

Case-Based Menu Planner: Web-Based System

By

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CERTIFICATION OF APPROVAL

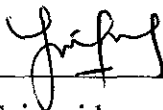
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A project dissertation submitted to the
Information and Communication Technology Program
Universiti Teknologi PETRONAS
in partial fulfillment of the requirement for the
BACHELOR OF TECHNOLOGY (Hons)
(INFORMATION AND COMMUNICATION TECHNOLOGY)

Approved by,



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UNIVERSITI TEKNOLOGI PETRONAS
TRONOH, PERAK
January 2008

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.



SITI NORHANIS BINTI MOHD AKHIR

ABSTRACT

Case-Based Menu Planner is a web based system and will apply Case-Based Reasoning (CBR) technique. This system is developed in order to help user to know the amount of calories needed in one day and also to give advice to the user about the food they take in one day. Given a user query, the system first retrieves similar cases from the case base in which past successful food menu are stored. Then it formalizes desirability criteria of menu accordance with the user query by using the similar cases. Then the system will gives the solution to the user based on similarity and prompt it as an output. CBR is a problem-solving paradigm that allows us to utilize the specific knowledge of previous problem situation (cases) to solve a new problem situation. New problem solved by finding the most similar past cases and then adapt and reuse them in the new problem situation. The most important concept of CBR is that the ability of continuous learning from experience, since a new problem is retained each time a problem have been solved, making it immediately available for the future problem. The development of this system will focus on entering information or data as a new request and also to retrieve saved case as a result for the problems. The methodology that selected for the system development is Rapid Application Development (RAD). The expected output from the project will be the implementation of real system that can be used by the healthy user which is to know the amount of calories needed by them in their daily life. Besides, the users also can know the amount of calories that contains in their meal and can help the users to plan their intake of calories for each day.

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TABLE OF CONTENTS

CERTIFICATION OF APPROVAL	ii
CERTIFICATION OF ORIGINALITY	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	ix
LIST OF TABLES	ix
ABBREVIATION	x
CHAPTER 1: INTRODUCTION	1
1. Background of Study	1
1.1 Problem Statement	2
1.1.1 Problem Identification	2
1.1.2 Significant of the Project	2
1.2 Objectives	3
1.3 Scope of Study	3
1.4 Relevancy of the Project	4
1.5 Feasibility of the Project within Scope and Time Frame	4
CHAPTER 2: LITERATURE REVIEW	5
2. Case-Based Reasoning (CBR)	5
2.1 The Process of CBR	5
2.2 Calorie	6
2.2.1 Calorie Needed	7
2.2.2 Recommended Intakes of Calorie	8
2.3 Comparison with Similar or Existence System	9
2.3.1 http://www.dietitians.ca	9
2.3.1.1 The Advantages of the System	10
2.3.1.2 The Disadvantages of the System	10
2.3.2 http://www.nutriweb.org.my	10
2.3.2.1 The Advantages of the System	11

2.3.2.2	The Disadvantages of the System	11
2.3.3	http://www.mealsforyou.com	12
2.3.3.1	The Advantages of the System	12
2.3.3.2	The Disadvantages of the System	13
2.3.4	http://www.weightmanagement.org.my	13
2.3.4.1	The Advantages of the System	14
2.3.4.2	The Disadvantages of the System	14
CHAPTER 3:	METHODOLOGY	15
3.	Procedure Identification	15
3.1	Planning and Problem Definition	16
3.2	Information Gathering and Research	16
3.3	Design	16
3.4	Building Application	17
3.4.1	Hardware	17
3.4.2	Software	17
3.5	Testing	18
CHAPTER 4:	RESULT AND DISCUSSION	19
4.	System Functionality	19
4.1	System Design	20
4.1.1	Use Case Diagram	20
4.1.2	Class Diagram	21
4.1.3	Sequence Diagram	22
4.1.4	System Workflow	23
4.2	System Development	24
4.2.1	Main Page (User Login)	24
4.2.2	Sign up (Register for New User)	25
4.2.3	Menu Planner	25
4.2.4	Calorie Calculator	26
4.2.5	Healthful Recipes	26
4.2.6	Diet and Nutrition	27
4.3	Discussion	27
4.3.1	Usability Testing	27

4.3.2 Testing Conclusion	29
CHAPTER 5: CONCLUSION AND RECOMMENDATION	30
5.1 Conclusion	30
5.2 Recommendation	30
REFERENCES	31
APPENDICES	32
Appendix 1: Gantt Chart	
Appendix 2: User Manual	
Appendix 3: User Evaluation Form	
Appendix 4: System Coding	

LIST OF FIGURES

Figure 2.1	The Process of Case-Based Reasoning (CBR)	6
Figure 2.2	Webpage of www.dietitians.ca	9
Figure 2.3	Webpage of www.nutriweb.org.my	10
Figure 2.4	Webpage of www.mealsforyou.com	12
Figure 2.5	Webpage of www.weightmanagement.org.my	13
Figure 3.1	The Waterfall Development Methodology	15
Figure 4.1	Use Case Diagram	21
Figure 4.2	Class Diagram	21
Figure 4.3	Sequence Diagram for Calculate Calories	22
Figure 4.4	System Workflow	23
Figure 4.5	Screen Shot of Main Page (User Login)	24
Figure 4.6	Screen Shot of Sign Up for New User	25
Figure 4.7	Screen Shot of Menu Planner	25
Figure 4.8	Screen Shot of Calorie Calculator	26
Figure 4.9	Screen Shot of Healthful Recipes	26
Figure 4.10	Screen Shot of Diet and Nutrition	27

LIST OF TABLES

Table 2.1	Recommended Intakes of Calories	8
Table 3.1	Minimum Hardware Requirement	17
Table 3.2	Software Requirement	17
Table 4.1	Usability Criteria's and Corresponding of Evaluators Feedback	28

ABBREVIATION

- CBR – Case-Based Reasoning
- CBMP – Case-Based Menu Planner
- HTML – Hyper Text Markup Language

CHAPTER 1

INTRODUCTION

1. BACKGROUND OF STUDY

Continuously health care is important to ensure the healthy life. There are a few factors that contribute to our health which are by take a good meal and healthy life style. Beside these two factors, there are other factors that cause the diseases occur such as heredity, virus or bacteria infection and so on. In order to ensure the good health, the observation or monitoring must be done continuously by health specialist or expertise.

Case-Based Menu Planner (CBMP) is the consultation system that design to solve the problem. The system not only give the information to the user but it also capable of solving the problem that faced by the user when the user state or enter the problem. Technique or method that is used in this system is based on case-based system which is apply or using Case-Based Reasoning (CBR) technique. CBR is the process of solving new problems based on the solutions of similar past problems.

CBMP not only can be used by the user in order to know about how much calories that can be take each day but the system also can interact with the user by deciding the type of meal that can be take in user's daily life.

1.1 Problem Statement

1.1.1 Problem Identification

Nowadays, there are a lot of disease occurred because of food they take each day. Besides, the increasing in medical expenses and health care cost is one of the factor that need to be considered by the user. The best way to avoid the high cost of illness is to stay well by eat a balanced diet which is diet with less amount of calories and keep your weight under control

In addition, human necessity is different in daily life, depending on the changing of the human physical from kid to adult, health rank and activity that done in daily life. Adult with the age of sixty (60) and above need less meal than individual who are young and active because of activity less.

A calorie is a unit of measurement for energy. However, the calorie remains in common use for the amount of food energy. The amount of calorie is measured by kilo joule (kJ). The amount of energy in the meal is measured by unit of calorie. The contents of calorie in the meal depend on carbohydrate, protein and fat. Fat will produce the very much calorie depends on the weight. A gram of fat is equal with nine (9) calories. Therefore, the meal that has a lot of fat will have high calories.

CBR used the data base for solving new problems based on the solutions of similar past problems. New problem solved by finding the most similar past cases and then adapt and reuse them in the new problem situation. A very important concept of CBR is that the ability of continuous learning from experience, since a new problem is retained each time a problem have been solved, making it immediately available for the future problem.

1.1.2 Significant of the Project

This project can show that web applications can help to improve user's health and life style. Through this system, user can know the amount of calories that need to be taking in their daily life. Given a user query, the system first retrieves similar cases

from the case base in which past successful food menu are stored. Then it formalizes desirability criteria of menu accordance with the user query by using the similar cases. Then the system will give the solution to the user based on similarity and prompt it as an output. A web based front end with MySQL database as a back end will be a package for the users to enhance their health and life style.

1.2 Objectives

At the end of the study there are several objectives need to be achieved. The objectives are:

- To develop a web based menu planner system which will help the user to know the amount of calories needed each day.
- To study on the capability of Case-Based Reasoning (CBR) technique that will help the user by deciding the type of meal for each day.

1.3 Scope of Study

This project is developed module by module that corresponds to the development phases and timeframe. The CBMP is a menu planner website where it is able to calculate the amount of calories needed for the user in one day. This system will be used by the users which are from teenagers and adults who are concern with their health and lifestyle. The system will make ease for them in order to know the amount of calories needed in one day and get advice about the food they take in one day. Besides, the suggestion meal for the system is for breakfast, lunch and dinner. Hence, an effective and efficient web based system is useful to satisfy their needs. In developing this system there are a number of technological and design requirements that should be considered. There are certain criteria need to be considered before develop a good system such as availability, accessibility, flexibility and performance. The needs from the people that will use the system also must be considered. Besides, there is a need to determine on how the CBR technique will incorporate with the database in order to produce a dynamic system through this study. The advantage of using CBR technique compared to other technique will also

be covered. At the end, the system will be develop based on the guideline getting from the research and study done.

1.4 Relevancy of the Project

This project is definitely related to Information Communication Technology. The development of the system involves the use of database using MySQL and need to apply all the knowledge in order to create the tables and all the fields with each other. Besides that, the knowledge for web development through the use of VB Script and JAVA Script need to be applied. Regardless of all these the Author also has to do research on how to set up a web server for the development. The Author also has to document all the information and data where this will involve the skill of using IT tools.

1.5 Feasibility of the Project within Scope and Time Frame

In this project the Author is responsible to develop a web based system that will help the user to know the amount of calories needed in one day and also to give advice to the user about the food they take in one day. Through this system the user will enter their personal details in order to know the amount of calories needed in their daily life. This system will be used by the users who are concern with their health and life style. The system also provides the menu that suitable with the user. The development process should be completed within four months.

CHAPTER 2

LITERATURE REVIEW

2. CASE-BASED REASONING (CBR)

Case-Based Reasoning (CBR) is the process of solving new problems based on the solutions of similar past problems. It has been argued that CBR is not only a powerful method for computer reasoning but also a pervasive behavior in everyday human problem solving. Basically, all reasoning is based on past cases experienced or accepted by the being actively exercising choice most deeply explored in human cognitive science. [1]

2.1 The Process of CBR

Case-Based Reasoning (CBR) has been formalized for purposes of computer reasoning as a four (4) step process. There are four (4) steps involve in CBR which are Retrieve, Reuse, Revise and Retain. [1]

- Retrieve: Given a target problem, retrieve cases from memory that is relevant to solving it. A case consists of a problem, its solution, and, typically, annotations about how the solution was derived.
- Reuse: Map the solution from the previous case to the target problem. This may involve adapting the solution as needed to fit the new situation.
- Revise: Having mapped the previous solution to the target situation, test the new solution in the real world (or a simulation) and, if necessary, revise.
- Retain: After the solution has been successfully adapted to the target problem, store the resulting experience as a new case in memory.

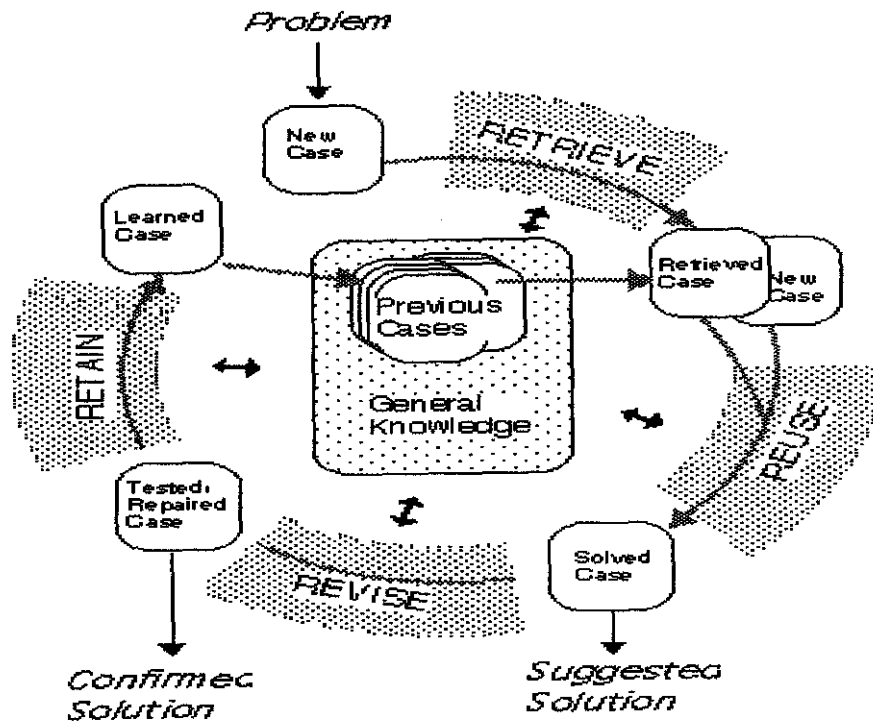


Figure 2.1: The Process of Case-Based Reasoning (CBR)

2.2 Calorie

A calorie is the unit of measurement of energy produced by food when it is oxidized or used in the body. Calories are like fuel for our bodies. We need them for our bodies to run. But if we pump more fuel into our bodies than we need for the amount of activity we do, the excess fuel just sits there. Your body will store this excess, unused fuel. It may store it as muscle, if you perform enough physical, muscle-building exercises such as weightlifting, or it may store it as fat. [2]

You need to maintain a balance between the amount of calories you take in (food) and the amount of calories you use (exercise). You "burn" your body's fuel - calories - when you perform physical activities, and you also burn calories just by sitting still, breathing and living each day. [2]

If you perform enough physical activity, you may increase the amount of calories (or energy units) you burn each day and raise the amount of calories (or energy units) you need each day. So a person who is physically active can eat more calories each day without gaining weight, because this person uses the fuel he or she pumps in, instead of storing it as fat. [2]

Each person is different when it comes to the amount of calories he or she needs each day. The amount of calories a person needs for fuel varies according to age, height, gender, amount of physical activity and other factors. [2]

2.2.1 Calorie Needed

An important goal in human nutrition is to ensure that the amount of calories (or energy units) ingested in food is adequate to meet energy demands. The body needs energy for maintaining body temperature, metabolic activity, supporting growth and for physical work. It is also important, particularly in affluent societies, to minimize excess energy intake over expenditure in order to prevent obesity and its complications. [3]

In addition, conceptually, the prevalence of food deprivation, which is termed undernourishment, is based on comparison of usual food consumption expressed in term of dietary energy (kcal) with a minimum requirement level. The part of the population with food consumption below the minimum required level is considered undernourished. The focus on dietary energy in assessing food insufficiency or deprivation is justified from two perspectives. Firstly a minimum amount of dietary energy intake is essential for body-weight maintenance and work performance. Secondly, increased dietary energy, if derived from normal staple foods, brings with it more protein and other nutrients as well, while raising intakes of the latter nutrients without ensuring a minimum level of dietary energy, and is unlikely to be of much benefit in terms of improving nutritional status. [3]

The first important principle is that energy requirement must be estimated on the basis of energy expenditure and not of energy intake. It is based on the recognition that it is energy expenditure that drives energy needs rather than intake, which does not necessarily reflect energy needs and may vary independently. [3]

2.2.2 Recommended Intakes of Calorie

The proposed recommended energy intake for Malaysia is based on the 2004 Interim Report on Human Energy Requirements. Although the basic principles set forth in the 1985 report have withstood the test of time, several modifications were proposed in the FAO/WHO/UNU 2004 report. The IOM (2002) report on Dietary Reference Intakes for Energy was also used as a reference by the Technical Sub-Committee (TSC) on Energy and Macronutrients. [3]

Table 2.1: Recommended Intake of Calories

Category	Age (years)	Calories (kcal)
Boys (children)	1-3	980
	4-6	1340
	7-9	1780
Girls (children)	1-3	910
	4-6	1290
	7-9	1590
Boys (adolescents)	10-12	2180
	13-15	2690
	16-18	2840
Girls (adolescents)	10-12	1990
	13-15	2180
	16-18	2050
Men (adults and elderly)	19-29	2440
	30-59	2460
	>60	2010
Women (adults and elderly)	19-29	2000
	30-59	2180
	>60	1780

2.3 Comparison with Similar or Existence System

2.3.1 <http://www.dietitians.ca>

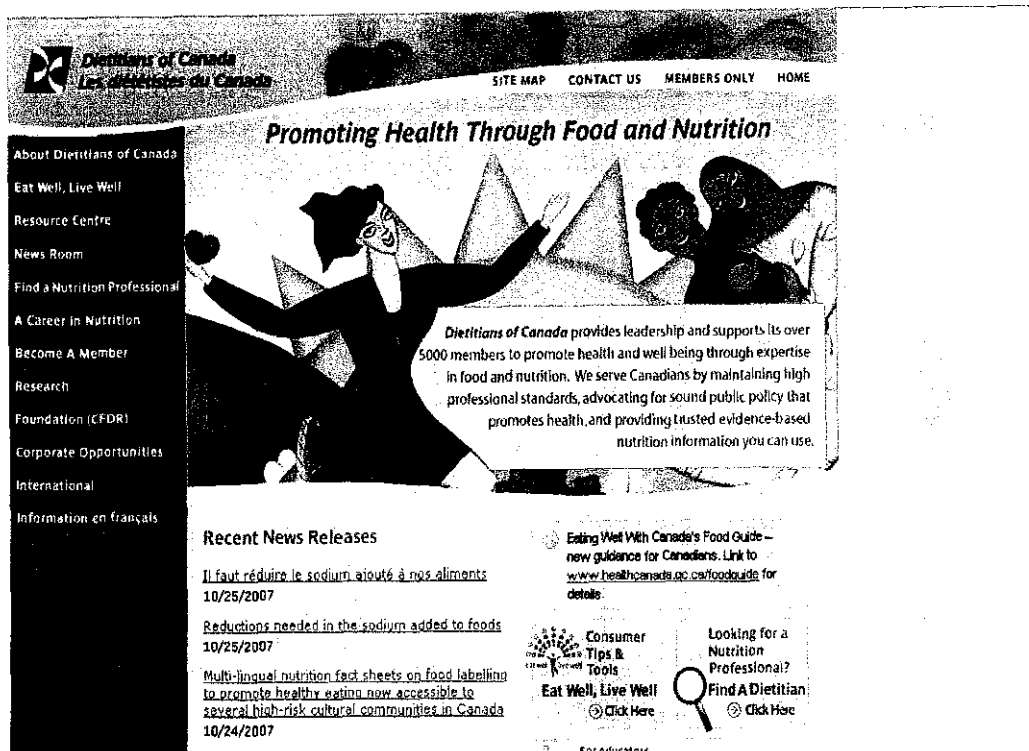


Figure 2.2: Webpage of www.dietitians.ca

This system is a web based system and it is develop to help user in order to decide the amount and type of food. The user of this system need to fill in the information in Meal Planner such as name, gender, age and also the condition of the user like pregnant or not. Then, the user need to choose the type of food that they need for breakfast, lunch and dinner. Besides, the user also needs to choose the type of food which is from vegetables and cereal and lastly decide the amount of food taken by them. After finished to fill in all the data needed, the user will get advice about the amount of calories, fat and fiber from the food that they take. If the user selection did not have the appropriate rate of calories, system will give the suggestion to the user about the food that have a right nutrition. The user also can get advice about the right selection of food that proposes by Dietitians of Canada. [4]

2.3.1.1 The Advantages of the System

There are several advantages of this system. The advantages are:

- The system is a web based system.
- Can get the calculation of calorie, fat and fiber from meal that enters by the user.
- The menu selection is clear and easily for the user to get the information that they want.

2.3.1.2 The Disadvantages of the System

There are several disadvantages of this system. The disadvantages are:

- The system needs the user to enter the type of food in order to determine the amount of calorie in the food. The system not functioning if there are no foods that enter by the user.
- The system only serves Canadians, so it is not suitable for Malaysian.

2.3.2 <http://www.nutriweb.org.my>



Figure 2.3: Webpage of www.nutriweb.org.my

The system is a web based system and has various function for the user such as the calories burner, Body Mass Index (BMI) calculator, provide recipe that has less calories and food pyramid. The system has food guidance for Malaysian for example recipe for Malaysia food. The system also gives a useful health tips like food guidance for pregnancy women, diet and disease, weight issues and healthy eating. [5]

2.3.2.1 The Advantages of the System

There are several advantages of this system. The advantages are:

- The system is a web based system.
- The system has a lot of information such as diet and disease and weight issues.
- The system has guidance about Malaysia food.
- The system has various functions.
- The system can give suggestion about daily menu depends on the information enter by the user such as age, gender, occupation and activities involved.

2.3.2.2 The Disadvantages of the System

There are several disadvantages of this system. The disadvantages are:

- The system did not implement Case-Based Reasoning (CBR) technique.
- The system did not have suggestion for daily meal. It only has recipe to prepare food with less of calories.

2.3.3 <http://www.mealsforyou.com>

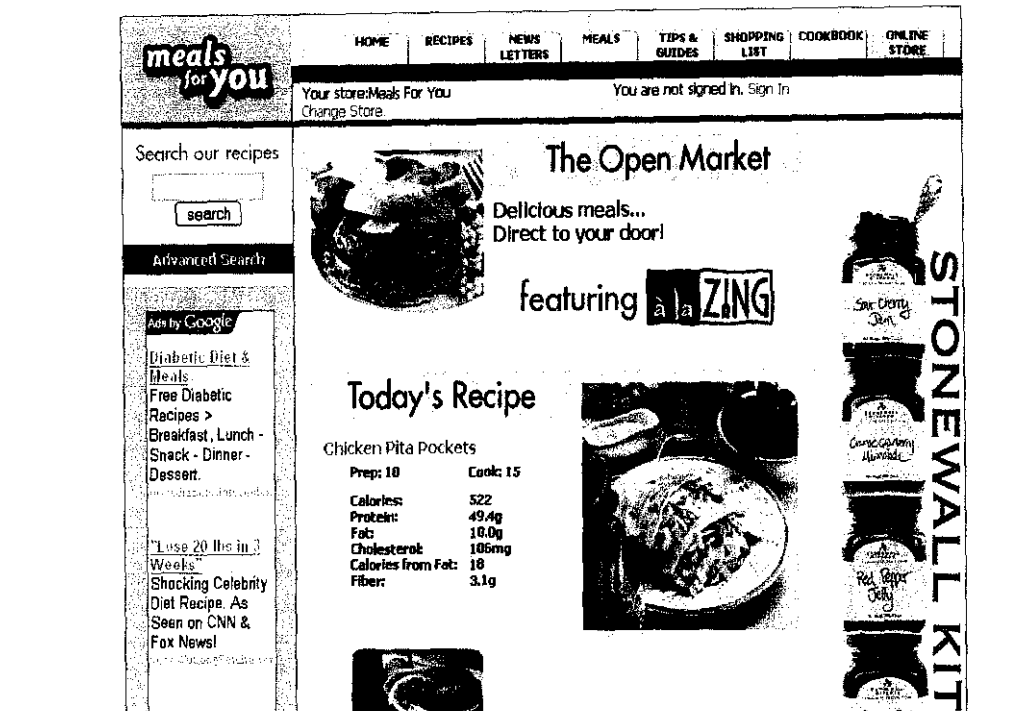


Figure 2.4: Webpage of www.mealsforyou.com

This system is developed special for housewives and has a lot of recipes for housewives who want to cook the meal that has less amount of calories and full with nutrients. The user needs to click at the recipes tab in order to view all the recipes inside the system. This system also has home, news letters, meals, tips and guides, cook book and online store tabs. [6]

2.3.3.1 The Advantages of the Systems

There are several advantages of the system. The advantages are as follow:

- The system has attractive interface with a few choices for the user.
- The system has forum site in order to enable the user to give health tips to other users.
- The arrangement of the menu is easy to understand and the website is up to date.

2.3.3.2 The Disadvantages of the Systems

There are several disadvantages of the system. The disadvantages are as follow:

- The system did not have guidance about Malaysian meal.
- The system did not have suggestion for daily meal. It only has recipe to prepare food with less of calories.
- The system only provides information to the users.
- The system did not implement CBR technique.

2.3.4 <http://www.weightmanagement.org.my>

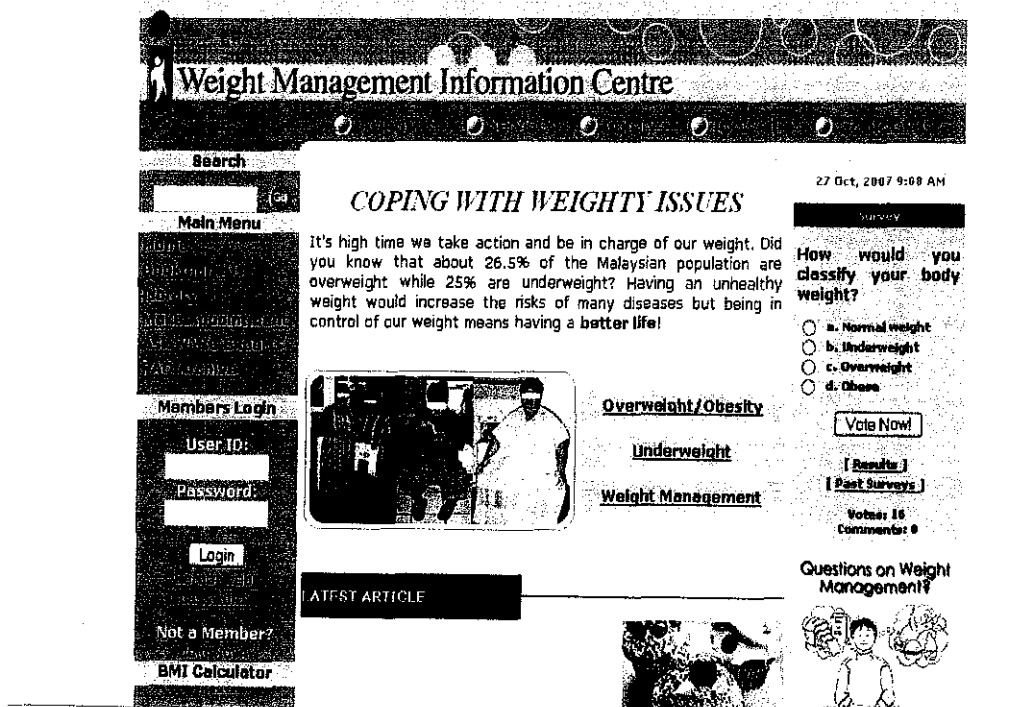


Figure 2.5: Webpage <http://www.weightmanagement.org.my>

The purpose of developing this system is to give information and awareness to Malaysian about weight issue, consequences if overweight and underweight. The system also provide Body Mass Index (BMI) calculator to ease user to know their BMI and weight loss tip. [7]

2.3.4.1 The Advantages of the System

There are several advantages of the system. The advantages are as follow:

- The system is a web base system.
- The interface of the system is attractive and easy to understand.

2.3.4.2 The Disadvantages of the System

There are several disadvantages of the system. The disadvantages are as follow:

- The system only has recipe for food that contain less amount of calories.
- The system did not implement CBR technique.

CHAPTER 3

METHODOLOGY

3. PROCEDURE IDENTIFICATION

The methodology used in this project is the waterfall model shown in Figure 3.1. In this methodology, analyst and users proceed in sequence from one phase to the next. The five steps will explain in detail on each process in the waterfall development methodology:

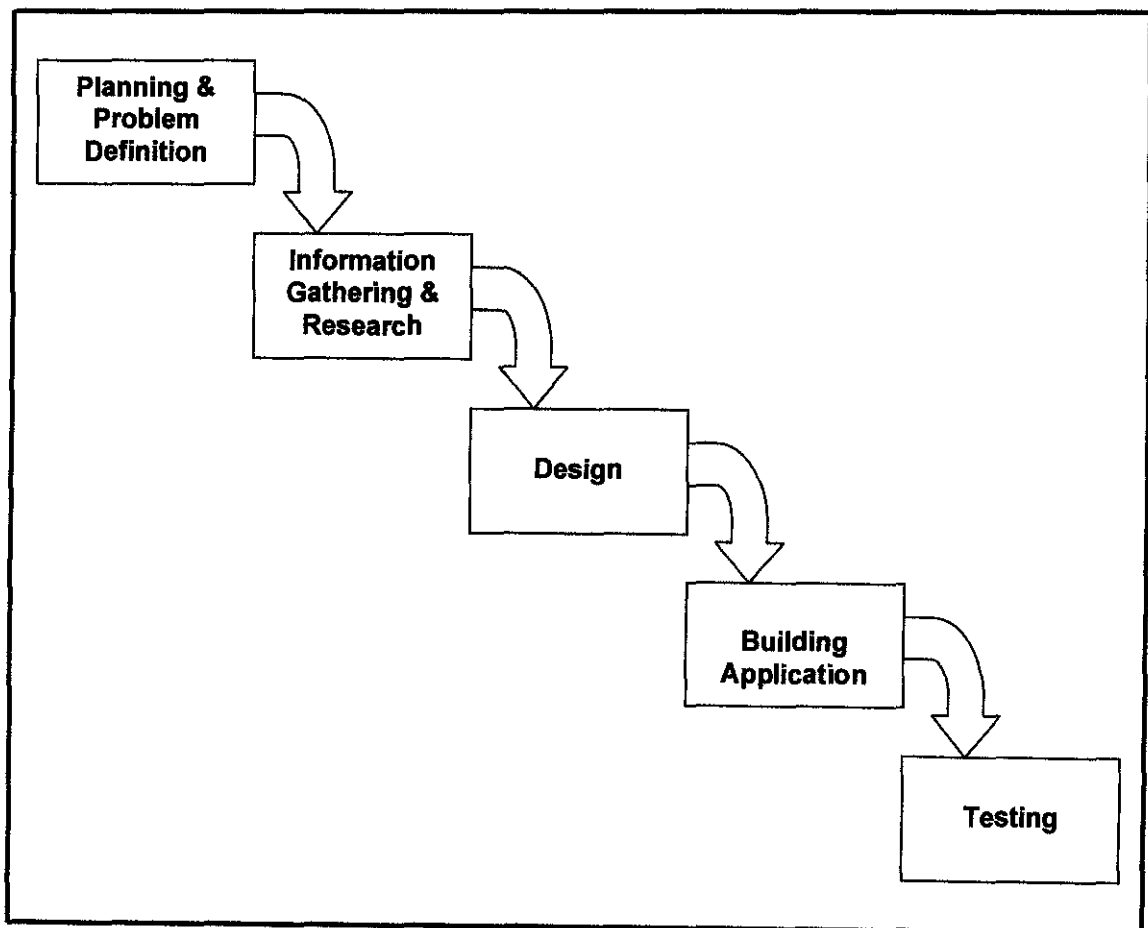


Figure 3.1: The Waterfall Development Methodology

3.1 Planning and Problem Definition

The process begins by planning through the whole project. A well planned project may need to include a Gantt chart to be able to perform the tasks of the whole project on time as per **Appendix 1**.

Next would be identifying the broad problem area and followed by defining the problem area in detail. There is where the problem is defined and narrowed to ease the study. Broad and unnecessary elements that could make the problem vague are filtered and eliminated, thus simplifies the problem. By this, it would be clear to seek for solution.

The project basically looks into the current existence or similar system. Then, these current systems are then analyzed in terms of its reliability, responsiveness and user friendly. The current drawbacks of the system are then overcome and enhanced to meet the objectives of the proposed system.

3.2 Information Gathering and Research

This stage involves seeking information in depth of what is being observed earlier. The information gathering process will be performed to collect all the necessary resources. At this stage, the project will basically look into research of the CBMP. A thorough literature review is done through the usage of web and reference books to further understand the step-by-step development procedure of the system.

3.3 Design

The design process involves the creation of the website in which will focus on how the system will operate, in terms of the hardware, software, network infrastructure, the user interface and databases. First, the system workflow will be designed to show how the system operate and decide its content. Then, the structure for database will be designed. The database structure is very important as to produce comprehensive data structure as a basis for creating database. The web interfaces will also being

designed during this phase. The web interface which is known as Graphical User Interface (GUI) use as the presenter to the end users.

3.4 Building Application

In developing this project, selected tools are used to ensure the system will successfully complete. The tools are divided into two categories which are hardware and software.

3.4.1 Hardware

Table 3.1 shows the hardware requirement of the computer for the development of CBMP.

Table 3.1: Minimum Hardware Requirement

Device	Requirement
<i>Operating System</i>	<i>Microsoft Windows XP</i>
<i>Processor</i>	<i>Intel Pentium IV</i>
<i>Memory</i>	<i>512MB of memory</i>
<i>Disk Space</i>	<i>80GB of free space</i>
<i>Other Peripherals</i>	<i>Screen (1024 x 768), Keyboard, Mouse, CD-Rom</i>

3.4.2 Software

Table 3.2 shows the software used throughout the development of CBMP.

Table 3.2: Software Requirement

Software	Function
<i>Macromedia Dreamweaver MX (PHP)</i>	<ul style="list-style-type: none"> This web development software will be used to create the web pages for the system. It has more features compare to other software such as HTML Kit.

<i>Apache Server</i>	<ul style="list-style-type: none"> • This server provides the place where the application is being stored.
<i>phpMyAdmin (MySQL Database)</i>	<ul style="list-style-type: none"> • phpMyAdmin is the interface for MySQL Database. It is used to store all the data entered by user.
<i>VB script and Java script</i>	<ul style="list-style-type: none"> • These language scripts will be used to work together with Macromedia Dreamweaver MX.
<i>Adobe Photoshop 7.0</i>	<ul style="list-style-type: none"> • This will be used to manipulate images. It will be useful during the web design to ensure the user interface is attractive.
<i>Internet Explorer / Mozilla Firefox</i>	<ul style="list-style-type: none"> • It is the graphical World Wide Web browser used to display the application via internet. It enables user to view the pages and downloads files.

3.5 System Testing

System testing involves requirements testing and usability testing. A requirement testing is to test whether the original requirement are met. As for the usability testing, it tests how convenient the system is to use. This step is often done by analyst with experience in how users think and in good interface design. This is important to ensure the system is easy for users.

CHAPTER 4

RESULT AND DISCUSSION

4. SYSTEM FUNCTIONALITY

The system functionalities for CBMP are divided into six (6) functions which are Home, Menu Planner, Calorie Calculator, Healthful Recipes, Diet and Nutrition and Admin Login.

At Home function, user can see the description about the system and also the example of the menu that has in Malaysia such as Malay food, Indian food and Chinese food. In order to use all the function in this system, user need to login to the system first. For the new user, they need to fill in the register form in order to get access to the system.

At Menu Planner function, user can select the type of menu for breakfast, lunch and dinner in order to know the total amount of calories that contain in the selected meal. Before the users used the Menu Planner function, they need to go to Calorie Calculator function in order to know the total amount of calories needed by them in one day. After that, user can go to Menu Planner function in order to know the total amount of calories that contain in the meal for breakfast, lunch and dinner that select by them.

For Calorie Calculator function, the users need to enter their personal details like age, gender, height, weight and activeness. After that, the users can click at the calculate button and the system will calculate the amount of calories needed by the users based on their personal details and prompt it as an output.

For the Healthful Recipes function, the system will provide all the healthful recipes which is contains less of calories and full with nutrition based on the region in Malaysia such as northern zone, eastern zone, central zone, southern zone, Kuala Lumpur, Sabah and Sarawak. At this function, the users also can read and view all the healthful recipes inside the system.

For the Diet and Nutrition function, there are article about diet and nutrition. In this function, the users can view the article such as “what are the ill effects of junk food?” and “how to follow healthy diet for children?” [8]. Finally, the last function of this system is Admin Login. This function only can be access by the administrator of this system in order to add and delete the data.

4.1 System Design

In this section the Unified Modelling Language (UML) used to emphasize the functional requirement of the system from user’s point of view. There are three (3) diagrams in this section which are use case diagram, class diagram and sequence diagram.

4.1.1 Use Case Diagram

Figure 4.1 below shows the use case diagram used to represent a graphical overview of the functionality provided by a system in terms of actors, their goals and any dependencies between those use cases. The Actor or users need to enter their personal details in order to know the amount of calories needed each day. Besides, users also need to select the type of meal that provided by the system. The system will provide the type of meal for breakfast, lunch and dinner to the users. Besides, the system also can calculate the amount of calories.

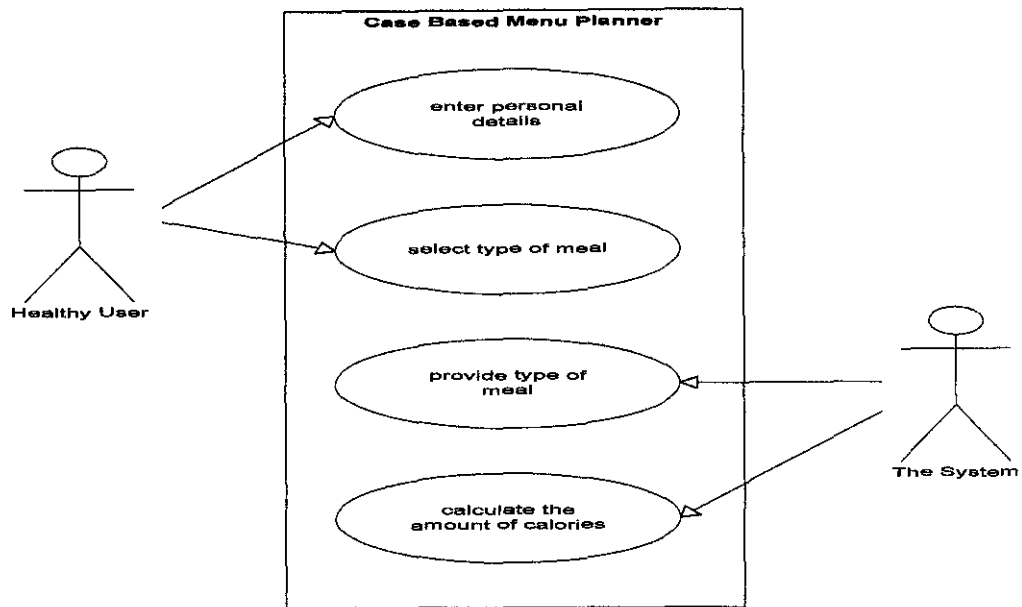


Figure 4.1: Use Case Diagram

4.1.2 Class Diagram

Figure 4.2 shows the class diagram for CBMP. It shows the interaction between the classes which are user, main menu and meal. User send the request to the system which is main menu and main menu will generate the meal to the user and prompt it as an output.

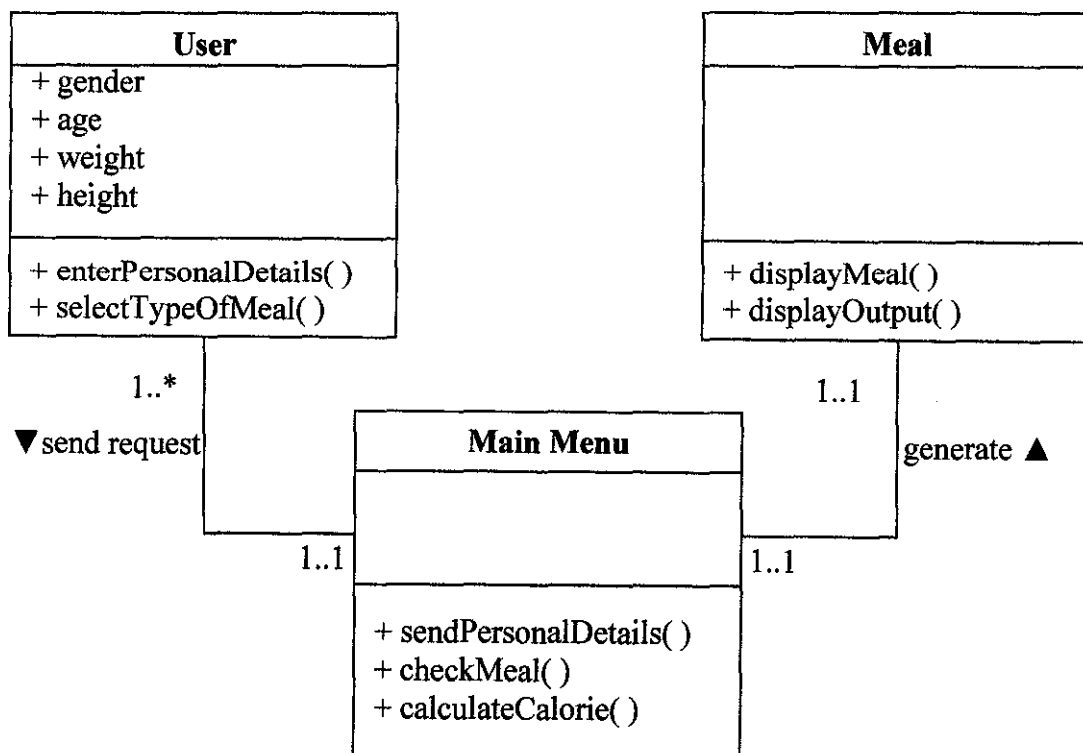


Figure 4.2: Class Diagram

4.1.3 Sequence Diagram

Figure 4.3 shows the sequence diagram for CBMP process. This diagram used message passing in order to show the interaction between the objects. First, user will enter their personal details at the main menu (User Interface) and main menu will send their personal details to the meal. Then, meal will display all the type of meal for breakfast, lunch and dinner to the main menu. User needs to select the type of meal at main menu and main menu will check all the type of meal at meal. After finished to select the type of meal, user can send the request to the main menu and main menu will send user's request to meal in order to calculate the calories and meal will calculate the calorie and lastly display the amount of calories as an output.

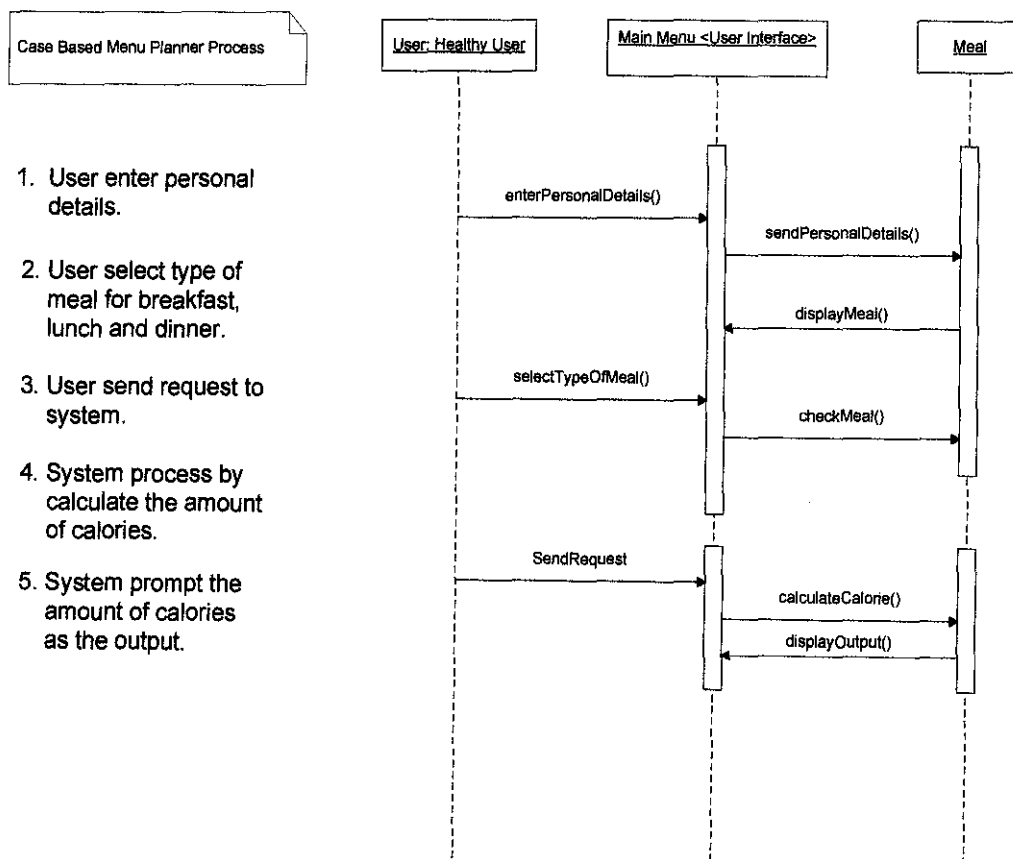


Figure 4.3: Sequence Diagram for Calculate Calories

4.1.4 System Workflow

The flowchart showed the workflow of the system. The most important phase that can be seen through the diagram is retrieve and reused the past cases. First, users need to enter the input which is user's information then the system will retrieve past cases from the database whether there is same cases with the new cases. If yes, the CBR engine will consider the past cases. If no, users need to select new menu which is create new cases and save it as a new cases in database. After the CBR engine consider the past cases and then it will assess the cases. If success, the cases will be reuse and prompt it as an output to the user. If fail, the case need to be repaired and modified and save it in the database.

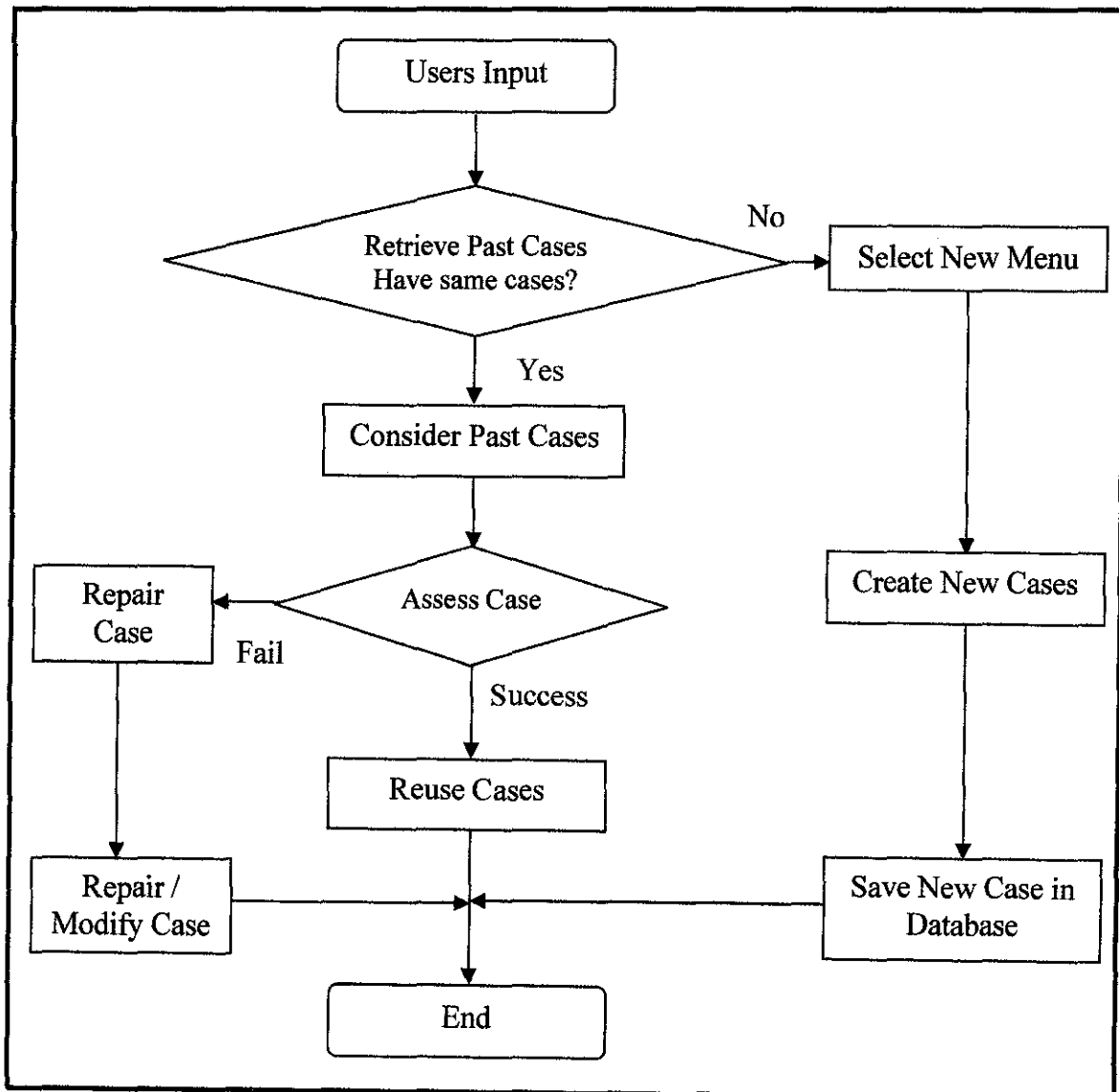


Figure 4.4: System Workflow

4.2 System Development

The CBMP consist about 15 pages. The main parts of the system are the login page, sign up, menu planner, calorie calculator, healthful recipes and diet and nutrition page. The user interface for this system has been designed with simple and attractive pages for the use of the system's users. All pages are sharing the same file for the appearance, colors, font and other properties. The used of Cascading Style Sheet (CSS) for the user interface can save a lot of time by avoiding duplication while developing the web based system. Besides, the appearance of the system is easy to maintain and can be simply changed in the future in only one place.

4.2.1 Main Page (User Login)

Figure 4.5 below shows the main page of the CBMP. The existing users just need to enter their username and password in order to login to the system. For new users, they may click "Here" link to register and become a member of the system. Besides, there are explanation about Malaysian food which is divided into three (3) different cuisines which are Malay food, Indian food and Chinese food. In addition, there are examples of the menu of Malaysian food which are bread dished like "roti canai" and noodle dishes like "mee goreng". The other five links are "Menu Planner", "Calorie Calculator", "Healthful Recipes", "Diet & Nutrition" and "Admin Login".



Figure 4.5: Screen Shot of Main Page (User Login)

4.2.2 Sign up (Register for New User)

Figure 4.6 below shows the sign up page for the new users. In order to use all the function in the system, users need to register their username and password to the system. The system will save all the data that entered by the users in the database.



CASE-BASED MENU PLANNER

HOME MENU PLANNER CALORIE CALCULATOR BURNING CALORIES DAILY INTAKE ADMIN LOGIN

SIGN UP FOR NEW USER

Username Desired:

Password Desired:

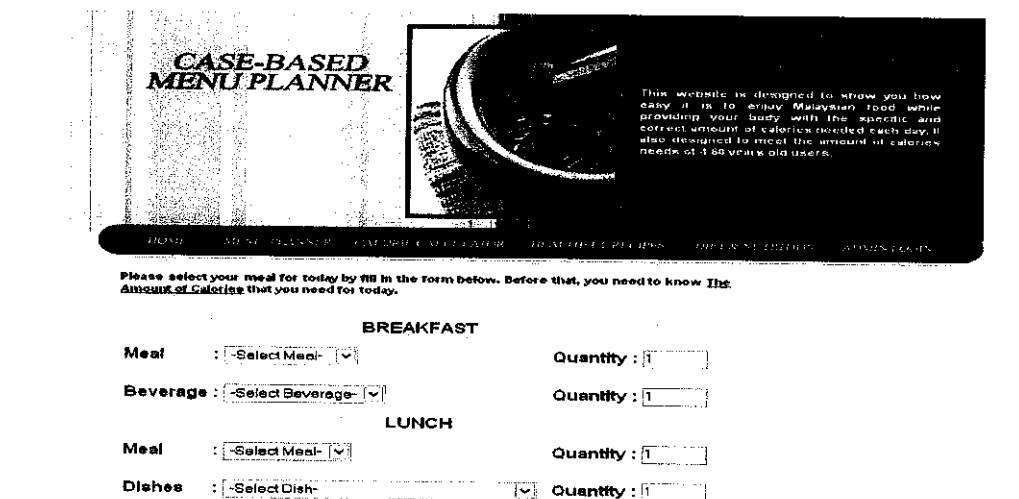
E-mail Address:

This website is designed to show you how easy it is to enjoy Malaysian food while providing your body with the specific and correct amount of calories needed each day. It also designed to meet the amount of calories needs of 4-60 years old users.

Figure 4.6: Screen Shot of Sign Up for New User

4.2.3 Menu Planner

Figure 4.7 below shows the Menu Planner page of the system. In this section, the users need to select the menu for breakfast, lunch and dinner in order to know the total amount of calories that contain in the selected meal.



CASE-BASED MENU PLANNER

HOME MENU PLANNER CALORIE CALCULATOR BURNING CALORIES DAILY INTAKE ADMIN LOGIN

This website is designed to show you how easy it is to enjoy Malaysian food while providing your body with the specific and correct amount of calories needed each day. It also designed to meet the amount of calories needs of 4-60 years old users.

Please select your meal for today by fill in the form below. Before that, you need to know the Amount of Calories that you need for today.

BREAKFAST

Meal :

Quantity :

Beverage :

Quantity :

LUNCH

Meal :

Quantity :

Dishes :

Quantity :

Figure 4.7: Screen Shot of Menu Planner

4.2.4 Calorie Calculator

Figure 4.8 below shows the Calorie Calculator page of the system. For this section, the users need to enter their personal details such as age, gender, height, weight and activeness in order to know the amount of calories needed for each day.

Figure 4.8: Screen Shot of Calorie Calculator

4.2.5 Healthful Recipes

Figure 4.9 below shows the Healthful Recipes page of the system. For this section, the users can read and view all the healthful recipes inside the system based on the region in Malaysia.

Figure 4.9: Screen Shot of Healthful Recipes

4.2.6 Diet and Nutrition

Figure 4.10 below shows the Diet and Nutrition page of the system. In this section, there are article about diet and nutrition for the users to view and read such as “what are the ill effects of junk food?” and “how to follow healthy diet for children?” [8].

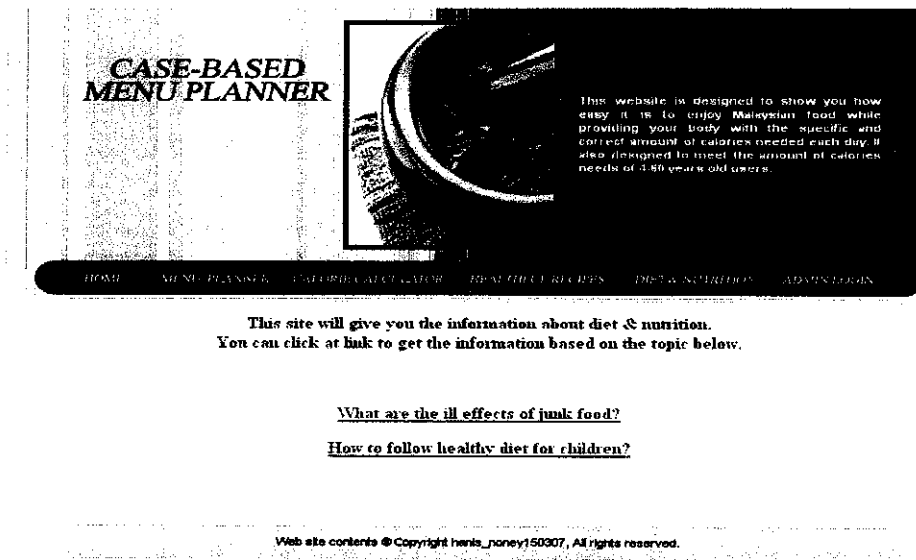


Figure 4.10: Screen Shot of Diet and Nutrition

4.3 Discussion

4.3.1 Usability Testing

First and foremost the target users who were going to test the system is chosen. The best candidates will be the public or anyone as they are the prime users of this system. So, ten candidates which ages ranging from 18 to 40 years old were chosen.

The system is tested by asking these ten people to test the system by inputting data in the interfaces. They were asked to use test data to test the system. They were asked to move through the system by themselves as what is wanted their honest feedback on the interface and system.

After using the system, they were given an evaluation form to fill. They were also asked to give their feedbacks on the system. The evaluation form for the system is as per **Appendix 2**.

Table 4.1 below shows the results of the usability testing done by the ten users of the system. The ten evaluators are named from A to J. They were needed to give rate the system based on the six criteria's. The range of the rating scale would be from 1 to 4 where 4 is the highest value on the scale. With the evaluators' result, the highest frequency of each category is identified and evaluated.

Table 4.1: Usability Criteria's and Corresponding of Evaluators Feedback

No.	Criteria's	Evaluator										Mark
		A	B	C	D	E	F	G	H	I	J	
1.	User Friendly	2	2	3	2	1	3	3	3	2	3	3
2.	Flexibility	3	3	3	2	3	3	2	2	3	2	3
3.	Navigation	3	3	3	3	2	2	2	3	2	3	3
4.	Consistency	2	2	3	3	3	3	3	2	2	3	3
5.	Language	4	4	4	3	3	4	4	3	3	4	4

The evaluation done by the users were based on five criteria's which are:

- **User friendly**

Easy to operate or understand. Users are asked if the system is difficult for them to move around or interact with. As the system is simple and do not have a lot of web pages, it is easy to operate and understand.

- **Flexibility**

The term flexibility refers to the multiplicity of ways the end users and the system exchange information. It relates to the way the user interprets the instructions and how the instructions are meant for the user. It is a two way communication. This not only concerns the interface but the system as a whole. The system uses simple and direct instruction is easily interpreted by users.

- **Navigation**

Navigation here concerns more of the interface than the system as a whole. The navigation here brings meaning to the tools provided for users to move around in the interface and system. The linking buttons, layout of the interface, interface flow and so on are some examples. The system has a menu bar on the left panel that helps the user to easily navigate through the system.

- **Consistency**

This criterion relates to the likeness in behavior arising from similar situations of similar task objectives. Consistency can be expressed in terms of the form of input expressions or output responses with respect to the meaning of actions in some conceptual model of the system. The system uses the same layout on most of the pages. Thus the layout and design is consistent.

- **Language**

The language used in the system is English. This section is to make sure that users prefer the usage of English.

4.3.2 Testing Conclusion

Based on the user feedback, it can be concluded that the system is user friendly, flexible, has a good navigation, consistency and has good command of languages. The suggested improvements were a better security for the admin to avoid hacking, more graphics in bright colors to attract attention and have more variety of menus of Malaysian food.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 CONCLUSION

In conclusion, the system is focusing to help user to know the amount of calories needed and give advice about the food they take in daily life based on the information that enter by the user. The system aim is to make the functionality of the system reliable to the users. The functions consist in the CBMP is easy to handle. The good choice of technology cooperated with the system is one of the factor that lead to the successful of the system development.

Successful development of CBMP will eliminate the difficulties and problems facing by healthy users or healthy people in Malaysia. Implementation of the project is a good exposure to the Author as the project required output of working model. This give a good opportunity to discover new management skill, new knowledge and apply the knowledge gained throughout the real working life. Good project planning and diligent work is very important along with supervise from the lecturer in charge. These are among the keys factor that can lead to the successful of the project.

5.2 RECOMMENDATION

Although this project completed, there are several recommendation can be applied in respect for future development. For the system, the Author would recommend to add more menu of Malaysian food in order to have more variety of selection. Other than that, the interface of the system needs to be improved in order to be more attractive.

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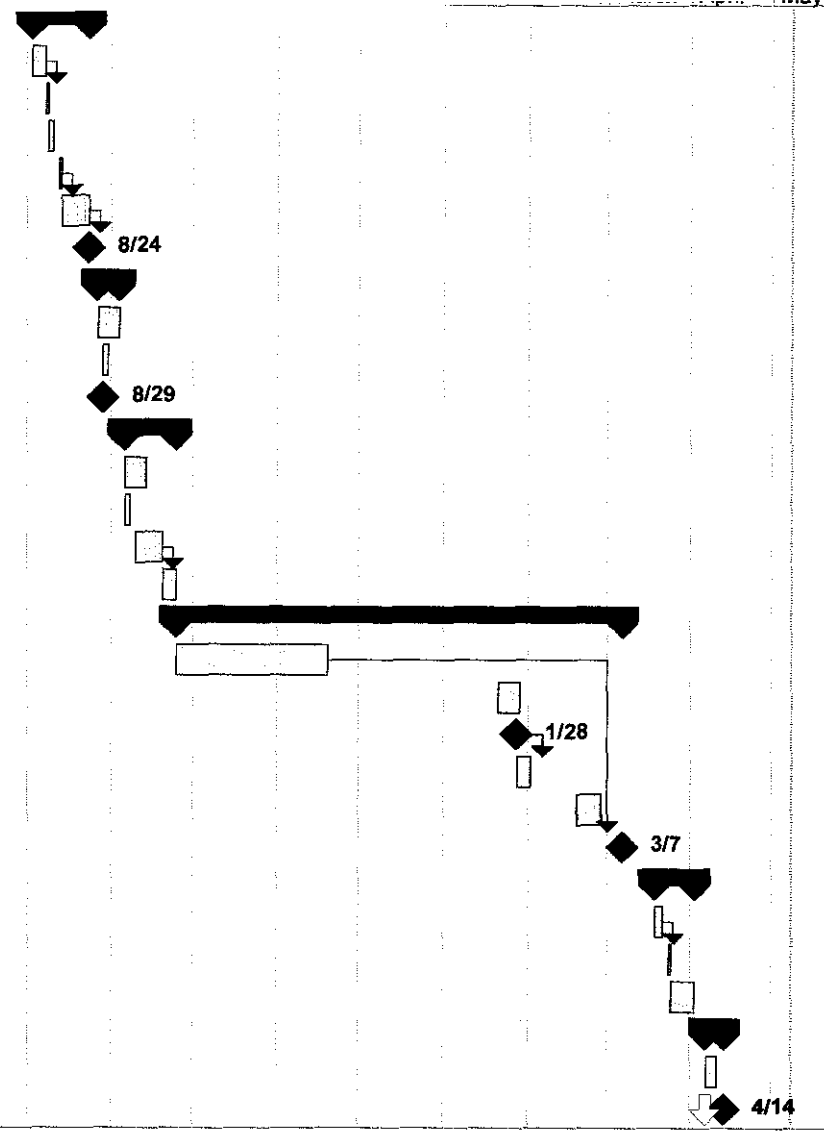
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APPENDICES

**APPENDIX 1:
GANTT CHART**

2	2	Selection of Project Topic	3 days	Fri 8/3/07	Fri 8/24/07
3	3	Determine Project Scope	1 day	Wed 8/8/07	Wed 8/8/07
4	4	Determine Project Schedule	2 days	Thu 8/9/07	Fri 8/10/07
5	5	Specify Objectives	1 day	Mon 8/13/07	Mon 8/13/07
6	6	Preliminary Research Work	8 days	Tue 8/14/07	Thu 8/23/07
7	7	Submission of Preliminary	0 days	Fri 8/24/07	Fri 8/24/07
8	8	Information Gathering and Research	6 days	Mon 8/27/07	Mon 9/3/07
9	9	Research and Observe on Existing System	6 days	Mon 8/27/07	Mon 9/3/07
10	10	Problem Solving	2 days	Wed 8/29/07	Thu 8/30/07
11	11	Seminar 1: Preliminary Reporting	0 days	Wed 8/29/07	Wed 8/29/07
12	12	Design	13 days	Thu 9/6/07	Mon 9/24/07
13	13	Research	6 days	Thu 9/6/07	Thu 9/13/07
14	14	Designing of Flowchart	2 days	Thu 9/6/07	Fri 9/7/07
15	15	Designing interface	8 days	Mon 9/10/07	Wed 9/19/07
16	16	Evaluation	3 days	Thu 9/20/07	Mon 9/24/07
17	17	Building Application	118 days	Tue 9/25/07	Fri 3/7/08
18	18	Program the project	40 days	Tue 9/25/07	Mon 11/19/07
19	19	Prepare Progress Report	6 days	Mon 1/21/08	Mon 1/28/08
20	20	Submission of Progress Report	0 days	Mon 1/28/08	Mon 1/28/08
21	21	Evaluation	5 days	Mon 1/28/08	Fri 2/1/08
22	22	Prepare Interim Report	7 days	Tue 2/19/08	Wed 2/27/08
23	23	Submission of Interim Report	0 days	Fri 3/7/08	Fri 3/7/08
24	24	Testing	11 days	Wed 3/19/08	Wed 4/2/08
25	25	Functional Testing	3 days	Wed 3/19/08	Fri 3/21/08
26	26	Project Demo	1 day	Mon 3/24/08	Mon 3/24/08
27	27	Evaluation	7 days	Tue 3/25/08	Wed 4/2/08
28	28	Presentation	5 days	Mon 4/7/08	Mon 4/14/08
29	29	Presentation Preparation	4 days	Mon 4/7/08	Thu 4/10/08
30	30	Final Presentation	0 days	Mon 4/14/08	Mon 4/14/08



Project: gantt chart
Date: Thu 5/8/08

Task		Milestone		External Tasks	
Split		Summary		External Milestone	
Progress		Project Summary		Deadline	

APPENDIX 2:
USER MANUAL

User Manual

This guide describes how to use the Case-Based Menu Planner System.

- **Main Page (User Login)**

The screenshot shows the main page of the Case-Based Menu Planner system. At the top left, the title "CASE-BASED MENU PLANNER" is displayed. To its right is a close-up image of a bowl of food. Further right, a paragraph states: "This website is designed to show you how easy it is to enjoy Malaysian food while providing your body with the specific and correct amount of calories needed each day. It also designed to meet the amount of calories needs of 4-60 years old users." Below this is a navigation bar with links: HOME, MENU PLANNER, CALORIE CALCULATOR, HEALTHY RECIPES, DIET & NUTRITION, ADMIN LOGIN. The main content area features a "USER LOGIN" section with a message: "Please enter the username and password in order to use this website." Below this are input fields for "Username:" and "Password:", followed by "Submit" and "Reset" buttons. A link "Not a member? Click [here](#) to Register" is also present. To the right of the login form are two recipe cards: "Bread Dishes (Roti Canai)" and "Noodle Dishes (Mee Goreng)". At the bottom left, a quote reads: "Malaysian food is the best in Asia, it has the most variety and the best quality, explore the Malay, Chinese or Indian cuisine" and "Malaysian food can be separated in three different cuisines. About 70%".

1. Register user need to enter their username and password.
2. Click the button Submit and user will be notify their email address and can use the system.

- **Sign Up for New User**

The screenshot shows the sign-up page of the Case-Based Menu Planner system. It features the same header and navigation bar as the login page. The main content area is titled "SIGN UP FOR NEW USER" and contains three input fields: "Username Desired:", "Password Desired:", and "E-mail Address:". Below these fields are "Submit" and "Reset" buttons. The rest of the page content, including the navigation bar and the bottom quote, is identical to the login page screenshot.

1. For the new user, they need to register in order to become a member of the system and have an access to use all the function in the system.
2. New user need to enter their details like username, password and email address.

- **Menu Planner**

CASE-BASED MENU PLANNER

This website is designed to show you how easy it is to enjoy Malaysian food while providing your body with the specific and correct amount of calories needed each day. It also designed to meet the amount of calories needs of 4-60 years old users.

HOME MENU PLANNER CALORIE CALCULATOR HEALTHY RECIPES DIET & NUTRITION ADMIN LOGIN

Please select your meal for today by fill in the form below. Before that, you need to know The Amount of Calories that you need for today.

BREAKFAST

Meal : Quantity :

Beverage : Quantity :

LUNCH

Meal : Quantity :

Dishes : Quantity :

1. Users need to select the menu for breakfast, lunch and dinner.
2. Click on the Submit button in order to know the total amount of calories that contains in the selected meal.

- **Calorie Calculator**

CASE-BASED MENU PLANNER

This website is designed to show you how easy it is to enjoy Malaysian food while providing your body with the specific and correct amount of calories needed each day. It also designed to meet the amount of calories needs of 4-60 years old users.

HOME MENU PLANNER CALORIE CALCULATOR HEALTHY RECIPES DIET & NUTRITION ADMIN LOGIN

Please enter your personal details in order to know the total amount of calories that need for today.

Age: years

Gender: Male Female

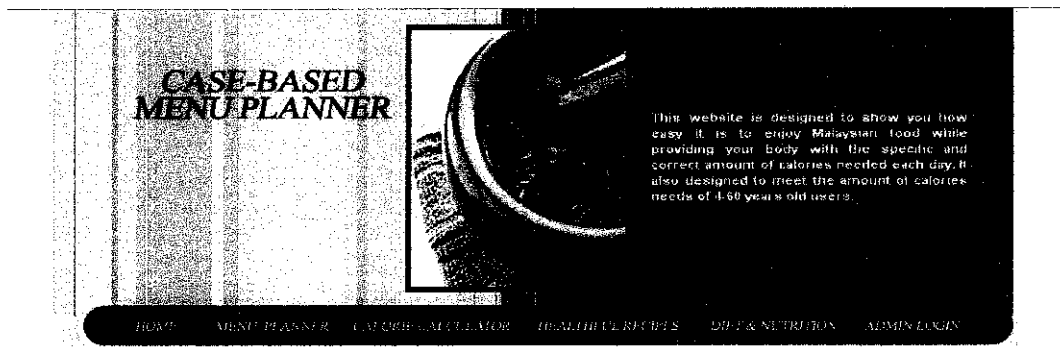
Height:

Weight: Kg

Activeness:

1. Users need to enter their personal details such as age, gender, height, weight and activeness.
2. Click on the Calculate button in order to know the total amount of calories needed for each day.

- **Healthful Recipes**



This site will give you the example of healthful recipes in Malaysia.
You can click at link to get the healthful recipes based on the zone below.

[Northern Zone](#)

[Eastern Zone](#)

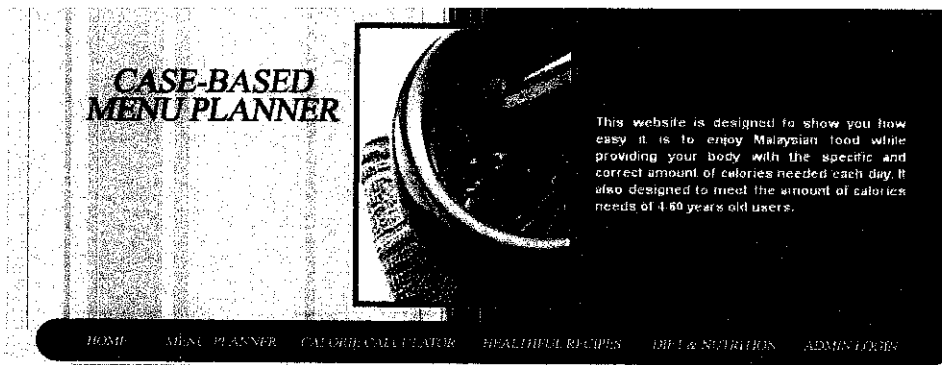
[Central Zone](#)

[Southern Zone](#)

[Kuala Lumpur](#)

1. Users need to click on the navigate link in order to read the healthful recipes.

- **Diet and Nutrition**



This site will give you the information about diet & nutrition.
You can click at link to get the information based on the topic below.

[What are the ill effects of junk food?](#)

[How to follow healthy diet for children?](#)

Web site contents © Copyright heris_honey150307, All rights reserved.

1. Users need to click on the navigate link in order to read the article about diet and nutrition.

APPENDIX 3:
USER EVALUATION FORM

USER EVALUATION FORM

Rate these sections for the interface you were asked to evaluate:

User Friendly 1 2 3 4

Is the system easy to operate or to understand as a whole?

Flexibility 1 2 3 4

Are the instructions on the website understandable?

Navigation 1 2 3 4

Is it easy to move around the website?

Consistency 1 2 3 4

Is the website's layout and design consistent?

Language 1 2 3 4

How is the command of language used in this system?

** 1 is rated the lowest and 4 is rated the highest

APPENDIX 4:
SYSTEM CODING

Menu Planner Coding

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>Menu Planner</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link href="text.css" rel="stylesheet" type="text/css">
</head>
<!--javascript-->
<script language="JavaScript">

<!--

// CED subroutine for cleaning up JavaScript rounding errors
// to any reasonable number of decimal places 5/5/1997 last mod 2/19/2004
// round for decimal of (value of precision) places, default is 3
// This routine can be used to pass a number and a number for precision
// or just a number only, that is to be rounded to a set number of decimal
// places. This routine supports leading and training zeros, leading and
// trailing spaces, and padding. To prevent errors, pass variables as a string.

function perRound(num, precision) {

    var precision = 3; //default value if not passed from caller, change if
desired

    // remark if passed from caller

    precision = parseInt(precision); // make certain the decimal precision is
an integer

    var result1 = num * Math.pow(10, precision);
    var result2 = Math.round(result1);
    var result3 = result2 / Math.pow(10, precision);
    return zerosPad(result3, precision);
}

function zerosPad(rndVal, decPlaces) {

    var valStrg = rndVal.toString(); // Convert the number to a string
    var decLoc = valStrg.indexOf("."); // Locate the decimal point
    // check for a decimal
    if (decLoc == -1) {

        decPartLen = 0; // If no decimal, then all decimal places will be padded with
0s

        // If decPlaces is greater than zero, add a decimal point
        valStrg += decPlaces > 0 ? "." : "";
    }

    else {

        decPartLen = valStrg.length - decLoc - 1; // If there is a decimal already,
only the needed decimal places will be padded with 0s
    }
}
```

```

        var totalPad = decPlaces - decPartLen;    // Calculate the number of decimal
places that need to be padded with 0s

        if (totalPad > 0) {

            // Pad the string with 0s

            for (var cntrVal = 1; cntrVal <= totalPad; cntrVal++)

                valStrg += "0";

            }

        return valStrg;

    }

// send the value in as "num" in a variable

// clears field of default value
function clear_field(field) {

    if (field.value==field.defaultValue) {

        field.value=''

    }

}

// calculate the calories

function CalcCal() {

var quantity = eval(document.calcalc.InUnit.value);

var i = document.calcalc.unit.selectedIndex;

var thisUnit = eval(document.calcalc.unit.options[i].value);

var quantity2 = eval(document.calcalc.InUnit2.value);

var i2 = document.calcalc.unit2.selectedIndex;

var thisUnit2 = eval(document.calcalc.unit2.options[i2].value);

var quantity3 = eval(document.calcalc.InUnit3.value);

var i3 = document.calcalc.unit3.selectedIndex;

var thisUnit3 = eval(document.calcalc.unit3.options[i3].value);

var quantity4 = eval(document.calcalc.InUnit4.value);

var i4 = document.calcalc.unit4.selectedIndex;

var thisUnit4 = eval(document.calcalc.unit4.options[i4].value);

var quantity5 = eval(document.calcalc.InUnit5.value);

var i5 = document.calcalc.unit5.selectedIndex;

var thisUnit5 = eval(document.calcalc.unit5.options[i5].value);

```

```

var quantity6 = eval(document.calcalc.InUnit6.value);
var i6 = document.calcalc.unit6.selectedIndex;
var thisUnit6 = eval(document.calcalc.unit6.options[i6].value);

var quantity7 = eval(document.calcalc.InUnit7.value);
var i7 = document.calcalc.unit7.selectedIndex;
var thisUnit7 = eval(document.calcalc.unit7.options[i7].value);

var quantity8 = eval(document.calcalc.InUnit8.value);
var i8 = document.calcalc.unit8.selectedIndex;
var thisUnit8 = eval(document.calcalc.unit8.options[i8].value);

var quantity9 = eval(document.calcalc.InUnit9.value);
var i9 = document.calcalc.unit9.selectedIndex;
var thisUnit9 = eval(document.calcalc.unit9.options[i9].value);

document.calcalc.ecals1.value = (thisUnit);
document.calcalc.ecals2.value = (thisUnit2);
document.calcalc.ecals3.value = (thisUnit3);
document.calcalc.ecals4.value = (thisUnit4);
document.calcalc.ecals5.value = (thisUnit5);
document.calcalc.ecals6.value = (thisUnit6);
document.calcalc.ecals7.value = (thisUnit7);
document.calcalc.ecals8.value = (thisUnit8);
document.calcalc.ecals9.value = (thisUnit9);

document.calcalc.cals1.value = (thisUnit) * (quantity);
document.calcalc.cals2.value = (thisUnit2) * (quantity2);
document.calcalc.cals3.value = (thisUnit3) * (quantity3);
document.calcalc.cals4.value = (thisUnit4) * (quantity4);
document.calcalc.cals5.value = (thisUnit5) * (quantity5);
document.calcalc.cals6.value = (thisUnit6) * (quantity6);
document.calcalc.cals7.value = (thisUnit7) * (quantity7);
document.calcalc.cals8.value = (thisUnit8) * (quantity8);
document.calcalc.cals9.value = (thisUnit9) * (quantity9);

document.calcalc.cals.value = ((thisUnit) * (quantity)) + ((thisUnit2) * (quantity2))
+ ((thisUnit3) * (quantity3)) + ((thisUnit4) * (quantity4)) + ((thisUnit5) *
(quantity5)) + ((thisUnit6) * (quantity6)) + ((thisUnit7) * (quantity7)) +
((thisUnit8) * (quantity8)) + ((thisUnit9) * (quantity9));

}

//-->

```

```

</script>

<body bgcolor="FDF5C8" leftmargin="0" topmargin="0" marginwidth="0" marginheight="0">
<center>
<table width="50%" border="0" cellspacing="0" cellpadding="0">
  <tr>
    <td bgcolor="DC3467"><table width="770" border="0" cellspacing="0" cellpadding="0">
      <tr>
        <td width="290" align="left" valign="top" background="images/top_bg.gif"></td>
        <td width="185" align="left"></td>
        <td align="center"><table width="260" border="0" cellspacing="0" cellpadding="0" class="text">
          <tr>
            <td><font color="white"><strong>
              <p align="justify">This website is designed to show you how easy it
                is
                to enjoy Malaysian food while providing your
                body with
                the specific and correct amount of calories
                needed each day.
                It also designed to meet the amount of
                calories needs of
                4-60 years old
                users.</p></strong></font></td>
          </tr>
        </table></td>
        </table></td>
      </tr>
    </table></td>
  </tr>
  <tr>
    <td height="35" valign="top" background="images/but_bg.gif"><table width="770" border="0" cellspacing="0" cellpadding="0">
      <tr>
        <td width="59" align="left"></td>
        <td width="68" align="left"><A href="index.php"></a></td>
        <td width="115" align="left"><A href="menuplanner.php"></a></td>
        <td width="145" align="left"><A href="calorie.php"></a></td>
        <td width="88" align="left"><A href="recipes.php"></a></td>
        <td width="94" align="left"><A href="diet.php"></a></td>
        <td width="46" align="left"><A href="admin.php"></a></td>
        <td align="left"></td>
      </tr>
    </table></td>
  </tr>
</table>
<table width="753" border="0" cellspacing="0" cellpadding="0">
  <!--DWLayoutTable-->
  <tr>
    <td width="27" rowspan="3" align="left" valign="top"></td>
    <td width="726" align="left"></td>
  </tr>
  <tr>
    <td align="left" bgcolor="#FFFFFF"><table width="726" border="0" cellspacing="0" cellpadding="0">
      <!--DWLayoutTable-->
      <tr>
        <td width="379" align="center" valign="top"> <table width="350" border="0" cellspacing="0" cellpadding="0" class="text">
          <!--DWLayoutTable-->
          <tr>
            <td align="left">
              <p align="justify"><strong>Please select your meal for today
                by fill in the form below. Before that, you need to know
                <a href="calorie.php">The Amount of Calories</a> that you

```

```

        need for today.</strong> </p>
        <p align="justify">&nbsp; </p></td>
    </tr>
    <tr>
        <!--user login form-->
        <td align="left">
            <table width="301" height="659" border="0">
                <!--DWLayoutTable-->
                    <form name="calcalc">
                        <tr bgcolor="FDF5C8">
                            <td height="21" colspan="10"><div align="center"><span
class="style16"><strong>BREAKFAST</strong></span></div></td>
                        </tr>
                        <tr>
                            <td width="73" height="43"><span
class="style16"><strong>Meal</strong></span></td>
                            <td width="53"><div align="center"><span
class="style16"><strong></strong></span></div></td>
                            <td colspan="3"><strong><span class="style16"><strong>
<select name="unit" class="style17" id="pagi_makanan">
                    <option value="-Select Meal-" selected>-Select Meal-
</option>
                    <option value="231">Murtabak</option>
                    <option value="356">Roti Telur</option>
                    <option value="301">Roti Canai</option>
                    <option value="300">Capati</option>
                    <option value="147">Thosai</option>
                    <option value="389">Nasi Lemak</option>
                    <option value="637">Fried Rice</option>
                    <option value="598">Fried Mee</option>
                    <option value="321">Fried Kueteow</option>
                    <option value="383">Mee Soup</option>
                </select>
                </strong></span></strong></td>
                            <td width="1">
                            <td width="64"><span
class="style16"><strong>Quantity</strong></span></td>
                            <td width="6"><div align="center"><span
class="style16"><strong></strong></span></div></td>
                            <td width="30"><strong><span class="style16">
<input type="text" name="InUnit" size="5" value="1"
onFocus"clear_field(this)">
                    </span></strong></td>
                            <td width="1">&nbsp;</td>
                        </tr>
                        <tr>
                            <td height="43"><span
class="style16"><strong>Beverage</strong></span></td>
                            <td><div align="center"><span
class="style16"><strong></strong></span></div></td>
                            <td colspan="3"><strong><span class="style16"><strong>
<select name="unit2" class="style17" id="pagi_minuman">
                    <option value="-Select Beverage-" selected>-Select
Beverage-</option>
                    <option value="154">Orange Juice</option>
                    <option value="161"> Apple Juice</option>
                    <option value="184">Pineapple Juice</option>
                    <option value="154">Teh Tarik</option>
                    <option value="162">Coffee with Milk</option>
                    <option value="186">Milo with Milk</option>
                    <option value="8">Plain Coffee</option>
                    <option value="8">Plain Tea</option>
                    <option value="0">Plain Water</option>
                </select>
                </strong></span></strong></td>
                            <td>
                            <td><span
class="style16"><strong>Quantity</strong></span></td>
                            <td><div align="center"><span
class="style16"><strong></strong></span></div></td>
                            <td><strong><span class="style16">
<input type="text" name="InUnit2" size="5" value="1"
onFocus"clear_field(this)">
                    </span></strong></td>
                            <td>&nbsp;</td>
                        </tr>
    </tr>

```



```

        <tr bgcolor="FDF5C8">
            <td height="21" colspan="10"><div align="center"
class="style16"><strong>LUNCH</strong></div>
                <div align="center" class="style16"></div>
                <div align="center" class="style16"></div></td>
        </tr>
        <tr>
            <td height="43"><span
class="style16"><strong>Meal</strong></span></td>
            <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
            <td colspan="3"><strong><span class="style16"><strong>
id="tengahari_makanan">
                <select name="unit3" class="style17"
                    <option value="-Select Meal-" selected>-Select Meal-
</option>
                    <option value="300">Nasi Putih</option>
                    <option value="448">Nasi Briyani</option>
                    <option value="805">Nasi Pataya</option>
                    <option value="637">Fried Rice</option>
                    <option value="389">Nasi Lemak</option>
                    <option value="436"> Nasi Minyak</option>
                    <option value="495">Nasi Tomato</option>
                    <option value="508">Nasi Dagang</option>
                </select>
                </strong></span></strong></td>
            <td>
            <td><span
class="style16"><strong>Quantity</strong></span></td>
            <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
            <td><strong><span class="style16">
onFocus"clear_field(this)">
                <input type="text" name="InUnit3" size="5" value="1"
                </span></strong></td>
            <td>&nbsp;</td>
        </tr>
        <tr>
            <td height="43"><span
class="style16"><strong>Dishes</strong></span></td>
            <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
            <td colspan="3"><strong><span class="style16"><strong>
                <select name="unit4" class="style17" id="tengahari_lauk">
                    <option value="-Select Dish-" selected>-Select Dish-
</option>
                    <option value="179">Chicken Kurma</option>
                    <option value="70"> Mutton Curry</option>
                    <option value="255">Fried Chicken</option>
                    <option value="195">Chicken Curry</option>
                    <option value="64">Beef Rendang</option>
                    <option value="65">Beef Curry</option>
                    <option value="142">Spanish Makarel(Ikan Tengiri)
                    Fried Chili</option>
                    <option value="71">Shrimp Chili Paste(Udang
Sambal)</option>
                    <option value="126">Anchovy Chili Paste(Ikan Bilis
Sambal)</option>
                    <option value="122">Stingray(Ikan Pari) Asam
                    Pedas</option>
                    <option value="55">Cuttlefish Chili Paste(Sotong
                    Sambal)</option>
                    <option value="143">Black Pomfret(Bawal Hitam)
                    Fried</option>
                    <option value="24">Indian Mackerel(Ikan Kembung)
                    Bakar</option>
                    <option value="20">Ulam</option>
                </select>
                </strong></span></strong></td>
            <td>
            <td><span
class="style16"><strong>Quantity</strong></span></td>
            <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
            <td><strong><span class="style16">

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```


</span></strong></td>
<td>&nbsp;</td>
</tr>
<tr>
<td height="43"><span
class="style16"><strong>Dessert</strong></span></td>
<td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
<td colspan="3"><strong><span class="style16"><strong>
<select name="unit5" class="style17"
id="tengahari_pencuci_mulut">
<option value="-Select Dessert-" selected>-Select
Dessert-</option>
<option value="37">Slice of Watermelon</option>
<option value="51">Slice of Guava</option>
<option value="56">Slice of Papaya</option>
<option value="38">Whole of Orange</option>
<option value="37">Whole of Mandarin Orange</option>
<option value="44">Whole of Ciku</option>
<option value="103">Whole of Mango(Large)</option>
<option value="63">Whole of Red Apple</option>
<option value="40">Whole of Green Apple</option>
<option value="56">Whole of Starfruit</option>
</select>
</strong></span></strong></td>
<td>
<td><span
class="style16"><strong>Quantity</strong></span></td>
<td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
<td><strong><span class="style16">
<input type="text" name="InUnit5" size="5" value="1"
onFocus"clear_field(this)"/>
</span></strong></td>
<td>&nbsp;</td>
</tr>
<tr>
<td height="43"><span
class="style16"><strong>Beverage</strong></span></td>
<td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
<td colspan="3"><strong><span class="style16"><strong>
<select name="unit6" class="style17"
id="tengahari_minuman">
<option value="-Select Beverage-" selected>-Select
Beverage-</option>
<option value="154">Orange Juice</option>
<option value="161">Apple Juice</option>
<option value="184">Pineapple Juice</option>
<option value="0">Plain Water</option>
<option value="146">Iced Lemon Tea</option>
<option value="232">Iced Milo</option>
<option value="351">Carbonated Soft Drink</option>
</select>
</strong></span></strong></td>
<td>
<td><span
class="style16"><strong>Quantity</strong></span></td>
<td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
<td><strong><span class="style16">
<input type="text" name="InUnit6" size="5" value="1"
onFocus"clear_field(this)"/>
</span></strong></td>
<td>&nbsp;</td>
</tr>
<tr bgcolor="#FDF5C8">
<td height="21" colspan="10"><div align="center"><span
class="style16"><strong>DINNER</strong></span></div>
<div align="center"></div>
<div align="center"></div></td>
</tr>
<tr>

```

```

        <td height="43"><span
class="style16"><strong>Meal</strong></span></td>
        <td><div align="center"
class="style16"><strong>:</strong></div></td>
        <td colspan="3"><strong><span class="style16"><strong>
        <select name="unit7" class="style17" id="malam_makanan">
        <option value="-Select Meal-" selected>-Select Meal-
</option>
        <option value="356">Roti Telur</option>
        <option value="301">Roti Canai</option>
        <option value="389">Nasi Lemak</option>
        <option value="637">Fried Rice</option>
        <option value="598">Fried Mee</option>
        <option value="321">Fried Kueteow</option>
        </select>
        </strong></span></strong></td>
        <td>
        <td><span
class="style16"><strong>Quantity</strong></span></td>
        <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
        <td><strong><span class="style16">
        <input type="text" name="InUnit7" size="5" value="1"
onFocus"clear_field(this)">
        </span></strong></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td height="43"><span
class="style16"><strong>Dessert</strong></span></td>
        <td><div align="center"
class="style16"><strong>:</strong></div></td>
        <td colspan="3"><strong><span class="style16"><strong>
        <select name="unit8" class="style17"
id="malam_pencuci_mulut">
        <option value="-Select Dessert-" selected>-Select
Dessert-</option>
        <option value="37">Slice of Watermelon</option>
        <option value="51">Slice of Guava</option>
        <option value="56">Slice of Papaya</option>
        <option value="38">Whole of Orange</option>
        <option value="37">Whole of Mandarin Orange</option>
        <option value="44">Whole of Ciku</option>
        <option value="103">Whole of Mango(Large)</option>
        <option value="63">Whole of Red Apple</option>
        <option value="40">Whole of Green Apple</option>
        <option value="56">Whole of Starfruit</option>
        </select>
        </strong></span></strong></td>
        <td>
        <td><span
class="style16"><strong>Quantity</strong></span></td>
        <td><div align="center"><span
class="style16"><strong>:</strong></span></div></td>
        <td><strong><span class="style16">
        <input type="text" name="InUnit8" size="5" value="1"
onFocus"clear_field(this)">
        </span></strong></td>
        <td>&nbsp;</td>
    </tr>
    <tr>
        <td height="43"><span
class="style16"><strong>Beverage</strong></span></td>
        <td><div align="center"
class="style16"><strong>:</strong></div></td>
        <td colspan="3"><strong><span class="style16"><strong>
        <select name="unit9" class="style17" id="malam_minuman">
        <option value="-Select Beverage-" selected>-Select
Beverage-</option>
        <option value="154">Orange Juice</option>
        <option value="161">Apple Juice</option>
        <option value="0">Plain Water</option>
        </select>
        </strong></span></strong></td>
        <td>

```



```
        </table>
      </td>
    </tr>
  <tr>
    <td>&nbsp;&nbsp;&nbsp;</td>
  </tr>
</table></td>
  <td width="347" height="729">&nbsp;&nbsp;&nbsp;</td>
</tr>
</table></td>
</tr>
<tr>
  <td width="726">&nbsp;&nbsp;&nbsp;</td>
</tr>
</table>
<table width="760" border="0" cellpadding="0" cellspacing="0" class="text">
  <tr>
    <td width="10"></td>
    <td width="21"></td>
    <td align="center" background="images/bottom_bg.gif">Web site contents ©
  Copyright
  hanis_noney150307, All rights reserved.</td>
    <td width="20" align="right"></td>
  </tr>
</table>
<p>&nbsp;&nbsp;&nbsp;</p>
<p>&nbsp;&nbsp;&nbsp;</p>
</center>
</body>
</html>
```

Calorie Calculator Coding

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>Calorie</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<link href="text.css" rel="stylesheet" type="text/css">
<!--      Script by hscripts.com      -->
<!--      copyright of HIOX INDIA      -->
<!-- Free javascripts @ http://www.hscripts.com -->
<script language=javascript>
function cc()
{
    var cneed;
    var fneed;
    var crneed;
    var pneed;
    var aneed;
    var fd;
    var age=parseInt(document.getElementById("age").value);
    var foot=parseInt(document.getElementById("foot").value);
    var inch=parseInt(document.getElementById("inch").value);
    var cm1=(inch*2.54);
    var cm2=(foot*30.48);
    var cm=cm1+cm2;
    var weight=parseInt(document.getElementById("weight").value);
    var loa=document.getElementById("loa").value;
    if(document.getElementById("gen").checked)
    {
        fd=66+(13.7*weight)+(5*cm)-(6.8*age);
    }
    else
    {
        fd=655+(9.6*weight)+(1.8*cm)-(4.7*age);
    }
    switch(loa)
    {
        case "1":
            cneed=fd*1.2;
            break;
        case "2":
            cneed=fd*1.375;
            break;
        case "3":
            cneed=fd*1.53;
            break;
        case "4":
            cneed=fd*1.725;
            break;
        case "5":
            cneed=fd*1.9;
            break;
    }
    cneed=Math.floor(cneed);
    fneed=Math.floor((cneed*0.25)/9);
    pneed=Math.floor((cneed*0.25)/4);
    crneed=Math.floor((cneed*0.25)/4);
    aneed=Math.floor((cneed*0.25)/7);
    document.getElementById("rc").innerHTML=" "+cneed+" per day";
    document.getElementById("rf").innerHTML=" "+fneed+" grams per day";
    document.getElementById("rp").innerHTML=" "+pneed+" grams per day";
    document.getElementById("rh").innerHTML=" "+crneed+" grams per day";
    document.getElementById("ra").innerHTML=" "+aneed+" grams per day";
}

function con(num)
{
    var hc=parseInt(num.value);
    var hi=hc/2.54;
    var hf=Math.floor(hi/12);
    var ri=Math.round(hi%12);
    if(hc>40 && hc<=210)
```

```

        {
            document.getElementById("foot").value=hf;
        }
    document.getElementById("inch").value=ri;
}

```

```

function hcon()
{
    var hf=parseInt(document.getElementById("foot").value);
    var hi=parseInt(document.getElementById("inch").value);
    var hc;

    hc=Math.round((hf*30.48)+(hi*2.54));
    document.getElementById("cen").value=hc;
}

```

```

function cknum(event,num)
{
    var kc;
    if(window.event)
    {
        kc=event.keyCode;
    }
    else
    {
        kc=event.which;
    }
    var a=num.value;
    if(kc==48)
    {
        if(a=="")
        {
            return false;
        }
        else
        {
            return true;
        }
    }
    if (kc!=8 && kc!=0)
    {
        if (kc<49||kc>57)
        {
            return false;
        }
    }
}

```

```

</script>
<!-- Script by hscripts.com -->
</head>

```

```

<body bgcolor="FDF5C8" leftmargin="0" topmargin="0" marginwidth="0" marginheight="0">
<center>
<table width="50%" border="0" cellspacing="0" cellpadding="0">
    <tr>
        <td bgcolor="DC3467"><table width="770" border="0" cellspacing="0"
cellpadding="0">
            <tr>
                <td width="290" align="left" valign="top"
background="images/top_bg.gif"></td>
                <td width="185" align="left"></td>
                <td align="center"><table width="260" border="0" cellpadding="0"
cellspacing="0" class="text">
                    <tr>
                        <td><font color="white"><strong>
                            <p align="justify">This website is designed to show you how easy it
is
                            to enjoy Malaysian food while providing your
body with
                            the specific and correct amount of calories
needed each day.
                            It also designed to meet the amount of
calories needs of

```


4-60 years old

```
users.</p></strong></font></td>
</tr>
</table></td>
</tr>
</table></td>
</tr>
<tr>
<td height="35" valign="top" background="images/but_bg.gif"><table width="770"
border="0" cellspacing="0" cellpadding="0">
<tr>
<td width="59" align="left"></td>
<td width="68" align="left"><A href="index.php"></a></td>
<td width="115" align="left"><A href="menuplanner.php"></a></td>
<td width="145" align="left"><A href="calorie.php"></a></td>
<td width="88" align="left"><A href="recipes.php"></a></td>
<td width="94" align="left"><A href="diet.php"></a></td>
<td width="46" align="left"><A href="admin.php"></a></td>
<td align="left"></td>
</tr>
</table></td>
</tr>
</table>
<table width="753" border="0" cellspacing="0" cellpadding="0">
<!--DWLayoutTable-->
<tr>
<td width="27" rowspan="3" align="left" valign="top"></td>
<td width="726" align="left"></td>
</tr>
<tr>
<td align="left" bgcolor="#FFFFFF"><table width="726" border="0"
cellspacing="0" cellpadding="0">
<p align="center"><strong>Please enter your personal details
in order to know the total amount of calories that need for
today.</strong></p><br>
<tr>
<td width="379" align="center" valign="top"> <table width="350"
border="0" cellpadding="0" cellspacing="0" class="text">
<!--DWLayoutTable-->
<form>
<table align="left"></table>
<tr><td align="right"><strong>Age</strong></td><td><input type="text" name="age"
id="age" align="left" size="3" maxlength="2" onkeypress="return cknun(event,age)">
<strong>years</strong></td></tr>
<tr rowspan="2"><td align="right"><strong>Gender</strong></td><td align="left"><input
type="radio" name="gen" id="gen" checked><strong>Male</strong><br><input
type="radio" name="gen" id="gen"><strong>Female</strong></td></tr>
<tr rowspan="2"><td align="right"><strong>Height</strong></td><td>
<select name="foot" id="foot" onchange="hcon()">
<option value="1">1</option>
<option value="2">2</option>
<option value="3">3</option>
<option value="4">4</option>
<option value="5">5</option>
<option value="6">6</option>
<option value="7">7</option>
</select>
<strong>Foot</strong><select name="inch" id="inch" onchange="hcon()">
<script type="text/javascript">
for(i=0;i<12;i++)
{
document.write("<option value=" + i + ">" + i + "</option>");
}
</script>
</select><strong>Inches</strong><br><input type="text" name="cen" id="cen" size="4"
onkeyup="con(cen)"><strong>cms</strong></td></tr>
```

```

<tr><td align="right"><strong>Weight</strong></td><td><input type="text"
name="weight" id="weight" maxlength="3" size="3" onkeypress="return
cknum(event,weight)"><strong>Kg</strong></td></tr>
<tr><td align="right"><strong>Activeness</strong></td><td>
<select name="loa" id="loa">
<option value="1">Sedentary</option>
<option value="2">Light Active</option>
<option value="3">Moderately Active</option>
<option value="4">Very Active</option>
<option value="5">Extra Active</option>
</select></td></tr>
<tr>
<td colspan="2" align="center"><br>
<input name="button" type="button" onClick="cc()" value="Calculate">&nbsp;&nbsp;&nbsp;
<input name="reset" type="reset" value="Reset">
</td>
</tr>
</form>
</table>
<br>
<table align="center">
<tr><td align="right"><strong>Calorie</strong></td>
<td align="left"><strong>Result</strong></td>
</tr>
<tr>
<td align="right"><strong>Calorie Needed:</strong></td>
<td><div id="rc"></div></td></tr>
<tr>
<td align="right"><strong>To Level The Calorie</strong></td>
<td align="left"><strong>Need ,You Must Intake The
Following:</strong></td></tr>
<tr>
<td align="right"><strong>Fat:</strong></td>
<td><div id="rf"></div></td></tr>
<tr>
<td align="right"><strong>Protein:</strong></td>
<td><div id="rp"></div></td></tr>
<tr>
<td align="right"><strong>Carbohydrate:</strong></td>
<td><div id="rh"></div></td></tr>
</table>
<tr>
<td align="center">
</td>
</tr>
<tr>
<td align="left">
<!--user login form-->
</td>
</tr>
</tr>
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Copyright
hanis_noney150307, All rights reserved.</td>
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