UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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FAKULTI TEKNOLOGI MAKLUMAT DAN KOMUNIKASI

W O R K S H O P 1
R E P O R T

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CHAPTER 1

<u>Introduction</u>

1. Problem statement
   - Misplace recipe book
   - Time consuming
   - Wasting food

2. Background of project
   - Storage organizer system is a system that helps users to organize their goods like groceries or leftover food so they will not have to spend time on searching the desire item one by one. With this system, users can just search what they want to search just by typing. It helps people to plan on their meal whenever they want especially for working people who do not have time to search and list down everything. The system also stored goods' expiry date which is important for user to determine which item they need to use first so they will not waste any food. Other than allowing user to store goods, this system also provide some recipes for user as a guide. Furthermore, user also can add their own recipe in the system so they will not have to waste pen and paper to write down any new recipe they found or created. This also helps preventing misplace recipe books.

3. Objectives
   - To develop a system that can help people to save their time and money on goods.
   - To reduce the usage of paper and provide a space to store everything just in one place.
   - To minimize waste of products.

4. Scopes
   - User
     ➢ Able to view, insert, update, and delete items in the list.
     ➢ Able to search and delete recipes.
     ➢ Able to add new recipe and update old recipes.

CHAPTER 2

<u>Analysis of Problem</u>

1. Misplace recipe book.
   - As a human, people tend to forget where they keep their belongings. This will cause a problem in finding it later especially when they are in hurry. Not everyone can always keep things in one place after using it. They tend to put it at the last place the item is being used.
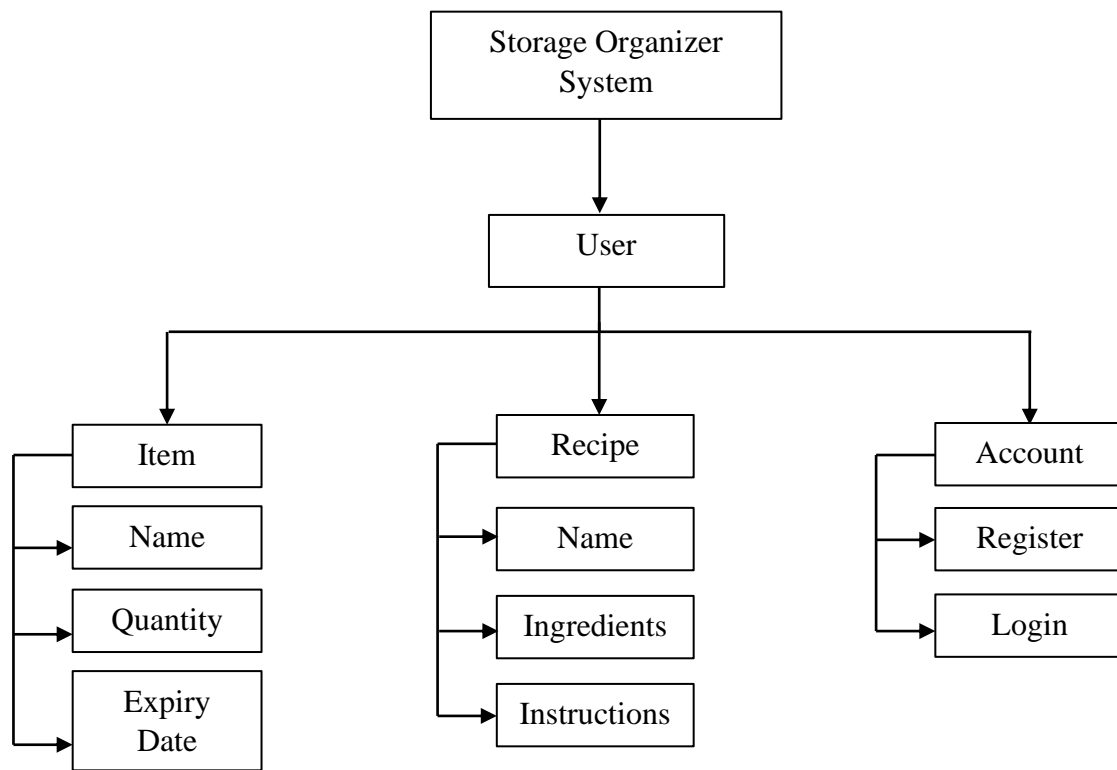
2. Time consuming
   - For someone who always busy with their work or studies, people have no time to go through everything in their house before deciding what they need buy for daily supplies. The time that being used to search everything and jot down what need to buy can be used to do other things like spending time for family or finishing unfinished works.

3. Wasting food
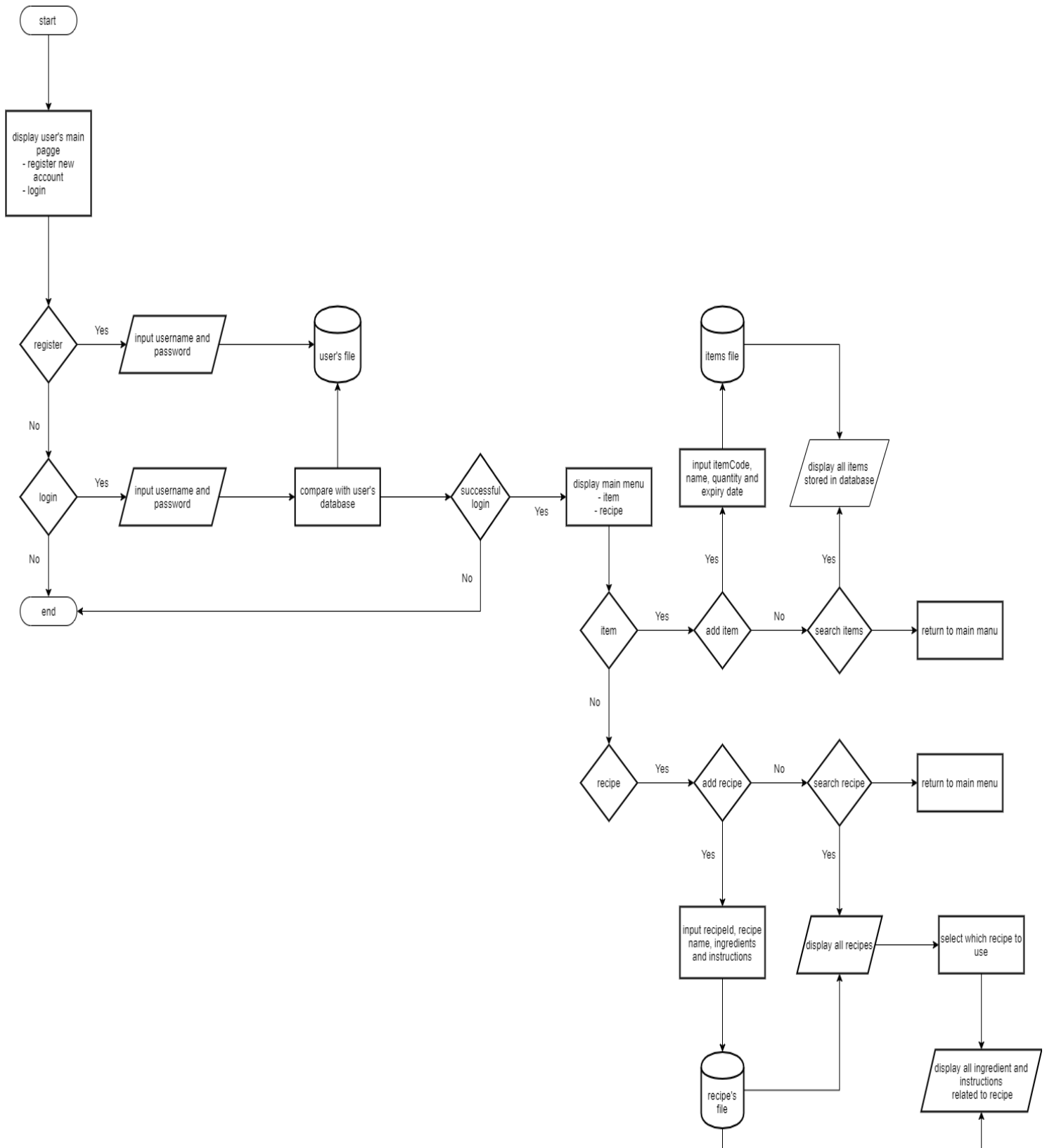   - People will not search each one in their fridge every time they opened it. Furthermore, for someone who is busy they rather buy fast food or anything at restaurant instead of opening the fridge to look for food after tired of working all day. So, whenever there is leftover food from the day will end up in the fridge and stay there until the food cannot be eaten anymore.
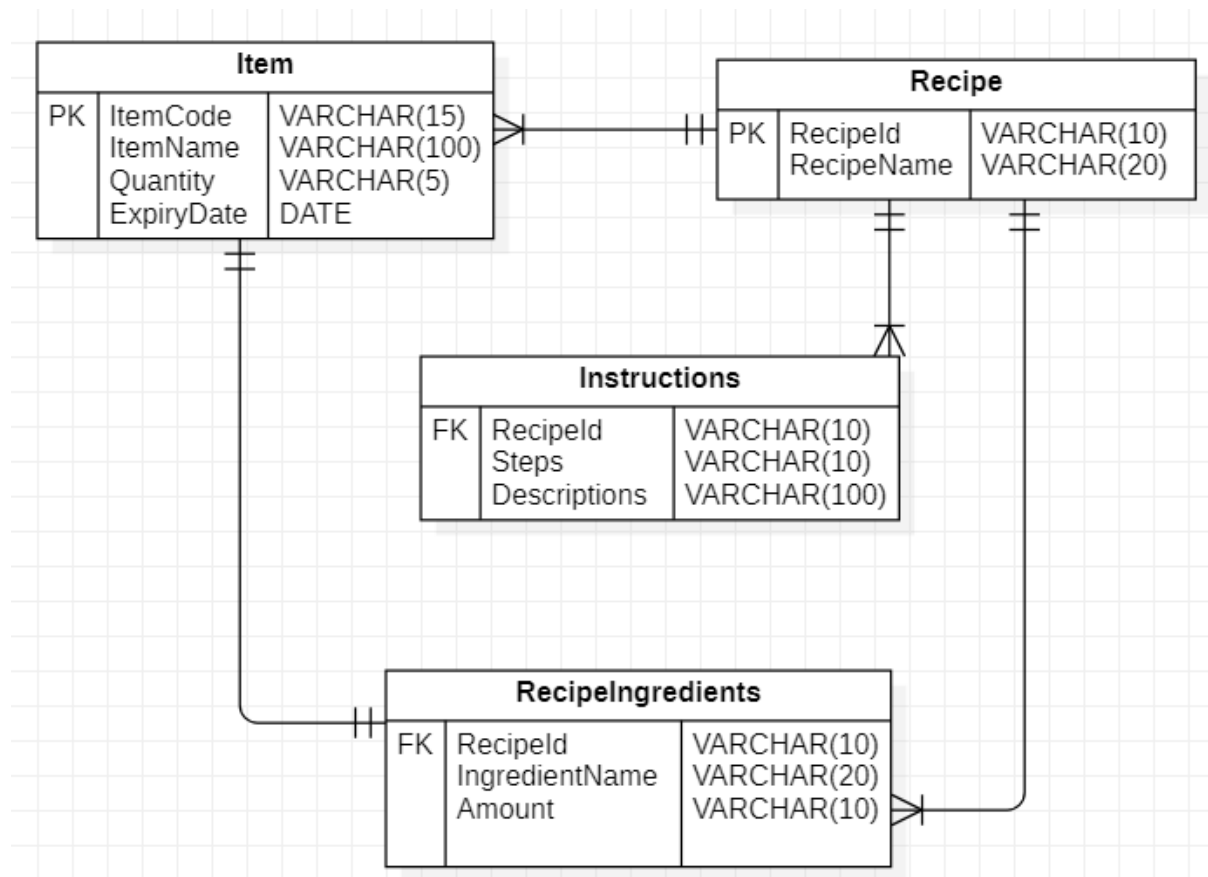
Structured Chart

CHAPTER 3

Flowchart

```
                    start
                      |
                      v
           ┌──────────────────┐
           │ display user's main│
           │      pagge         │
           │ - register new     │
           │   account          │
           │ - login            │
           └──────────────────┘
                      |
                      v
              ◇ register ◇  ──Yes──▶  / input username and /  ──────▶  (user's file)
                      |                /   password        /
                     No
                      |
                      v
              ◇ login ◇  ──Yes──▶  / input username and /  ──▶  [compare with user's  ──▶  ◇ successful ◇  ──Yes──▶  [ display main menu
                      |            /   password        /          database ]                 login                      - item
                     No                                                                        |                        - recipe ]
                      |                                                                       No
                      v                                                                        |
                    (end) ◀───────────────────────────────────────────────────────────────────┘
```

- start
- display user's main pagge
  - register new account
  - login
- register — Yes → input username and password → user's file
- register — No → login
- login — Yes → input username and password → compare with user's database → successful login
- login — No → end
- successful login — Yes → display main menu (- item - recipe)
- successful login — No → end

Main menu branch

- item
  - item — Yes → add item
  - item — No → recipe
  - add item — Yes → input itemCode, name, quantity and expiry date → items file
  - add item — No → search items
  - search items — Yes → display all items stored in database → items file
  - search items → return to main manu

- recipe
  - recipe — Yes → add recipe
  - add recipe — Yes → input recipeId, recipe name, ingredients and instructions → recipe's file
  - add recipe — No → search recipe
  - search recipe — Yes → display all recipes → select which recipe to use → display all ingredient and instructions related to recipe
  - search recipe → return to main menu

ERD

<u>Data Dictionary</u>

dbsos

instructions

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
RecipeId	varchar(10)	No		recipe -> RecipeId	Recipe ID for every different recipes	
Steps	varchar(10)	No			number of steps for the instruction	
Descriptions	varchar(100)	No			instruction's description	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Instructions_Recipe_FK	BTREE	No	No	RecipeId	13	A	No	

item

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
ItemCode *(Primary)*	varchar(15)	No			code for every item	
ItemName	varchar(100)	No			name of item	
Quantity	varchar(5)	No			item's quantity	
ExpiryDate	date	No			date of expire for the item	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	ItemCode	13	A	No	

recipe

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
RecipeId *(Primary)*	varchar(10)	No			Id for recipe	
RecipeName	varchar(20)	No			Name of recipe	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	RecipeId	11	A	No	

recipeingredients

Column	Type	Null	Default	Links to	Comments	Media (MIME) type
RecipeId	varchar(10)	No		recipe -> RecipeId	Id of recipe	
IngredientName	varchar(20)	No			Name of ingredient	
Amount	varchar(20)	No			Amount of needed ingredients	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
RecipeIngredients_Recipe_FK	BTREE	No	No	RecipeId	16	A	No	

user

Column	Type	Null	Default	Links to	Comments	Media (MIME) type

username *(Primary)*	varchar(100)	No			username of user	
password	varchar(8)	No			password for user account	

Indexes

Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
PRIMARY	BTREE	Yes	No	username	1	A	No	

Interface Design
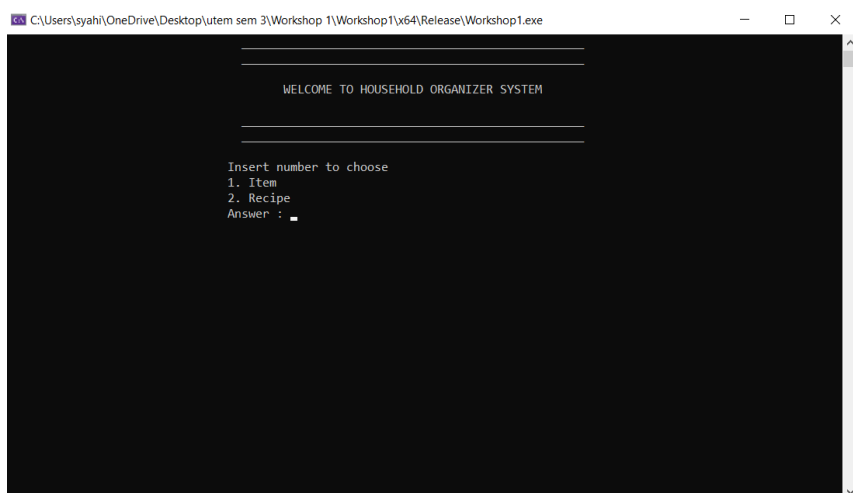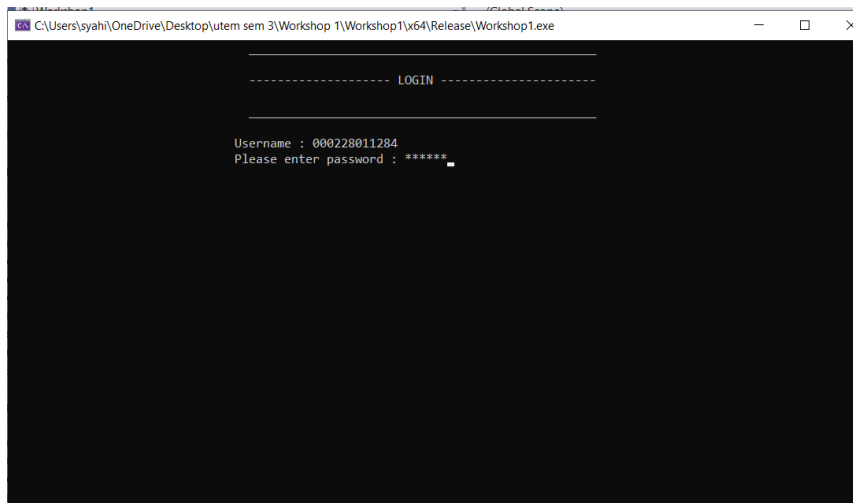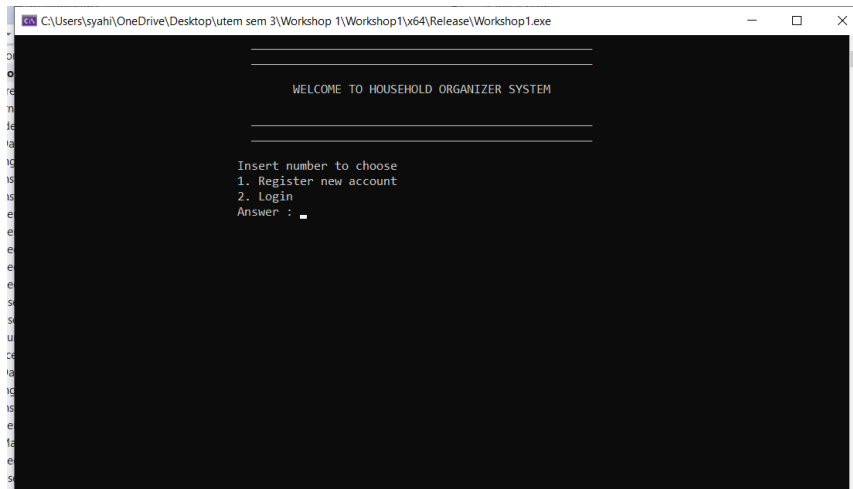
```
--------------------- ITEM ---------------------


Insert your selection.
1. Add new item
2. Display item
3. Return to main
Answer :
```

```
--------------------ADD ITEM---------------------


Please insert new item details as stated
Item Code : 56
Item Name : sos cili
Quantity : 2
Expiry Date (YYYYMMDD) : 20220513
```

```
--------------------ADD ITEM---------------------


Please insert new item details as stated
Item Code : 44
Item Name : sos cili
Quantity : 2
Expiry Date (YYYYMMDD) : 20220413
Item is successfully added.

Do you want to add another item?
Type y for yes and n for no.
Answer :
```

```
--------------------REGISTER--------------------


Username : syah
New password (less than 8 characters) : qwe123
Successful registration.
Press any key to continue . . .
```



```
------------------SEARCH RECIPE------------------


Please enter the recipe you want to search.
Recipe Id : 1001

The name for the recipe is Ayam Halia.
Do you want to look at the ingredients used to make this dish?
Type y to proceed : y
```



```
The name for the recipe is Ayam Halia.
Do you want to look at the ingredients used to make this dish?
Type y to proceed : y

The ingredients are :

500g ayam
4 ulas bawang putih-hiris
2cm halia-hiris
1 sudu besar kicap cair
1 sudu besar sos tiram
1 biji bawang besar-hiris
1 biji cili merah-hiris
1 tangkai daun bawang-hiris
1 sudu kecil tepung jagung
1/2 sudu kecil garam
2 tangkai daun kari
1 biji tomato-belah 4
1 biji kentang-belah 4

Do you want to proceed with instructions to cook this dish?
Type y to proceed : y

The instructions are :

1 Panaskan minyak. Tumis bahan hiris sehingga naik bau.
2 Masukkan daun kari. Tumis sekejap.
4 Masukkan ayam, tomato dan kentang ke dalam periuk.
5 Masukkan sos tiram dan kicap. Kacau dan masukkan garam.
```

CHAPTER 4

<u>Implementation</u>

Firstly, the system will ask user to choose between register account or login. If the user chooses to register, the system will add input of username and password into database. Meanwhile, if user choose login, system will ask for username and password and compare to database. Firstly, the system will check the username insert by user. If the username is stored in database, then it will proceed to password. If not, user will have to try again until the username is correct. However, if the password is incorrect, user will be given 3 attempt and if all attempts is failed, user will be direct to main account menu and register new account. If both login information is correct, user will be direct to main menu page. In main menu, there are 2 options which is item and recipe. If user choose item, the screen will show the choices of add item or view item and if the user choose recipe, the system will provide with 2 choices which is add recipe or view recipe.

In add item, user will input details such as item code, name, quantity, and expiry date of the item. If the input details are successfully added to database, the message saying it was successful will pop up. However, if the system fails to add the item in database, the pop-up message will tell user that the input is unsuccessful, and the system will return to main menu. Next, in view item function, the system will display all items in the database for user to check what item he/she already has.

In add recipe, the system will ask for details like recipe id and recipe name. After successfully added the recipe to database, user will continue to add ingredients and then instructions until finished. The system will display error message if the input was fails and will return to main menu.

In search recipe, user will input recipe id and the system will show the recipe name, if user want to proceed with ingredients and instructions, input y and the system will

automatically proceed with list of ingredients and instructions related to the recipe. However, if user does not want to proceed, he/she can type any key to exit and return to main menu.

CHAPTER 5

<u>Conclusion</u>

Like every other system, my system also has it owns limitations which can be improved. Even though I already tried my best to create the most simple system for user to use, it still needs many improvement to be made to make sure the system is smooth and easy to use by everyone.

1. Constraints
    - This system can only be used by one user at a time.
    - Cannot provide user with warning message on nearly expire item.
    - User cannot divide the items into different partitions like frozen food, vegetables etc.

2. Future improvements
    - Make sure the system can be used by multiple users in one time.
    - Add more functionalities in the system like division and warning messages.