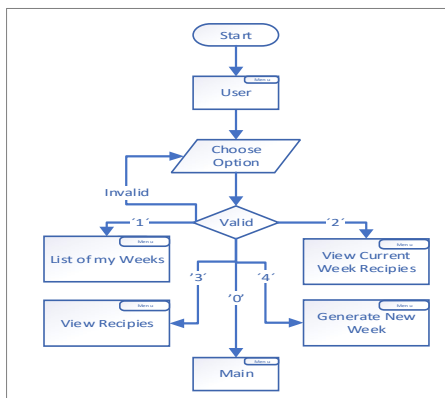
This section helps to identify the different menus mandatory steps and explains the execution flow.

3.2.4.1 Main

The main menu shall be shown to the user initially, it will provide few options as described in below picture.



3.2.4.2 User Role



3.2.4.2.1 List of My Weeks

When pressing option #1 in the main menu, the app must show user .When we enter the option #1,the user ,all the user actions are displayed.. When the user enters the option 1, he shall see all the list of the weeks that are present in the application. The screenshot of the above task shall be displayed in the below figure.

```

** Welcome To Recipe Manager **

List of my weeks menu options:
[1] WEEK 33
[2] WEEK 34
[3] WEEK 35
[4] WEEK 36
[0] Back
Choose an option and press enter: 1
[1] MONDAY      ITALIAN STUFFED CHICKEN
[2] TUESDAY     BUTTER CHICKEN
[3] WEDNESDAY   BAKED VEGETABLES
[4] THURSDAY    YORKSHIRE LAMB PATTIES
[5] FRIDAY      VEG FRIED RICE
[6] SATURDAY    BATTER FISH
[7] SUNDAY      TAMARIND RICE
[0] Back
Choose an option and press enter: |

```

When the user enters the option #1, he shall see all the recipes of that particular week. The screenshot of this is shown below.

3.2.4.2.2 View Current Week Recipes

When pressing option #2, the app must show all the list of the current week recipes to the user in the terminal. Here the user shall see all the recipes of the current week. If the user wants to see the recipe ingredients and steps, then he can also press any one of the options from the current week. After that he can continue or quit from the application. The screenshot of the above task shall be displayed in the below figure.

```

** Welcome To Recipe Manager **

View Current Week recipe menu options:
[1] MONDAY      BIRYANI
[2] TUESDAY     ITALIAN STUFFED CHICKEN
[3] WEDNESDAY   VEG FRIED RICE
[4] THURSDAY    BUTTER CHICKEN
[5] TODAY **    CHICKEN STEAK
[6] SATURDAY    BAKED VEGETABLES
[7] SUNDAY      CHICKEN TANDOORI
[0] Back
Choose an option and press enter: 1
Name: Tuesday
Recipes:ITALIAN STUFFED CHICKEN
Ingredients: [CHOPPED OLIVES OR SUNDRIED TOMATOES (2.0, PC), FULL-FAT SOFT CHEESE (2.0, KG), SKINLESS CHICKEN BREASTS (1.0, KG), RIPE TOMATOES (4.
Steps:
1.Heat oven to 220C/fan 200C/gas 7. Beat the olives or sundried tomatoes, garlic and almost all the herbs into the cheese, then season. Cut a slit
2.Stuff each breast with a quarter of the cheese mix, then press to close. Lift onto a greased baking tray.
3.Roast for 20 mins until the chicken is golden around the edges and the tomatoes look a little shrivelled.
4.Serve with a green salad and crusty bread to mop up the juices.

Options:
[C] Continue
[Q] Quit

```

3.2.4.2.3 View Recipes

When pressing the option #3, the user shall see all the recipes in the recipe pool. If the user wants to view any one of the recipes. He can enter the id of that recipe. Then he shall view the ingredients

and steps of the recipe. After finishing if he wants to continue, he can enter 'c' or 'q' to quit the application. The screenshot of the above is shown here:

```
** Welcome To Recipe Manager **

View Recipe menu options:

[1 ] ITALIAN STUFFED CHICKEN      [2 ] BIRYANI                      [3 ] ROESTI AND SALAD            [4 ] PANEER STEAK
[5 ] KHAO SOI                    [6 ] BATTER FISH                 [7 ] ROSEMARY CHICKEN           [8 ] CHICKEN STEAK
[9 ] BUTTER CHICKEN              [10] BAKED VEGETABLES            [11] YORKSHIRE LAMB PATTIES      [12] VEG FRIED RICE
[13] TAMARIND RICE              [14] DOSA                       [15] BRINJAL CURRY              [16] SPINACH DAL

Choose an option and press enter: 13
Recipe Name: Tamarind rice
Ingredients: [VEGETABLE OIL (0.1, LTR), RICE (0.1, KG), TAMARIND PULP (0.2, KG)]
Steps:
1.Heat oil and roast peanuts along with both the dals.
2.Saute till the dals splutter and slightly coloured.
3.Now add curry leaves and whole red chillies.
4.Mix them well.
5.Add salt, hing, red chilli powder and turmeric powder. Saute them well.
6.Add gur to the cooked mix and saute well. Now add the tamarind pulp to the mix and saute till it becomes a semi thick gravy.
7.Add cooked rice to the mix.
8.Saute it well so the rice is completely mixed with the cooked gravy.
9.Serve hot, garnished with a tamarind.

Options:
[C] Continue
[Q] Quit
```

3.2.4.2.4 Generate New Week

When pressing option #4, the app should allow you to generate a new week by entering the recipes. You shall see the week name ,date and time. It shall ask you to enter a day name. When you enter the name ,it will show all the recipes available. You can add any recipe to that day. It will ask you ,do you want to generate. If yes, you can further continue and add it. Otherwise you can say no and quit the application. The screenshot of the above is shown here:

```
** Welcome To Recipe Manager **

Generate New Week menu options:
[1] Monday 2022-08-22      *****
[2] Tuesday 2022-08-23     *****
[3] Wednesday 2022-08-24  *****
[4] Thursday 2022-08-25    *****
[5] Friday 2022-08-26      *****
[6] Saturday 2022-08-27   *****
[7] Sunday 2022-08-28     *****
[0] Back

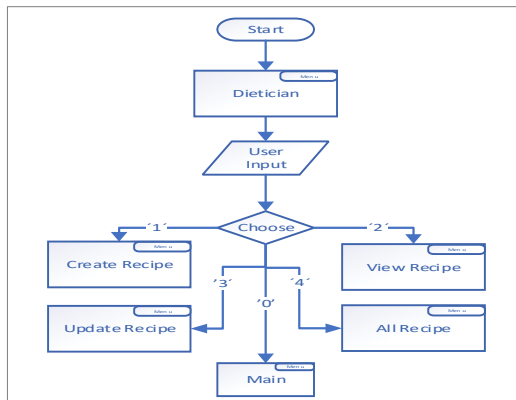
Choose an option and press enter: 1
Day Name: Monday
Date: Mon Aug 22 00:00:00 CEST 2022

[1 ] ITALIAN STUFFED CHICKEN      [2 ] BIRYANI                      [3 ] ROESTI AND SALAD            [4 ] PANEER STEAK
[5 ] KHAO SOI                    [6 ] BATTER FISH                 [7 ] ROSEMARY CHICKEN           [8 ] CHICKEN STEAK
[9 ] BUTTER CHICKEN              [10] BAKED VEGETABLES            [11] YORKSHIRE LAMB PATTIES      [12] VEG FRIED RICE
[13] TAMARIND RICE              [14] DOSA                       [15] BRINJAL CURRY              [16] SPINACH DAL

Choose an option and press enter: 3
Want to Generate a New week [Yes/No]:no
Data successfully Saved/Updated

Options:
[C] Continue
[Q] Quit
```


3.2.4.3 Dietician Roles



3.2.4.3.1 Create Recipe

When pressing option#2 in the main menu, the dietician menu shall be displayed in the terminal. Here, the dietician when enters the option #1, which is used to create as recipe. It asks for the recipe name, ingredients and steps to be followed. The dietician enters the name, ingredients and the steps required for the recipe. After that, recipe shall be successfully added to the recipe pool. The screenshot of the above is shown here:

```
** Welcome To Recipe Manager **

Create Recipe menu options:
Enter Recipe Name and press enter: idly

[1 ] MEAT (1.0, KG)           [2 ] SEMI COOKED RICE (1.0, KG)   [3 ] CURD (1.5, LTR)           [4 ] LEMON JUICE (3.0, Pcs)
[5 ] POTATOES (1.0, KG)       [6 ] CARROTS (1.0, KG)           [7 ] LOUKI (1.0, PC)          [8 ] BUTTER (0.5, kg)
[9 ] COTTAGE CHEESE (1.0, KG) [10] TOMATOES (0.5, KG)          [11] CORIANDER LEAVES (1.0, PC) [12] BREAD (2.0, PC)
[13] CHICKEN (1.0, KG)       [14] COCONUT MILK (1.0, LTR)     [15] EGGS (4.0, PC)           [16] RICE NOODLES COOKED (0.5, kg)
[17] LARGE ONIONS (3.0, PC)  [18] WHITE FIRM FLESH FISH FILLET (0.5, KG) [19] MAIDA (1.0, PC)          [20] EGG (1.0, PC)
[21] SODA WATER (0.5, LTR)   [22] BAKING POWDER (1.0, PC)     [23] BONELESS CHICKEN (1.0, KG) [24] GINGER GARLIC PASTE (1.0, PC)
[25] ROSEMARY TWIGS WITH LEAVES (8.0, PC) [26] BAY LEAVES (3.0, PC)       [27] BONELESS CHICKEN (0.5, KG) [28] GREEN CHILLIES (1.0, PC)
[29] EGGS (2.0, PC)         [30] PEPPER POWDER (1.0, PC)    [31] BONELESS CHICKEN PIECES (1.0, KG) [32] GREEN CHILLIES (2.0, PC)
[33] CURD (0.5, LTR)        [34] TOMATOES (4.0, PC)         [35] MIXED VEGETABLES (0.5, KG) [36] CHEESE (3.0, PC)
[37] MILK (0.5, LTR)         [38] MAIDA (4.0, PC)            [39] VEGETABLE OIL (0.1, LTR)   [40] HORSE RADISH SAUCE (0.1, KG)
[41] LAMB MINCED (0.2, KG)   [42] VEGETABLE OIL (0.01, LTR)  [43] CABBAGE (0.01, KG)        [44] CARROT (0.02, KG)
[45] CAPSICUM (3.0, PC)     [46] RICE (0.1, KG)            [47] MILK (0.1, LTR)           [48] RICE FLAKES (0.1, KG)
[49] VEGETABLES (0.2, KG)   [50] RICE (0.1, KG)            [51] CABBAGE (0.2, KG)         [52] BUTTER (0.1, KG)
[53] BEETROOT (0.2, KG)

Choose multiple options and press enter [e.g, 1,2]: 46,45
Enter Steps and press enter [Type 'exit' to save the steps]:
1.Prepare idly batter
2.Pour as idlies in the idly maker
3.Heat on the stove for 15 minutes
4.Serve hot with chutney.
exit
Data successfully Saved/Updated

Options:
[C] Continue
[Q] Quit
```

3.2.4.3.2 View Recipe

When pressing the option #2, the dietician shall see all the recipes in the recipe pool. If the user wants to view any one of the recipes. He can enter the id of that recipe. Then he shall view the ingredients and steps of the recipe. After finishing if he wants to continue, he can enter 'c' or 'q' to quit the application. The created recipe is shown in the below screenshot.

```

** Welcome To Recipe Manager **

View Recipe menu options:

[1 ] ITALIAN STUFFED CHICKEN      [2 ] BIRYANI                      [3 ] ROESTI AND SALAD            [4 ] PANEER STEAK
[5 ] KHAO SOI                     [6 ] BATTER FISH                 [7 ] ROSEMARY CHICKEN           [8 ] CHICKEN STEAK
[9 ] BUTTER CHICKEN               [10] BAKED VEGETABLES            [11] YORKSHIRE LAMB PATTIES      [12] VEG FRIED RICE
[13] TAMARIND RICE               [14] DOSA                       [15] BRINJAL CURRY              [16] SPINACH DAL
[17] IDLY

Choose an option and press enter: 17
Recipe Name: Idly
Ingredients: [RICE (0.1, KG), MAIDA (1.0, PC)]
Steps:
1. Take idly batter and pour in the mould
2. put it on the stove and heat for 15 minutes
3. idly is hot to serve

Options:
[C] Continue
[Q] Quit

```

3.2.4.3.3 Update Recipe

When entering option #4, the dietician shall see all the recipes in the recipe pool. He can enter the recipe that he wants to update. Here we can change the name, ingredients and steps that are required for updating recipe. Then the updated data will be added to the recipe pool successfully. The Screenshot of it is shown below.

```

** Welcome To Recipe Manager **

Update Recipe menu options:

[1 ] ITALIAN STUFFED CHICKEN      [2 ] BIRYANI                      [3 ] ROESTI AND SALAD            [4 ] PANEER STEAK
[5 ] KHAO SOI                     [6 ] BATTER FISH                 [7 ] ROSEMARY CHICKEN           [8 ] CHICKEN STEAK
[9 ] BUTTER CHICKEN               [10] BAKED VEGETABLES            [11] YORKSHIRE LAMB PATTIES      [12] VEG FRIED RICE
[13] TAMARIND RICE               [14] DOSA                       [15] BRINJAL CURRY              [16] SPINACH DAL
[17] IDLY

Choose an option and press enter: 4
Want to change the recipe name [Yes/No] ?yes
Enter Recipe Name and press enter: paneer steaks
Want to delete ingredient [Yes/No] ?no
Want to add ingredients [Yes/No] ?yes

[1 ] MEAT (1.0, KG)                [2 ] SEMI COOKED RICE (1.0, KG)   [3 ] CURD (1.5, LTR)             [4 ] LEMON JUICE (3.0, Pcs)
[5 ] POTATOES (1.0, KG)            [6 ] CARROTS (1.0, KG)            [7 ] LOUKI (1.0, PC)             [8 ] BUTTER (0.5, kg)
[9 ] COTTAGE CHEESE (1.0, KG)      [10] TOMATOES (0.5, KG)           [11] CORIANDER LEAVES (1.0, PC)  [12] BREAD (2.0, PC)
[13] CHICKEN (1.0, KG)            [14] COCONUT MILK (1.0, LTR)      [15] EGGS (4.0, PC)              [16] RICE NOODLES COOKED (0.5, kg)
[17] LARGE ONIONS (3.0, PC)        [18] WHITE FIRM FLESH FISH FILLET (0.5, KG) [19] MAIDA (1.0, PC)             [20] EGG (1.0, PC)
[21] SODA WATER (0.5, LTR)         [22] BAKING POWDER (1.0, PC)      [23] BONELESS CHICKEN (1.0, KG)  [24] GINGER GARLIC PASTE (1.0, PC)
[25] ROSEMARY TWIGS WITH LEAVES (8.0, PC) [26] BAY LEAVES (3.0, PC)         [27] BONELESS CHICKEN (0.5, KG)  [28] GREEN CHILLIES (1.0, PC)
[29] EGGS (2.0, PC)               [30] PEPPER POWDER (1.0, PC)      [31] BONELESS CHICKEN PIECES (1.0, KG) [32] GREEN CHILLIES (2.0, PC)
[33] CURD (0.5, LTR)              [34] TOMATOES (4.0, PC)           [35] MIXED VEGETABLES (0.5, KG)  [36] CHEESE (3.0, PC)
[37] MILK (0.5, LTR)              [38] MAIDA (4.0, PC)              [39] VEGETABLE OIL (0.1, LTR)    [40] HORSERADISH SAUCE (0.1, KG)
[41] LAMB MINCED (0.2, KG)        [42] VEGETABLE OIL (0.01, LTR)    [43] CABBAGE (0.01, KG)          [44] CARROT (0.02, KG)
[45] CAPSICUM (3.0, PC)           [46] RICE (0.1, KG)              [47] MILK (0.1, LTR)             [48] RICE FLAKES (0.1, KG)
[49] VEGETABLES (0.2, KG)         [50] RICE (0.1, KG)              [51] CABBAGE (0.2, KG)           [52] BUTTER (0.1, KG)
[53] BEETROOT (0.2, KG)

Choose multiple options and press enter [e.g, 1,2]: 3
Want to change the recipe steps [Yes/No] ?no
Data successfully Saved/Updated

Options:
[C] Continue
[Q] Quit

```

3.2.4.3.4 All Recipes

When pressing the option #4, the dietician shall see all the recipes in the recipe pool. If he wants to continue the application, he enters 'c', otherwise q' to quit. The screenshot of the above is shown here:

```

** Welcome To Recipe Manager **

Gell All Recipes menu options:

[1 ] ITALIAN STUFFED CHICKEN      [2 ] BIRYANI                      [3 ] ROESTI AND SALAD            [4 ] PANEER STEAK
[5 ] KHAO SOI                     [6 ] BATTER FISH                 [7 ] ROSEMARY CHICKEN           [8 ] CHICKEN STEAK
[9 ] BUTTER CHICKEN               [10] BAKED VEGETABLES            [11] YORKSHIRE LAMB PATTIES      [12] VEG FRIED RICE
[13] TAMARIND RICE               [14] DOSA                       [15] BRINJAL CURRY              [16] SPINACH DAL
[17] IDLY                        [18] PANEER STEAKS

Options:
[C] Continue
[Q] Quit

```