FACULTY OF INFORMATICS & COMPUTING

CSF 11103
Problem Solving and Computer Programming

Group Project

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Program: SMTMIM1

Group Members:

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1. Introduction

Our group has decided to create a program that simulates a retail price system for raw ingredients food. The program will use selection, loops, and string to accomplish this task. The objective of this program is to allow a user to input multiple ingredients and shows the market price to the users. It will calculate the total of the price on what users want to buy in the end of this program. The program named Wet2U.

The three concepts that were applied in this program are:

1. Selection: We used a selection statement to determine which product and price.

2. Loop: We used a loop to input the ingredients name and prices multiple times.

3. String: We used a string to input the ingredients types.

The expected input of the program is
1. The number of ingredients the user wants to buy.
2. The number and price of each ingredient.

The expected output of the program is
1. The list of ingredients the user has chosen.
2. The total price user have paid.

2. Pseudocode

START

1. Enter amount to buy
2. Choose the type of wet goods
3. Output the price of wet goods else invalid
4. Output the total of price on your input

FINISH

3. Programming

```
package com.mycompany.wet2u;
/**
 *
 * @author Ariff,Fahmi,Hazim
 */
import java.util.Scanner;

public class Wet2U {
    public static void main(String[] args) {
         //Declare Variable
        String Type;
        int totalChicken = 0;
        int totalMeat    = 0;
        int totalPrawn   = 0;
        int totalFish    = 0;
        int totalSquid   = 0;
        int Howmany;
        double Itemvalue;
        double Receipt;

        //Create Scanner
        Scanner sc = new Scanner(System.in);
        System.out.println("1) Chicken 1kg = RM 8.55") ;
        System.out.println("2) Fish    1kg = RM 12.50");
        System.out.println("3) Prawn   1kg = RM 30.75");
```

```
        System.out.println("4) Meat    1kg = RM 40.65");
        System.out.println("5) Squid   1kg = RM 35.75");

        //To know how many item user wan't to purchased
        System.out.println("Please enter how many you want to buy?");
        Howmany = sc.nextInt();
        sc.nextLine(); // to Allow you to push enter and avoid Invalid

        //Looping
        for (int i=1; i <= Howmany; i++){

            //To receive input of products
            System.out.println("Please enter what type you want to
buy?");
            Type = sc.nextLine();

            //Switch statement
            switch (Type) {
                case "1" :{
                    Itemvalue = 8.55;
                    totalChicken++;
                    System.out.println(Type + " = RM" + Itemvalue);
                    break;
                }
                case  "2" :{
                    Itemvalue = 12.50;
                    totalFish++;
```

```
                    System.out.println(Type + " = RM" +
String.format("%.2f",Itemvalue));
                    break;
                }
                case  "3" :{
                    Itemvalue = 30.75;
                    totalPrawn++;
                    System.out.println(Type + " = RM" + Itemvalue);
                    break;
                }
                case  "4" : {
                    Itemvalue = 40.65;
                    totalMeat++;
                    System.out.println(Type + " = RM" + Itemvalue);
                    break;
                }
                case  "5" :{
                    Itemvalue = 35.75;
                    totalSquid++;
                    System.out.println(Type + " = RM" + Itemvalue);}
                    break;

                default:{
                    System.out.println("Invalid");
                    break;
                }
            }
```

```
        }

        //Calculation value of chicken,fish,prawn,meat,squid

         Receipt = (totalChicken * 8.55) + (totalFish * 12.50) +
(totalPrawn * 30.75)

                + (totalMeat * 40.65) + (totalSquid * 35.75);

        System.out.println();


        //Quantities sold & displaying the value of quantities sold

        System.out.println("Quantities of Chicken : " + totalChicken);

        System.out.println("Quantities of Fish    : " + totalFish);

        System.out.println("Quantities of Prawn   : " + totalPrawn);

        System.out.println("Quantities of Meat    : " + totalMeat);

        System.out.println("Quantities of Squid   : " + totalSquid);

        System.out.println();



 //Displaying the total Price

        System.out.println("The Total Price : RM" +
String.format("%.2f", Receipt));

    }

}
```

4. Screenshot Output

```
Result

  Scanning for projects…

------------------------< com.mycompany:Wet2U >-------------------------

Building Wet2U 1.0-SNAPSHOT

--------------------------------[ jar ]---------------------------------


--- exec-maven-plugin:3.0.0:exec (default-cli) @ Wet2U ---

1) Chicken 1kg = RM 8.55

2) Fish    1kg = RM 12.50

3) Prawn   1kg = RM 30.75

4) Meat    1kg = RM 40.65

5) Squid   1kg = RM 35.75

Please enter how many you want to buy?

5

Please enter what type you want to buy?

1

1 = RM8.55

Please enter what type you want to buy?

2

2 = RM12.50

Please enter what type you want to buy?

3

3 = RM30.75

Please enter what type you want to buy?

4

4 = RM40.65
```

```
Please enter what type you want to buy?

6

Invalid


Quantities of Chicken : 1

Quantities of Fish    : 1

Quantities of Prawn   : 1

Quantities of Meat    : 1

Quantities of Squid   : 0


The Total Price : RM92.45

------------------------------------------------------------------------

BUILD SUCCESS

------------------------------------------------------------------------

Total time:  17.480 s

Finished at: 2023-01-21T10:33:21+08:00

------------------------------------------------------------------------
```

5. Conclusion

Wet2U is a Java program that simulates a simple ordering system for different types of seafood products, such as fish, prawn, and squid. The program uses a scanner to receive input from the user, including how many items they want to purchase, and what type of product they want to purchase. The program then uses a switch statement to determine the price of the product based on the user's input, and keeps track of the total number of each type of product that the user orders. The program then calculates the total cost of the order, and displays the quantities and total cost of the order to the user.

--- END OF REPORT ---