HEALTH AND CARE MOBILE APPLICATION

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DECLARATION

I hereby declare that this project report entitled

MOBILE APPLICATION:

HEALTH AND CARE MOBILE APPLICATION

Is written by me and is my own effort and that no part plagiarized

without citations.

STUDENT : _____ Date: 11 August 2016

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SUPERVISOR : _____ Date: 11 August 2016

(EN NAZREEN BIN ABDULLASIM)

DEDICATION

This final project is dedicated to my beloved parents for their endless support and helps, always pray the best for me and give me lots of useful advices in process of develop this project. An appreciative to my supervisor who has given guided and support En Nazreen Bin Abdullasim and not to forget all my friends who help me from the beginning of this project until it finished.

ABSTRACT

Drink Right application is a health and care base application that is developed for those who want to manage their daily water consumption. This application will provide information to user about how much water should they drink daily. Before user use the application, they have to register first to create account. By the data they provide, the application will calculate the amount of water user need to drink. The application will record every time user insert amount of water they have drink and deduct the amount until user reach the target.

ABSTRAK

Drink Right ialah aplikasi berasaskan kesihatan dan penjagaan yang dibangunkan untuk mereka yang ingin menguruskan pengambilan air harian mereka. Aplikasi ini akan memberi maklumat kepada pengguna mengenai berapa banyak air mereka perlu minum setiap hari. Sebelum pengguna menggunakan aplikasi ini, mereka perlu mendaftar terlebih dahulu untuk membuat akaun . Melalui data yang mereka berikan, aplikasi ini akan mengira jumlah pengambilan air yang perlu minum .Aplikasi ini akan merekodkan setiap kali jumlah air yang mereka telah minum dan memotong jumlah yang ada sehingga pengguna mencapai sasaran.

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CHAPTER 1

1.0 Introduction

1.1 Introduction

Mobile application development become more advance day by day. There are so many mobile application have been develop in various platform and field such as entertainment, education, finance and others. Health also one of the field that mobile application have been involve. In the market, many type of health mobile application have been develop. Either for fitness, workout, or food consumption.

For this project, the mobile application that will be build is focusing to manage the water consumption for daily life. The main purpose of this mobile application is to help user calculate the water that should be drink based on their weight

1.2 Problem Statement

Most of people especially the one who have a busy life tend overlook about their water intake. Most of people care about their meal time, but not for their water intake. Nowadays, many mobile application that help people to take care about their meal but not much that actually focuses on help to take care about daily water intake.

Furthermore, not all people nowadays know the actual amount of water they should drink a day and the correct time to drink. Some of them may drink not much water and some maybe drink too much water. Water intake should be follow the physical, weather and activities for the person themselves. Drink too less or too much water both can give negative effect to the body. They also must know they correct time to drink, either drink more at the morning, afternoon or night to give the most optimum effect on the body.

1.3 Objective

For this project, the objective have been clarified to ensure the project will been done clearly without any problem. Below are the objective for this project:

- To develop an application that will help people to manage their water intake.
- To investigate the proper amount of water should be drink.
- To study how to develop an application.

1.4 Scope

The main target user for this project is people that want to manage their daily water intake. This application will be develop on HTML5 platform that currently been use widely nowadays. This application will consist of some functionality. The main function is the reminder. This function will remind user about when the user need to drink and how much they need to drink. This application also will store the user weight and calculate the water amount needed for the user. So user can trace how much their water intake.

1.5 Project Significant

For this project the focus is on water intake. Each living thing need water to live. To get a healthy life we need to take care our dietary either water or food intake. People tend to remember when to eat then when to drink.

So this application will focusing to remind the user to manage their water intake as good as their remember when to eat. The most important thing is by using this application, user can get the positive impact to their health.

1.6 Conclusion

As the conclusion, this chapter discussed about introduction, problem statement, objectives, scope and the significant of this project. The important reason of developing this application is to help people to manage their water intake and hopefully it will help the improvement of user health

CHAPTER 2

2.0 Literature Review and Project Methodology

2.1 Introduction

In this chapter will discuss about the literature review that will focus on make a research to collected information regarding to this project. We will look the important of water, benefits of drinking water, and effect of less drinking water. We also will look into project methodology and project requirement for this project that will determine what we will need to build the application and the comparison with the existing product in the market.

2.2 Domain

Mobile application for health purpose have been use widely nowadays. User tend to find an application that can help in monitor their health. Due to busy life style, people tend to neglect their diet especially the water intake. So, they will find an application that can help remind them.

2.2.1 Important of Water

Every living thing start from water. Either human, animal or plant. Based on research, human can survive maximum 8 week without food but with consumption of water and good physical condition. This research show that water is very important in our life. Water is a carrier, distributing essential nutrients to cells, such as minerals, vitamins and glucose. Water also removes waste products including toxins that the organs' cells reject, and removes them through urines and feces. Water participates in the biochemical break-down of what we eat and Water is an effective lubricant around joints. It also acts as a shock absorber for eyes, brain, spinal cord and even for the fetus through amniotic fluid

If those is on diet, by drinking water it will help is weight loss. Fat and toxic in body will remove through urinate and sweating. It will also can help in reducing the hunger. By drinking one glass of water at night can help to reduce the hunger. For those that concern about their skin, drinking water also can keep your skin moisturize, keep it fresh and glowing. It also can help in prevent the wrinkle as water is one anti-aging treatment. When body get enough water, it will help joint lubricated and muscles more elastic so it can prevent cramp and sprain. Water is natural headache remedy. Water can help in prevent and relieves the pain that cause by dehydration.

The most significant effect of less water in body is dehydration. It will causes several symptom that is thirst, headache, and dryness of lip, tongue and skin. It will become more serious if this problem not been overcome and it will bring others symptom such as chest pain, fatigue, unable to urinate or having dark-colored pee and confusion. It will also disrupt in maintaining body temperature. Water acts as cooling mechanism in our body, both for external skin and internal organ. If internal cooling system not functioning well, it may cause heat cramps, a quickened pulse, dizziness, lightheadedness, severe weariness, and feelings of being too hot or cold. In severe cases, heat stoke can occur, which can be life-threatening.

2.2.2 Use of Mobile Application in Health

Use of mobile application to monitor the user health not a new thing nowadays. There are so many application have been develop and be deploy on the market. The dependency to technology by human nowadays especially on smartphone have created an idea to make the smartphone as a platform to monitor human health. From that, the developer come with many type of health based mobile application that will help user in monitoring their health. For example, there are application that will help us to track our calories intake. There also have an application that will show us how much we walk on that day and how much calories have been burn and so many type of application based on the health. User tend to find the application due to the hectic lifestyle. By having this type of application, it will help them to maintain the health so they can maintain healthy.

2.3 Existing System

There are many other similar mobile application have been develop on the market. This is the example of similar existing application:-

- **Calorie Counter – MyFitnessPal**

  MyFitnessPal is on all of the app lists for diet apps and nutrition apps and that's because it's the most popular. It comes with all the features including a database with over five million foods, full sync with their website service so you can count calories cross-platform, a recipe calculator so you can see how much nutrition a home cooked meal will have, and the ability to add multiple items at once. There is also a pretty decent fitness tracker with 350 exercises that covers both cardio and strength training. It's about the best all-in-one solution you can find for both fitness and nutrition.

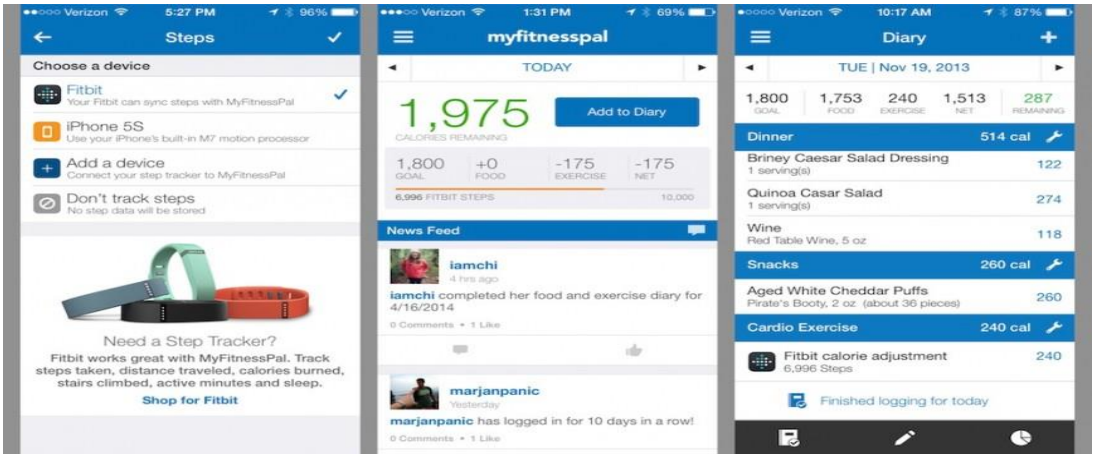


Diagram 2.3.1: Interface of Calories Counter by MyFitnessPal

- **Diet Watcher Diary**

  Diet Watchers Diary may be the most complicated app on this list but it also allows for a lot of personal customization. With this app, users are tasked with creating their own database and then using it to create their own diet. The premise is that once you see what you're eating, it'll encourage you to change things up a bit. The app also comes with Dropbox integration for backup and syncing, a barcode scanner, BMI calculator, and a basic food database to get you started. It has all the basics and is a good app for those who want a more hands-on approach.

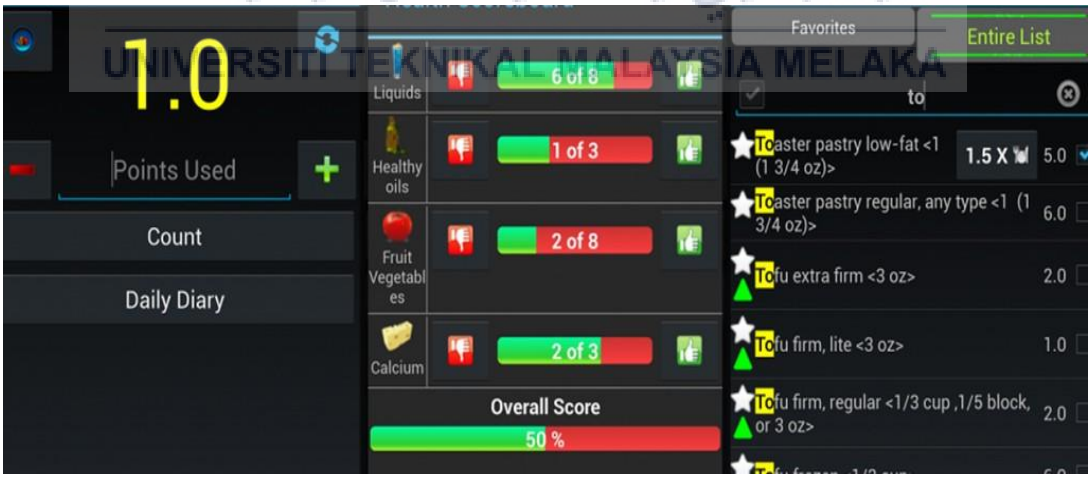


Diagram 2.3.2: Interface of Diet Watcher Diary

2.3.1 Comparison of Existing System

Calories Counter by MyFitnessPal	Diet Watcher Diary
This application is a health and fitness application that will help user count their calories intake for each serving. This also have suggestion list of food with the amount of calories for every serving. So user can choose the one of the suggestion and the application will store the calories intake for a day. It also come with barcode scanner. User can scan the barcode at the food packaging to get information about the food.	The purpose of this application is to record daily calories intake. It also Track various health recommendations on daily basis, such as liquids, healthy oils and more. You can add your own recommendations. This application also can help user monitor the weight, and it came with BMI calculator function.
Do not have reminder function to remind user about meal time. User cannot calculate the calories need for every day.	Do not have reminder function to remind user about meal time. User cannot calculate the calories need for every day.

Table 2.3.1.1: Comparison of Existing System

2.4 Project Requirement

2.4.1 Software Requirement

- Adobe Dreamweaver
- Notepad ++
- Apache Cordova
- Appsevr – PhpMyAdmin
- Microsoft Word

2.4.2 Hardware Requirement

- Personal Computer/Notebook
- Smart Phone

2.5 Project Methodology

For this project, the methodology have been use is ADDIE model. The ADDIE model is generic process that been used by developer. There are five phase include in this model, Analysis, Design, Development, Implementation and Evaluation. In analysis phase, developer will clarified the instructional problem, goal and the objective. We also will analys the requirment of this project. In the design phase, it wil involve with learning objectives, content, exercises, subject matter analysis, assessment instruments, and media selection. We will create the storyboard and the design the user interface and user experience. After that is development phase. In this phase, the desing that have been decide on the design phase we will transform into a product. Developer will develop the product base on the design that heve been made. In will include the programming work, and debugging. The product will review an revise according to the feedback. At the implementation phase, the procedure for the user to use the product will developed. At this phase also we need to ensure all material we supply to user in functional. The last phase in evaluation phase. During this phase, in will consits of two parts that is formative and summative. Formative evaluation present each phse in the model. Summative evaluation consists of test of the producr and it will provide feedback from the users.

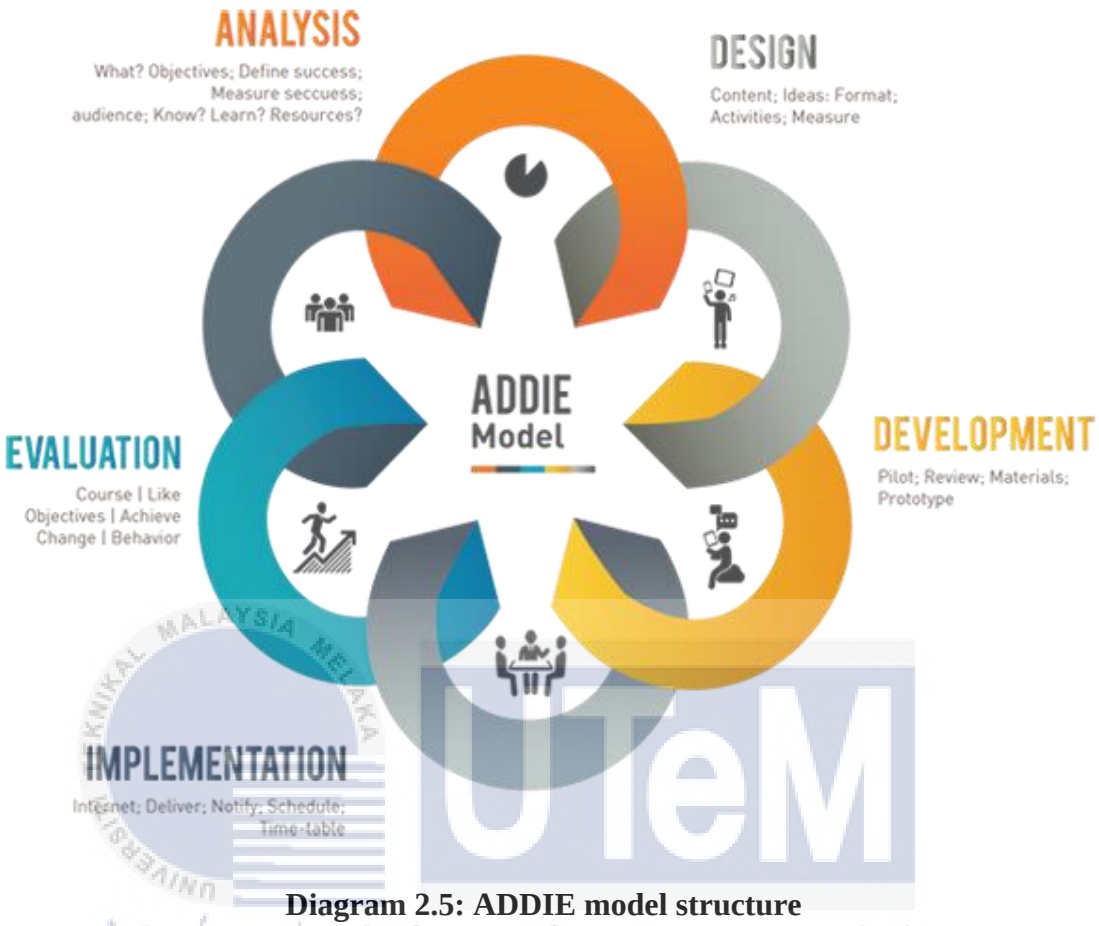


Diagram 2.5: ADDIE model structure

Below is the activities that been done using ADDIE model :

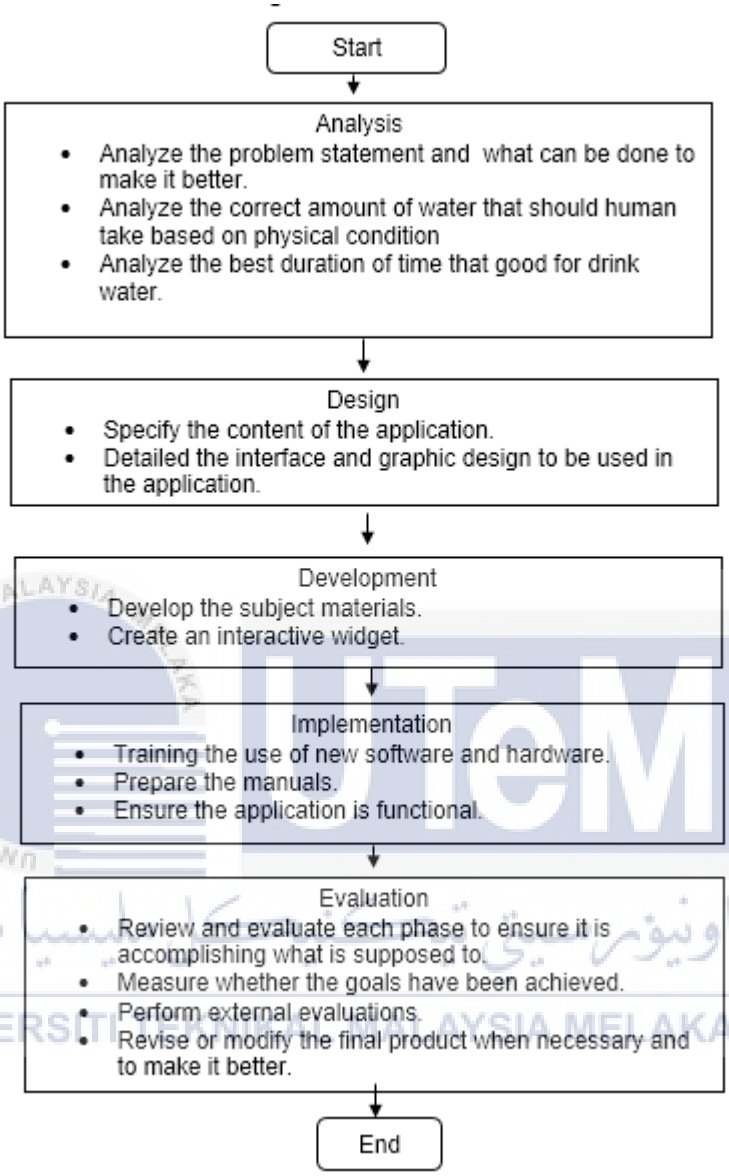


Diagram 2.5.1: ADDIE Model Activities

2.6 Conclusion

In conclusion, this chapter have cover the literature review about the important of water. We also have look at the existing system and make a comparison between them. We also have explain the methodology that been use to complete this project and lastly we list out the project requirement. At the next chapter we will explain more specific about the analysis have been made.

CHAPTER 3

3.0 Analysis

3.1 Introduction

In this chapter we will discuss about the analysis we made. First we will look at current scenario analysis. Then we will look at requirement analysis that consits of project requirement, hardware and software requirement for this project. Last we will look the project schedule and milestones.

3.2 Current Scenario Analysis

For the current scenario, we will use one of the existing product to make an analysis. The product is Calories Counter by MyFitnessPal. By referring to Google Play Store, this application have been download by more than million people. That mean the need of this type of application is high. User nowadays tend to find any health and care application to helping them to improve their health. For first time user, they need to sign up for create an account. After they have an account, they need to login to use the application. Based on the information that user provide the application will calculate the calories need by user and create the diet plan for the user. Every time user eat, they need to insert the amount of calories intake for each meal or user can choose the suggestion menu that been provide. The application will calculate the calories intake and show the

remaining calories that user can take for that day. User can see the progress of their diet program after a week or more. There are the flowchart for the application.

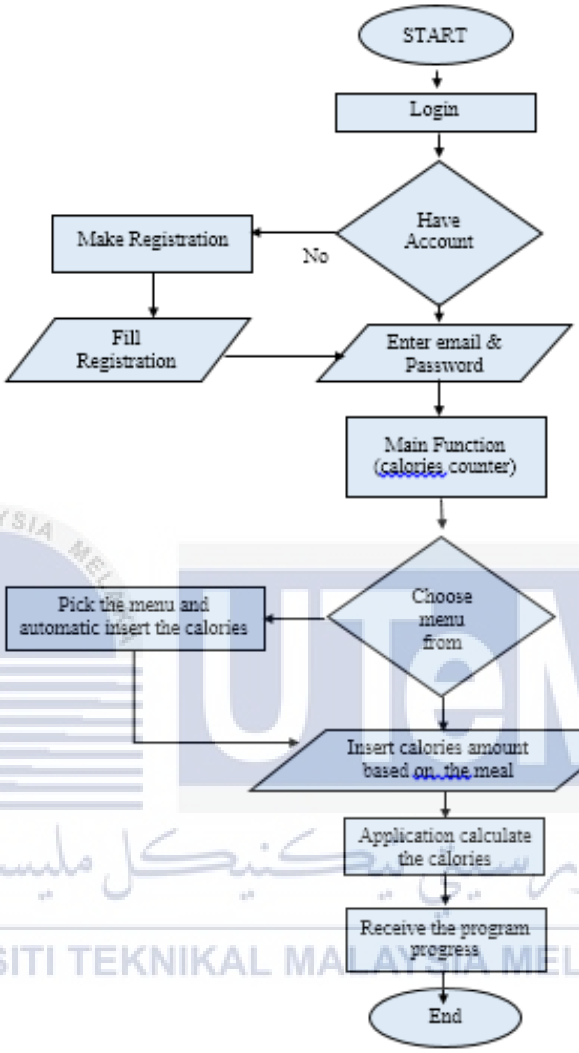


Diagram 3.2.1: Drink Right Flowchart

3.3. Requirement analysis

3.3.1. Project Requirement

The purpose for this application to be develop is to help user manage their water intake daily. The application need to able to calculate the water amount need by the user. Then the application will calculate the water remain after each time user input the water amount that they have drink until user reach their target. This application will develop on HTML 5 platform. This because HTML canvas can adapt to every environment of device either PC, tablet or smart phone. It also can be run on multi operating software. Then the application will be upload on the web hosting so that the application can run on multiple devices but with internet connection.

3.3.2 Software Requirement

For the software requirement we need Adobe Dreamweaver to design the application. Then we need Notepad ++ for programming work. We will use Appsevr PhpMyAdmin to create the database to store the data. Then we need Apache Cordova for compile the HTML file to become an APK file to be install on smart phone. Then we need a web hosting for the application can be run on other device but with the internet connection. Lastly we need Microsoft Word. We will use it for report writing.

3.3.3. Hardware Requirement

For hardware requirement, we need a personal computer or notebook for us to develop the application. We will do the programming and debugging work on it. Other than that we will need a smart phone so we can test the application either it functional or not.

3.4. Project Schedule and Milestones

3.4.1 Gantt Chart

No	Task	Week														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Proposal PSM : Submission & Presentation															
2	Proposal assessment and verification															
3	Proposal Correction/Improvement Chapter 1															
4	List of supervisor/title															
5	Chapter 1 - System Development Begins															
6	Chapter 1 & Chapter 2															
7	Chapter 2															
8	Chapter 2 Chapter 3															
9	Project Demo & Chapter 3 Chapter 4															
10	Project Demo & Chapter 4															
11	Project Demo & Chapter 4															
12	Project Demo															
13	Project Demo & PSM Report															

14	Project Demo & PSM Report														
15	Presentation Schedule														
16	Project Demo & PSM Report														
17	Final Presentation														
18	Submission overall marks to PSM/PD committee.														

Table 3.4.1.1: Gannt Chart

3.4.2 Project Milstones

Week	Activity	Note / Action
1 22-26 Feb	Proposal PSM : Submission & Presentation	Deliverable – **Proposal** Action – Student
		Deliverable – **Proposal Presentation (PP)** Action – Student
	Proposal assessment and verification	Action – Supervisor, Evaluator
2 29 Feb -4 Mar	Proposal Correction/Improvement Chapter 1	Action – Student
	List of supervisor/title	Action – AJK PSM/PD
3 7-11 Mar	Chapter 1 (System Development Begins)	Deliverable – **Chapter 1** Action – Student, Supervisor
4	Chapter 1 & Chapter 2	Action – Student

14-18 Mar		
5 21 - 25 Mar	Chapter 2	Action – Student
6 28 Mar -1 April	Chapter 2 Chapter 3	Deliverable – **Chapter 2 Progress Presentation 1 (Pembentangan Kemajuan(PK 1))** Action – Student, Supervisor
	Student Status	Action – AJK PSM/PD, Supervisor Warning Letter 1
7 4-8 April	Project Demo & Chapter 3 Chapter 4	Action – Student
8	**MID SEMESTER BREAK**	
9 18-22 April	Project Demo & Chapter 4	Deliverable – **Chapter 3** Action – Student, Supervisor
10 25 - 29 April	Project Demo & Chapter 4	Deliverable – **Progress Presentation 2** (**Pembentangan Kemajuan ,(PK) 2)** Action – Student, Supervisor

	Student Status	Action – AJK PSM/PD, Supervisor Warning Letter 2
11 2 - 6 May	Project Demo	Action – Student
	Determination of student status(Continue/Withdraw)	Action –PSM/PD Committee, Supervisor(submit student status to AJK)
12 9 – 13 May	Project Demo & PSM Report	Action – Student, Supervisor, Evaluator
13 16 - 20 May	Project Demo & PSM Report	Action – Student, Supervisor, Evaluator
	Presentation Schedule	AJK PSM/PD
14 23 - 27 May	Project Demo & PSM Report	Deliverable – **PSM Report** Action – Student, Supervisor
15 30 May -3 June	**FINAL PRESENTATION (PA)**	Action – Student, Supervisor, Evaluator
16 6 - 10 June	**REVISION WEEK** Correction draft report based on supervisor's and evaluator's comments during the final presentation session. Submission overall marks to PSM/PD committee.	Action – Student, Supervisor, Evaluator. PSM/PD committee.
	FINAL EXAMINATION SEMESTER	

Table 3.4.2.1: Project Milstones

3.5 Conclusion

For conclusion, in this chapter we have look at the current scenario analysis, requirement analysis that consits of project requirement, hardware and software requirement for this project and project schedule and milestones. On the next chapter we will look at the design phase of this application.

CHAPTER 4

4.0 Design

4.1 Introduction

This chapter will show the design part of this project. We will look into the system architecture, interactive storyboard, and the user interface design that been create for this project.

4.2 System Architecture

For this application, user need to login by using their Id number and password. For first time user they need to register first before using this application. User will need to give their basic information and the important thing is their weight. All the data will be store in the database. Once their login, the system will get their weight on the database and automatically calculate the quantity of water they needs. User will input the amount of water that they drink and the system will deduct the amount until it become zero.

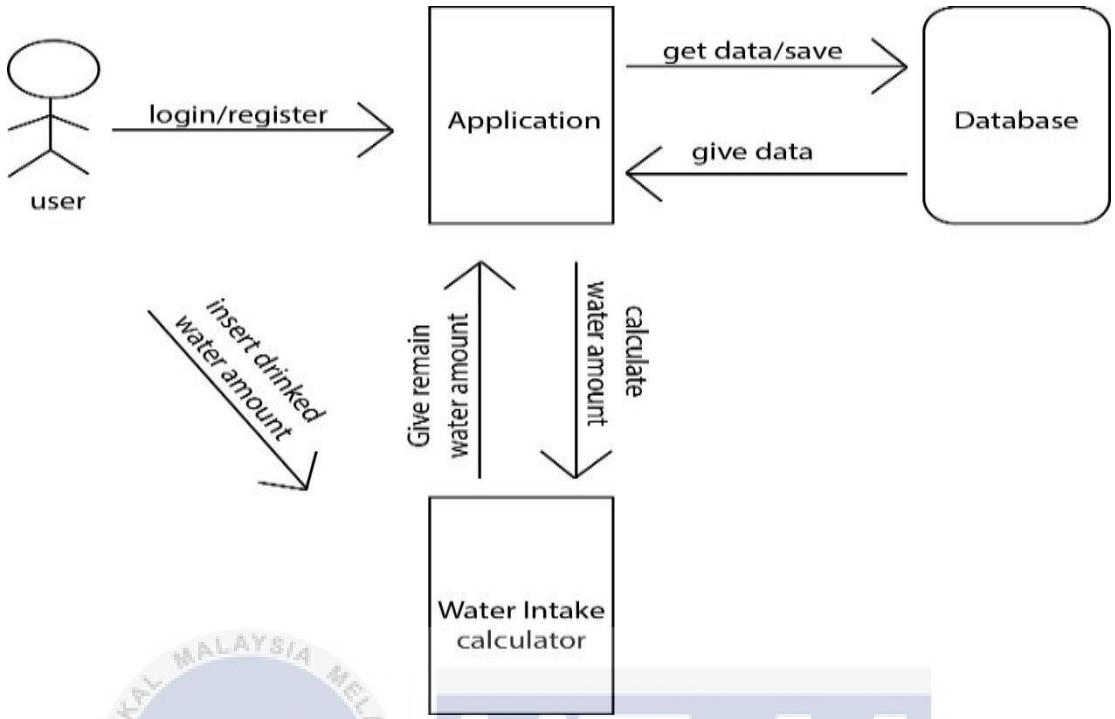
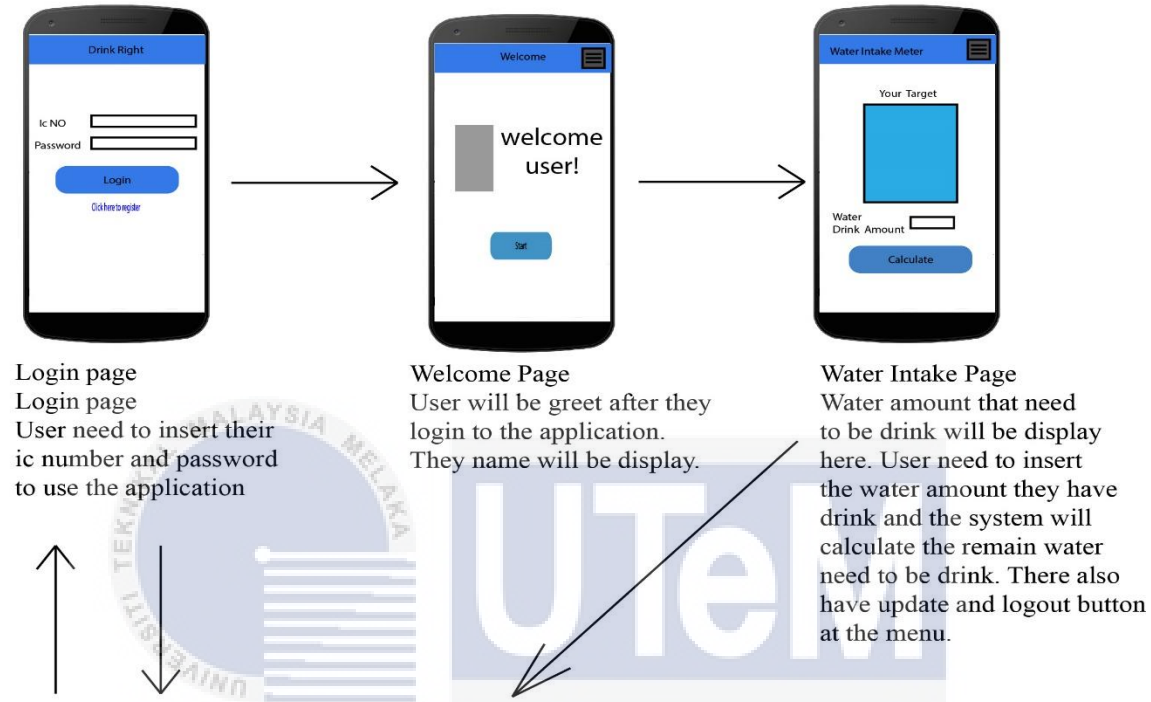


Diagram 4.2.1: Drink Right System Architecture

4.3 Preliminary Design

4.3.1 Interactive Storyboard



Login page
Login page
User need to insert their ic number and password to use the application

Welcome Page
User will be greet after they login to the application. They name will be display.

Water Intake Page
Water amount that need to be drink will be display here. User need to insert the water amount they have drink and the system will calculate the remain water need to be drink. There also have update and logout button at the menu.

Register Page
For first time user, they need to register first. After that that user need to login to use the application

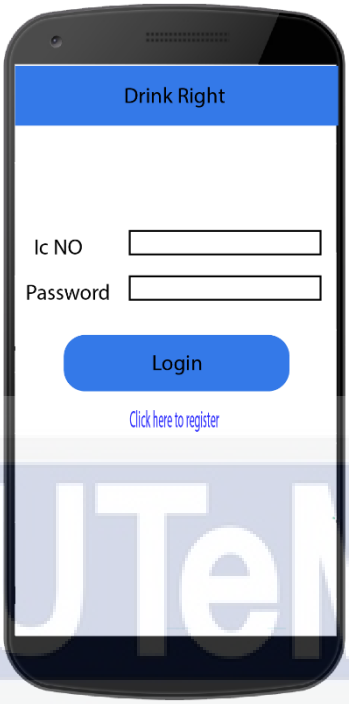
Update Page
User can update their weigth and password. After that user need to login back to use the application.

Statistic Page
User can view their daily progress in this page. it will be show in graph.

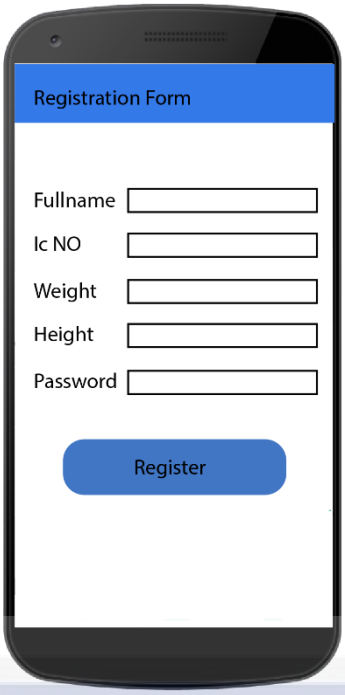
Diagram 4.3.1.1: Interactive Storyboard

4.4 User Interface Design

4.4.1 Input Design

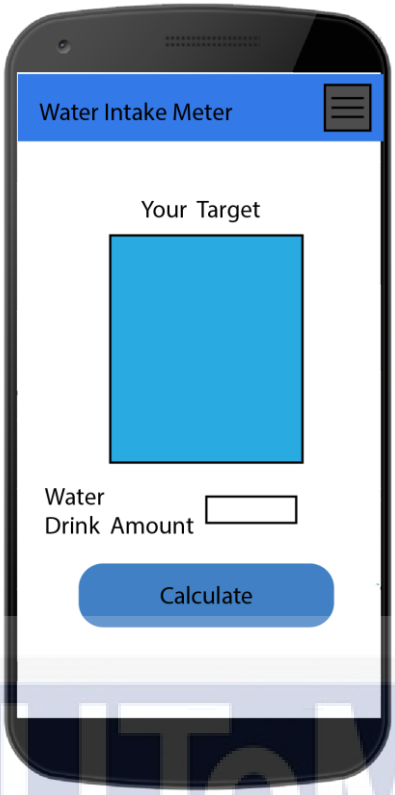


In this login page, user need to insert to type of data that is Ic number in form of integer and password in form of character. User need to insert that information in the text box that been provided. Once user finish inserting those data, they need to click on the login button to proceed. If the Ic number and password is match with the data on the database they will proceed to next page. If the Ic number and password do not match with data on the database an alert will come out say "Invalid Ic number and Password".



In the registration page, user need to fill they information that is full name in form of text, Ic number, weight, and height in form of number and password that is combination of text and number in the text box provided. When user finish fill the form, user need to click the register button to finish the registration process. If user not fill any of the information, an alert message will appear say “Do not leave blank”

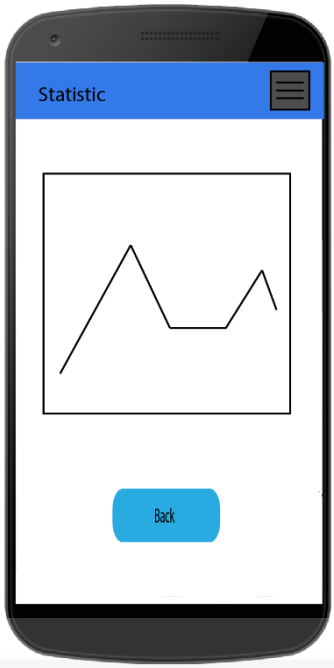
In the update page, user can update their weight and password in text form. User need to fill in the information on the text box. When user complete fill the information, user need to click on update button to confirm the update. When the update have been complete, user need to login once again. User also can click the back button if they want to cancel the update.



In the water intake meter page, user need to insert drank water amount in form of number so the system will calculate the remaining water that user need to drink. User need to insert the water amount in liter into the text box. Then user need to click the calculate button and an alert box will appear to get conformation from user about the amount of water they insert before. When user confirm the amount the system will calculate the water remain automatically.

4.4.2 Output Design

In the water intake meter page, the target of water for each day will be display. The system will calculate the water amount based on the user weight then it will be display on the screen. Other than that, quantity of water remain also will be display on this page. Every time user insert the water amount they drink, the application will calculate the water remain and show the new quantity until it reach zero.



In the Statistic Page, user can review they daily progress. System will get the data from the database and will show the data in the graph form.

In this welcome page, user full name will be display as the application greet and appreciate the user. The name will display same as what user insert during the registration season.

4.4.3 Database Design

This is the Entity Relation Diagram (ERD) for this project. There are two table that is user and water.

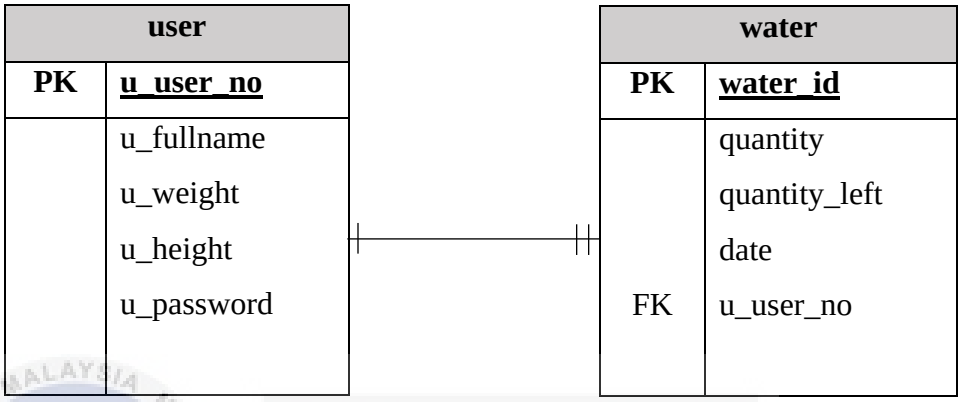


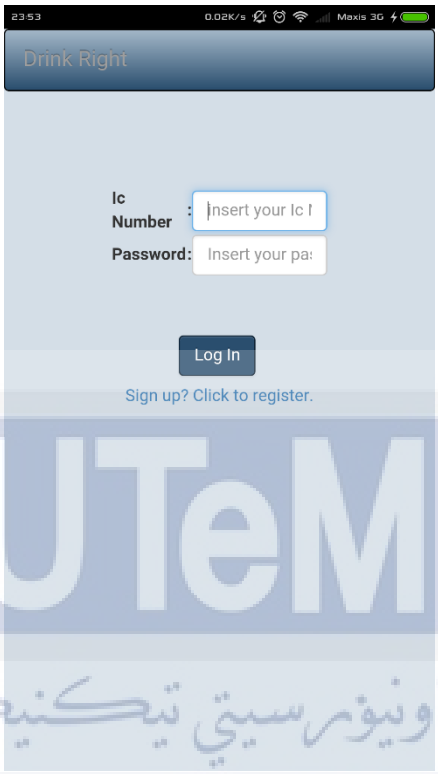
Diagram 4.4: Entity Relationship Diagram

4.4.4 Metaphors

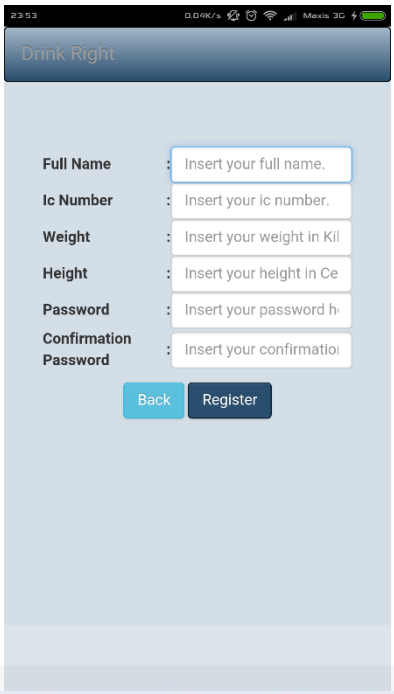
For this application, the base colour that have been use is blue. It is because, by choosing this colour, the application look more attractive and simple as we want to make the application have look like water theme. We have choose arial as our main font. The font colour for header is blue and black font for the main part so user can read clearly. We choose a simple theme because we want user comfortable to use this application.

4.4.5 Template Design

For this mobile application, the design have been create without any template. It have been create by using HTML code. There are the design for each page.



Login Page

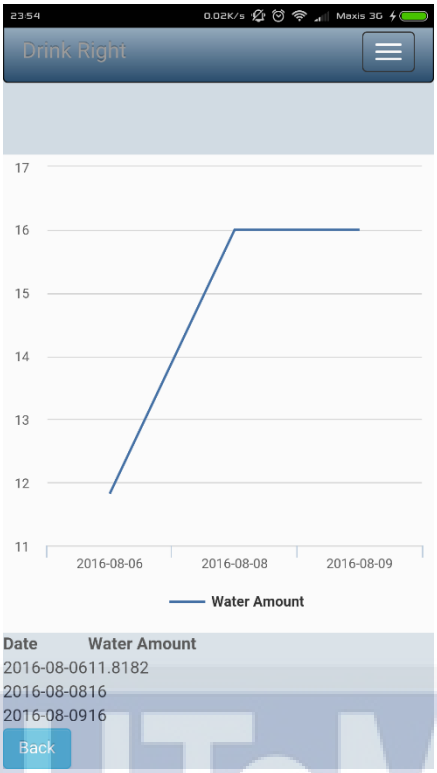


Registration Page

Water Intake Meter Page

Information Update Page

Welcome Page



Statistic Page

4.4.5 Uploading Files

For the application can be run on phone, all the file must be upload to remote hosting server. We use MercuMaya web hosting for this process. First we need to login or if we do not have any account we need to register first. Then uploading all the file into the server. After all the file is uploaded, check either the application can be run online or not.

4.5 Conclusion

In conclusion, in this chapter we have look at the design part for this application. We have explain how the flow of this application and the look how this application look like. In the next chapter we will look at the implementation part for this project.

CHAPTER 5

5.0 Implementation

5.1 Introduction

Here will focus on implementation of the product that has been develop. This chapter involves the production of multimedia element. For this application, we use two type of element that is text and graphic. Besides, it also contain the implementation status of the product and product configuration management. Media creation and integration plays important rule too in this chapter.

5.2 Media Creation

5.2.1 Production of Text

In a production of text, we mainly use text to present the information. Present the information in the form text can make user easy to understand how the application work. Arial font have been choose to use as font for this application.

5.2.2 Production of Graphic

To make the application look more interesting, we add some graphic. To generate the graphic, we use Adobe Illustrator. We have create a glass of water character. The purpose of it is to greet user when user log in into the application.

5.3 Media Integration

The multimedia element that have been use in this application is text and graphic.

We choose Arial font family to been use in this application. The font is been set in the Bootstrap library. For the graphic, we choose to use Adobe Illustrator to generate the graphic. It been save in png file format.

5.4 Configuration Setting

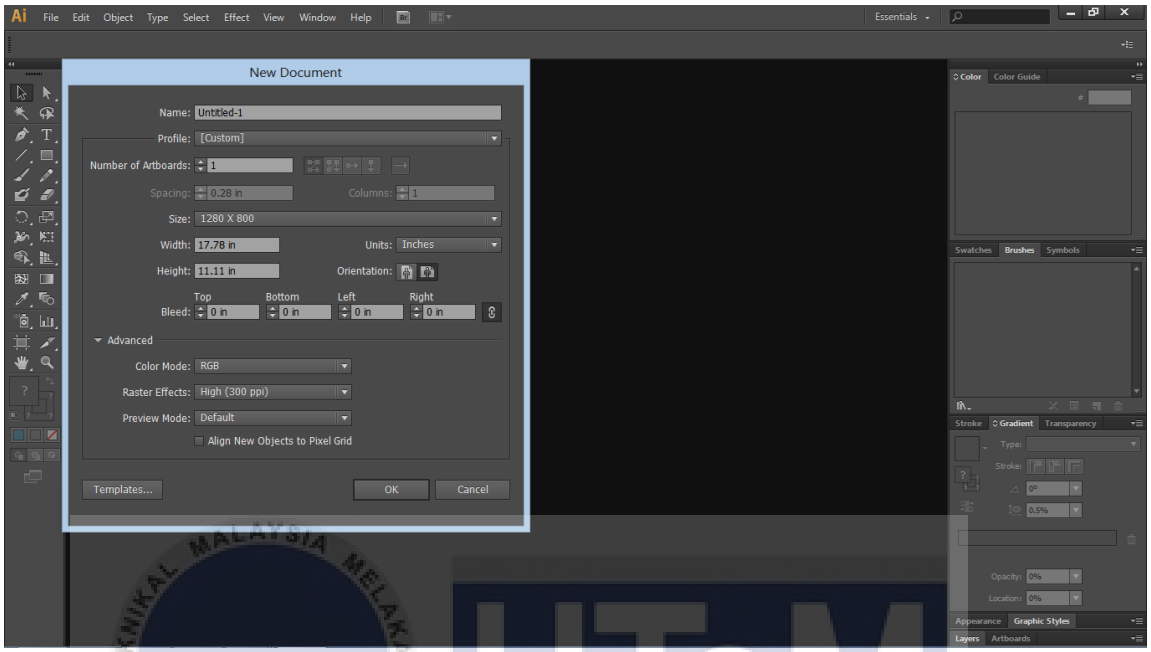


Diagram 5.4.1 Adobe Illustrator

Diagram 5.4.2 Notepad ++

5.5 Implementation Status

The phase for progress show below:

Application	Description	Status
Login Page	Where the user insert their Id and Password to login.	Complete
Registration Page	Page for user create their account.	Complete
Welcome Page	Page that function as to greet user after they login.	Complete
Meter Page	The main page that show the amount of water needed.	Complete
Update Page	User can update their information.	Complete
Statistic Page	Daily progress of user water consumption is show in form of graph.	Complete

Table 5.5.1: Implementation Status

5.6 Conclusion

Overall, this chapter explained about how the developer make the application. They are many method that has been use in order to develop this application. Next chapter which is testing phase, it will explain about the effectiveness of the application.

CHAPTER 6

6.0 Testing

6.1 Introduction

In this chapter, we will look at the testing phase for this project. We will find out the strength and weakness of this application. Testing is a process that used to judge and determine whether the final product meet our requirement and objective. Test plan, test environment, test schedule, test strategy, test implementation process and analysis will be conduct in this chapter. All the result that have been gathered will be analyze to see if the product is success or failure.

6.2 Test plan

6.2.1 Test User

The product have been tasted to random user around UTeM and Taman Tasik Utama, Ayer Keroh Melaka. We do not make specific target because this product can be use by everyone.

6.2.2 Test Environment

The testing have been carried out at several difference place that is, Universiti Teknikal Malaysia Melaka (UTeM), restaurant around Taman Tasik Utama and Pangsapuri Taman Tasik Utama. The hardware and software that compatible for the testing process must be prepare. Table 6.2.2.1 shown the hardware and software need to runs the product.

Hardware and Software	Description
Android Smartphone	Any version of Android smartphone can support the application can be uses to conduct the test.
Drink Right Application	This application is the product to be test and all the process involve in the testing process will be conduct in the application.

Table 6.2.2.1: Hardware and Software Requirement

6.2.3 Test Schedule

A test schedule is very important to control the length of time for the test user the product throughout the testing activity. In this project testing, users are provided with smartphone and will be given 5-10 minutes to play around with the application.

Tester	General Public
Number of Tester	20
Duration	5-10 minutes
Date	August 2016

Table 6.2.3.1: Schedule of Testing Activities

6.3 Test Strategy

The strategy for testing phase is to allow user to explore and test the application. After use done exploring the application, a set of questioner regarding to the application will be given to them. They will answer the questioner based on the experience by using the application. 20 responder have been choose to help in the testing process. The test is based on the product usefulness, ease of use and the design.

6.4 Test Implementation

6.4.1 Test Description

Testing process will be held by using smartphone for the user to exploring the product. The Drink Right application will be install in the smartphone and in compatible with Android smartphone. The test purpose to know the usefulness, ease of use and design of the application. User will answer the questioner after them exploring the application. The expected result is the application is useful to people.

6.4.2 Test Data

Test data is the synthetic data that will be select by user when they answer the questioner.

Rate	Description
1	Strongly disagree
2	Disagree
3	Neither agree or disagree
4	Agree
5	Strongly Agree

Table 6.4.4.1: Test Data

6.5 Test Result and Analysis

Below are the sample of questioner that been use to collect the data for testing process. It has been distribute to 20 respondent that have use the application.

HEALTH AND CARE MOBILE APPLICATION

I am from UTeM doing research on Health and Care Mobile Application for my final year project. Kindly answer ALL questions. Thank you.

PART A

Please tick (✓) for the following questions.

1. Gender:

☐ Male ☐ Female

2. Age

☐ 0-12 ☐ 13-19 ☐ 20-40 ☐ 41-Above

PART B

Please rate the following question.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree

PERCEIVED USEFULNESS

NO	QUESTION	1	2	3	4	5
1	Using the application in my daily life would enable me to know my daily amount of water needed.					
2	Using the system in daily life would enable me to improve my daily water consumption.					
3	Using the application in my daily life would enable me to manage my daily water consumption.					
4	Using the application would enhance my effectiveness on the daily water consumption.					
5	I would find the application useful in my daily life.					

PERCEIVED EASE OF USE

NO	QUESTION	1	2	3	4	5
1	Learning to operate the application would be easy for me.					
2	I would find it easy to get the application to do what I want it to do.					
3	My interaction with the application would be clear and understandable					

4	I would find the application to be flexible to interact with					
5	It would be easy for me to become skillful at using the application.					
6	I would find the application easy to use.					

SCREEN

NO	QUESTION	1	2	3	4	5
1	Reading characters on the screen.					
2	The colour schemes used are suitable.					
3	Every page is not too crowded.					
4	Organization of information.					

COMMENT AND PERCEPTION

1. Did this application need to be improve?

   ☐ Yes ☐ No

   If yes please state your reason and ideas of improvement.

   .....

   .....

Below is the table of data that have been collect during the testing process

Question about perceived usefulness

	Q1	Q2	Q3	Q4	Q5
U1	5	5	5	5	4
U2	4	4	4	4	5
U3	4	4	5	3	4
U4	5	5	4	5	5
U5	5	5	4	4	4
U6	4	4	3	4	4
U7	4	4	5	4	3
U8	4	4	5	3	4
U9	4	4	4	5	4
U10	5	5	5	5	5
U11	4	4	4	4	4
U12	4	5	5	5	5
U13	4	4	4	4	5
U14	2	4	4	3	3
U15	4	5	4	4	5
U16	4	4	4	5	4
U17	4	4	5	5	5
U18	4	4	4	4	4
U19	4	4	5	5	4
U20	4	4	5	4	5
Average	4.1	4.3	4.4	4.25	4.3

Table 6.5.1: Data of perceived usefulness

U= User

Question about perceived ease of use

	Q1	Q2	Q3	Q4	Q5	Q6
U1	4	4	5	5	4	5
U2	4	4	4	5	4	4
U3	4	4	4	5	5	3
U4	5	4	5	4	4	4
U5	4	4	4	4	3	4
U6	5	4	4	4	5	4
U7	3	3	3	4	4	5
U8	4	5	5	3	5	4
U9	4	4	5	5	4	4
U10	4	4	5	4	5	5
U11	3	4	4	4	4	4
U12	4	4	5	4	4	4
U13	4	3	5	3	3	4
U14	3	3	4	4	3	4
U15	4	5	4	5	5	5
U16	4	4	4	4	4	5
U17	4	4	5	5	5	5
U18	3	4	4	4	4	4
U19	4	4	3	4	4	4
U20	4	4	5	5	5	5
Average	3.9	3.95	4.35	4.25	4.2	4.3

Table 6.5.2: Data of ease of use

U= User

Question about screen design

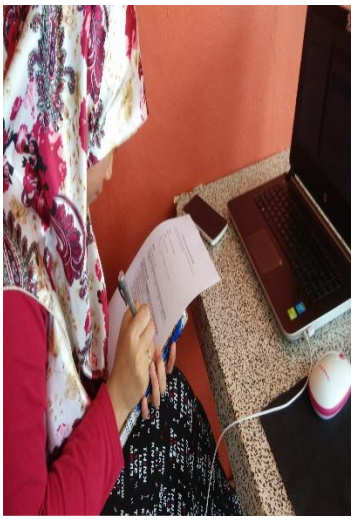
	Q1	Q2	Q3	Q4
U1	4	3	4	4
U2	4	3	4	4
U3	4	5	4	3
U4	3	3	4	4
U5	4	3	5	4
U6	4	4	5	4
U7	3	2	4	3
U8	4	3	3	4
U9	4	5	4	5
U10	4	4	4	4
U11	5	5	5	5
U12	4	4	5	4
U13	5	5	5	5
U14	3	4	4	4
U15	5	4	5	5
U16	4	3	4	4
U17	4	5	5	5
U18	4	4	4	4
U19	4	3	4	4
U20	5	5	5	4
Average	4.05	3.85	4.35	4.15

Table 6.5.3: Data of Screen Design

U= User

Testing process event

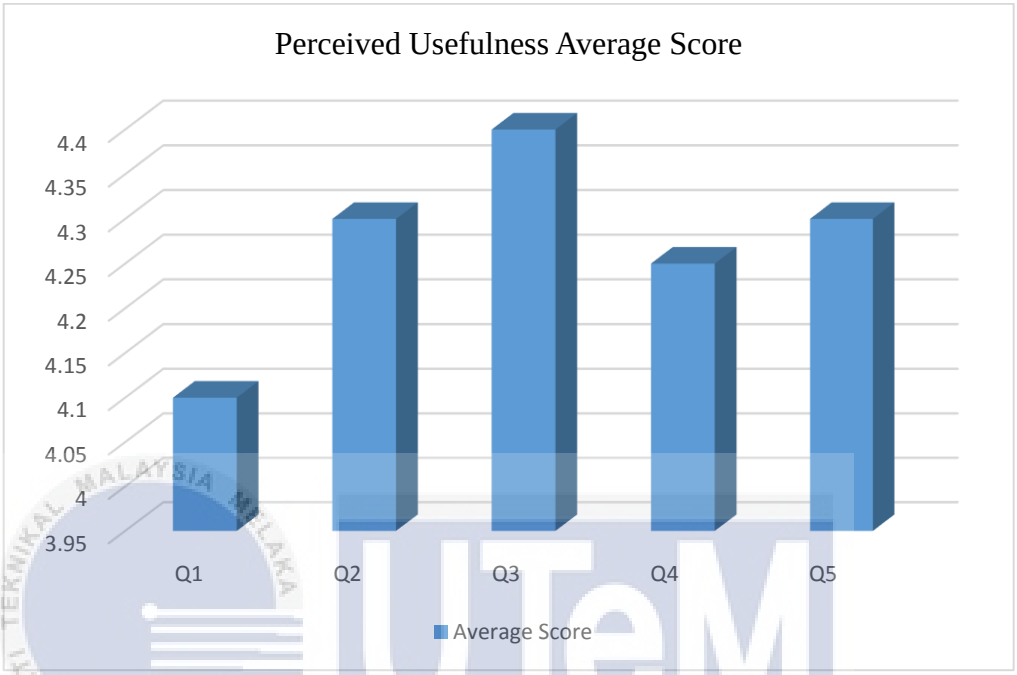




6.6 Analysis Testing

The result that have been gathered in the testing process will be analyze. From it we can determined whether the product meet the requirement and objective.

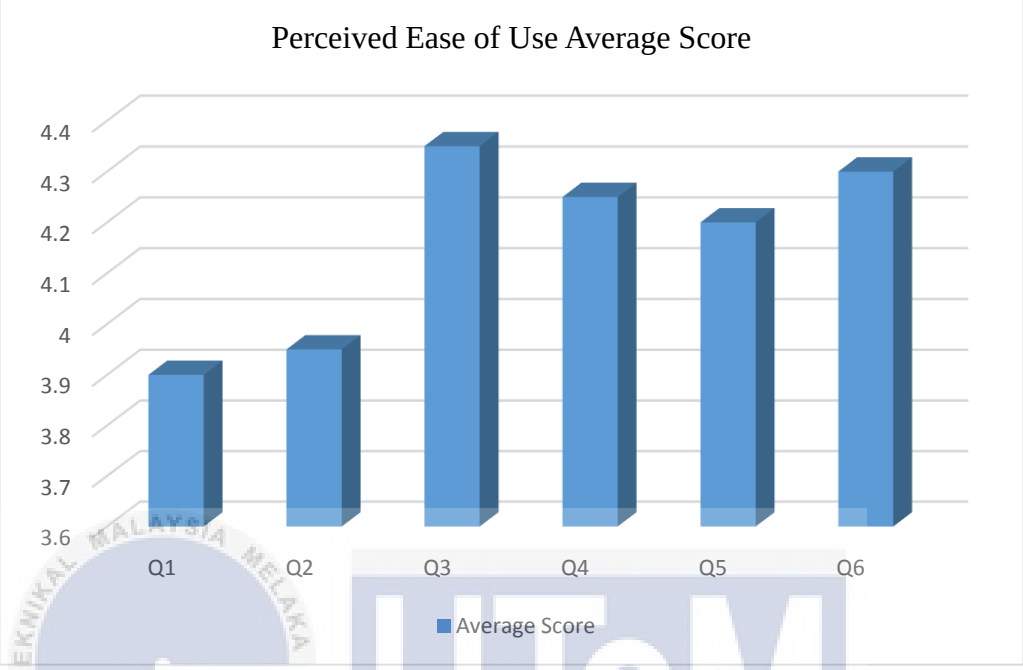
6.6.1 Analysis of Perceived Usefulness



Graph 6.6.1.1: Average Score of Perceived Usefulness

From the graph 6.6.6.1 we can see that question 3 get the highest score that is 4.4. The question is about by using this application, user enable to manage their daily water consumption. That means, most of the user agree that this application may help them manage their daily water consumption. But, question 1 that is by using this application user can know the amount of water needed get the lowest score that is 4.1. Question 2 that is this application enable to improve daily water consumption and question 5 that is this application useful in user daily life get the same average score that is 4.3. For question 4, this application would enhance user effectiveness on the water consumption get 4.25 average score.

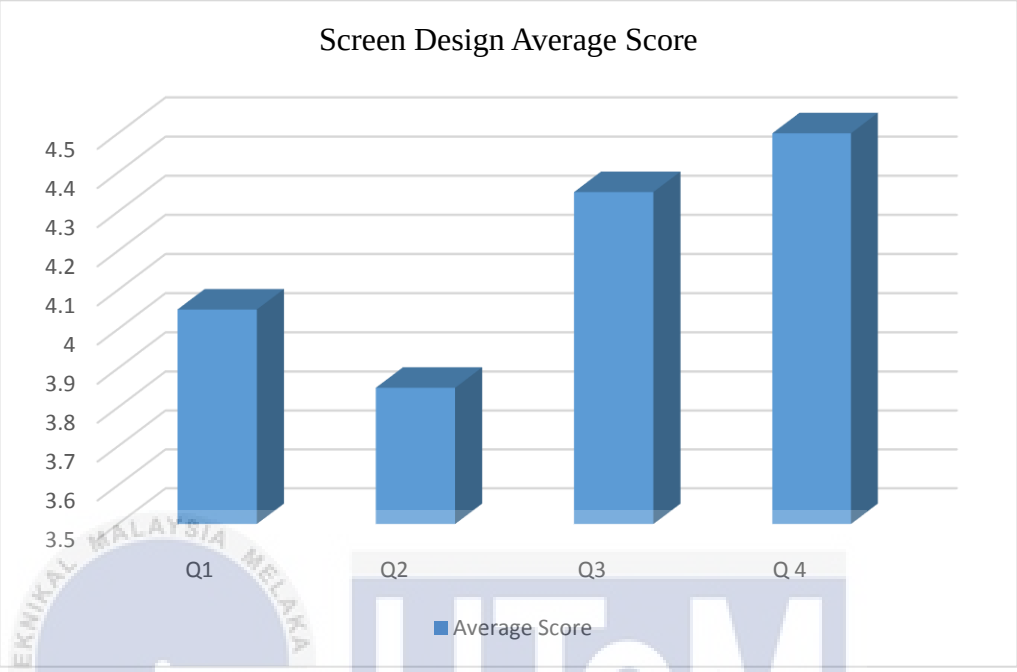
6.6.2 Analysis of Perceived Ease of Use



Graph 6.6.2.1: Average Score of Perceived Ease of Use

From graph 6.6.2.1, we can see that question 3 that is the interaction with the application would be clear and understandable get the highest average score that is 4.35. That means, user understand each interaction that they make with the application such as inserting the drinking amount or view the statistic. Learning to operate the application that is on the question 1 get the lowest score that is 3.9. Some user may take time to learn how to operate the application so that make it get the lowest score.

6.6.3 Analysis of Screen Design



Graph 6.6.3.1: Average Score of Screen Design

From graph 6.6.3.1 shown, the highest average score in goes to question 4 that is the organization of information display. Most of user agree with the way of organization of information display. But most of them do not agree with the colour scheme used in the application that is on question 2. So question 2 get the lowest average score.

6.6.4 Overall Analysis

For overall analysis, we can conclude that most of the user found that this application is useful to them. We get positive feedback and also some comment for improvement. Most of user give opinion to improve the features of this application. They want more feature to be add in the application.

6.7 Conclusion

This chapter describe all the testing part and all the testing analysis that been done and analyzed. We can conclude that this application can give help user in manage their water consumption The testing and improvement process still need to be done in future even though the project is successfully reach the requirements. This is to ensure the functionality and quality of the product.

CHAPTER 7

7.0 Conclusion

7.1 Introduction

In this section we will make the conclusion for this project, based on the result we get on the testing process. We have found several strength and weakness of the product. We also will see how can we improve the application and make the conclusion for overall project.

7.2 Project Summarization

We will make the summarization based on the objective that we have stated in chapter 1. First is to develop an application to manage the daily water consumption. Based on the testing, most of the user agree that with this application, they can manage their water consumption more easy. So we reach the objective. Second objective is to investigate the proper amount of water consumption. Based on research we make on Chapter 2, we found that one of factor that effect the amount of water consumption is body weight. We found that each 22 kilogram of body weight is equivalence to 1 liter of water. So from that we manage to make a formula to calculate the water needed for this application. Last objective is to learn how to develop an application. At the end of this project, we manage to develop the application based on the study that have been made about the fundamental to develop an application and we success. We can conclude from

the testing process, this application can give benefits to user. But there also have a room for improvement in the future.

7.2.1 Product Strength

By using this application, user do not need to calculate the amount of water they needed because the application have calculate automatically. They also can know how much they have drink for that day and how much water left to be drink by using this application. That mean they do not need to calculate how much they have drink. Then user also can look the daily progress of the water consumption. So user do not need to remember how much they have drink on the past day.

7.2.2 Product Weakness

Some of the weakness is lack of features in the application. Some user state that they want more features in this application to make this application more interesting. Then some user also do not agree with the colour scheme that bee use in the application.

7.3 Project Contribution

With this application, user can manage their daily water consumption more easy. Thus it can help them become healthier. Besides, nowadays people have busy life style, so they maybe neglect in their daily diet. Moreover, mobile application is popular nowadays and been uses widely in daily life.

7.4 Project Limitation

There are several limitation for completing this project. One of them is lack of knowledge in how to develop an application. Much of time is spend to learn how to develop this application especially on programming work.

7.5 Future Works

For improvement in future, we should add more future such as notification to make the application more interesting. We also should make more research on design part so we can choose the correct colour scheme for the application.

7.6 Conclusion

For overall conclusion, in my opinion, we have meet all the objective and requirement for this project. There are may have some improvement need to make this application more interesting. The most important think, we hope this application can give benefits to user and make us become healthier in the future.

REFERENCE

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hhttp://www.mindbodygreen.com/0-4287/10-Reasons-Why-You-Should-Drink-More-Water.html

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http://whatis.techtarget.com/definition/mobile-app

[3] Not Drinking Enough Water
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[4] Calories Counter MyFitnessPal
https://play.google.com/store/apps/details?id=com.myfitnesspal.android&hl=en

[5] Diet Watcher Diary
https://play.google.com/store/apps/details?id=com.crocodil.software.dwd&hl=en

APPENDIX A

HEALTH AND CARE MOBILE APPLICATION

I am from UTeM doing research on Health and Care Mobile Application for my final year project. Kindly answer ALL questions. Thank you.

PART A

Please tick (✓) for the following questions.

1. Gender:

☐ Male ☐ Female

2. Age

☐ 0-12 ☐ 13-19 ☐ 20-40 ☐ 41-Above

PART B

Please rate the following question.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree

PERCEIVED USEFULNESS

NO	QUESTION	1	2	3	4	5
1	Using the application in my daily life would enable me to know my daily amount of water needed.					
2	Using the system in daily life would enable me to improve my daily water consumption.					
3	Using the application in my daily life would enable me to manage my daily water consumption.					
4	Using the application would enhance my effectiveness on the daily water consumption.					
5	I would find the application useful in my daily life.					

PERCEIVED EASE OF USE

NO	QUESTION	1	2	3	4	5
1	Learning to operate the application would be easy for me.					
2	I would find it easy to get the application to do what I want it to do.					
3	My interaction with the application would be clear and understandable					
4	I would find the application to be flexible to interact with					
5	It would be easy for me to become skillful at using the application.					
6	I would find the application easy to use.					

SCREEN

NO	QUESTION	1	2	3	4	5
1	Reading characters on the screen.					
2	The colour schemes used are suitable.					
3	Every page is not too crowded.					
4	Organization of information.					

COMMENT AND PERCEPTION

1. Did this application need to be improve?

   ☐ Yes ☐ No

   If yes please state your reason and ideas of improvement.

   .....

   .....

APPENDIX B

Index.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<script src="assets/js/my_script.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>

</head>
<style>
#header {
   background-color:#3399ff;
   color:white;
   text-align:centre;
   padding:3px;
}

#footer {
   background-color:#3399ff;
   color:white;
   clear:both;
   text-align:center;
  padding:5px;
}
</style>
<body style="background-color:#D4DEE7;">
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <a class="navbar-brand" href="#">Drink Right</a>
  </div>
 </div>
</nav>
</div>
<br></br>

        <center>
        <table width ="50%" >

          <tr>
```

```
            <th>Ic Number</th>
            <th>:</th>
            <td>
              <input type="text" id="u_user_no" class="form-control"  placeholder="insert
your Ic Number"  autofocus="autofocus"/>
            </td>
          </tr><br>
          <tr>
            <th>Password</th>
            <th>:</th>
            <td>
              <input type="password" id="u_password" class="form-control"
placeholder="Insert your password." />
            </td>
          </tr>
        </table>
        <br></br>
        <p class="img-rounded" id="paparan"></p>

        <button type="button" class="btn btn-success" id="btn_login">Log In</button> <br />
        <button type="button" class="btn btn-link" id="btn_reg">Sign up? Click to
register.</button>

      </center>


</body>

<script>
  $(document).ready(function () {
    $("#btn_reg").click(function () {
      location.href = 'register.html';
    });

    $("#btn_login").click(function () {
      var u_user_no = $("#u_user_no").val();
      var u_password = $("#u_password").val();

      if (u_user_no == '' || u_password == '') {
        $("#paparan").addClass("alert-danger p_hack").html("Don't leave
blank!").delay(2000).queue(function () {
          $(this).removeClass("alert-danger p_hack").html("");
          location.href = 'index.html';
        });
      }

      $.post(URL_SERVER + "login.php", {
        u_user_no: u_user_no,
```

```
            u_password:u_password
        }).done(function (data) {
            var d = data.split('|');
            if (d[0] == '1') {
                $("#paparan").addClass("alert-danger
p_hack").html(d[1]).delay(2000).queue(function () {
                    $(this).removeClass("alert-danger p_hack").html("");
                    location.href = 'index.html';
                });
            } else if (d[0] == '-1') {
                localStorage.setItem("username", u_user_no);
                localStorage.setItem("password", u_password);
                localStorage.setItem("loggedin", true);
                $("#paparan").addClass("alert-success p_hack").html("Login
Success.").delay(500).queue(function () {
                    var goto_page = d[1];
                    location.href = goto_page;
                });
            }
        });
    });
  });
</script>
</html>
```

Login.php

```
<?php
require("dbconn.php");

$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];

$sql = "SELECT * FROM user WHERE u_user_no = '" . $u_user_no . "' AND u_password = '" .
$u_password . "' ";
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);

if ($t > 0) {

  die("-1|welcome.html");

} else {
  die("1|Invalid Ic Number and Password!");
}
?>
```

Register.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<script src="assets/js/my_script.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>
</head>
<body style="background-color:#D4DEE7;">
<center>
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header" >
   <a class="navbar-brand" href="#">Drink Right</a>
  </div>
 </div>
</nav>
<br></br>
     <center>
       <table width="80%">
          <tr>
             <th>Full Name</th>
             <th>:</th>
             <td>
                <input type="text" id="u_fullname" class="form-control" placeholder="Insert
your full name." autofocus="autofocus" />
             </td>
          </tr>
          <tr>
             <th>Ic Number</th>
             <th>:</th>
             <td>
                <input type="number" id="u_user_no" class="form-control"
placeholder="Insert your ic number." />
             </td>
          </tr>
           <tr>
```

```
            <th>Weight</th>
            <th>:</th>
            <td>
              <input type="number" id="u_weight" class="form-control" placeholder="Insert
your weight in Kilogram." />
            </td>
          </tr>
                                  <tr>
            <th>Height</th>
            <th>:</th>
            <td>
              <input type="number" id="u_height" class="form-control" placeholder="Insert
your height in Centimeter." />
            </td>
          </tr>
          <tr>
            <th>Password</th>
            <th>:</th>
            <td>
              <input type="password" id="u_password" class="form-control"
placeholder="Insert your password here." />
            </td>
          </tr>
          <tr>
                                  <tr>
            <th>Confirmation Password</th>
            <th>:</th>
            <td>
              <input type="password" id="u_password2" class="form-control"
placeholder="Insert your confirmation password here." />
            </td>
          </tr>

        </table>

        <p class="img-rounded" id="alert_paparan"></p>

        <button type="button" class="btn btn-info" id="btn_back">Back</button>
        <button type="button" class="btn btn-success" id="btn_reg">Register</button>

      </center>

<script>
  $(document).ready(function () {

    $("#btn_back").click(function () {
      location.href = 'index.html';
    });
```

```
    $("#btn_reg").click(function () {
        var u_fullname = $("#u_fullname").val();
        var u_user_no = $("#u_user_no").val();
                                var u_weight = $("#u_weight").val();
                                var u_height = $("#u_height").val();
        var u_password = $("#u_password").val();
                                var password2 = $("#u_password2").val();

                if (u_password != password2) {
            $("#alert_paparan").addClass("alert-danger p_hack").html("Password not match
with the confirmation!").delay(2000).queue(function () {
                $(this).removeClass("alert-danger p_hack").html("");
            });
            return;
        }
        if (u_user_no == '' || u_password == '' ) {
            $("#alert_paparan").addClass("alert-danger p_hack").html("Don't leave
blank!").delay(2000).queue(function () {
                $(this).removeClass("alert-danger p_hack").html("");
            });
            return;
        }

        $.post(URL_SERVER + "register.php", {
            u_fullname: u_fullname,
            u_user_no: u_user_no,
                                u_weight: u_weight,
                                u_height: u_height,
            u_password: password2,


        }).done(function (data) {
            var d = data.split('|');
            if (d[0] == '1') {
                $("#alert_paparan").addClass("alert-danger
p_hack").html(d[1]).delay(2000).queue(function () {
                    $(this).removeClass("alert-danger p_hack").html("");

                });
            } else if (d[0] == '-1') {
                $("#alert_paparan").addClass("alert-success
p_hack").html(d[1]).delay(2000).queue(function () {
                    $(this).removeClass("alert-success p_hack").html("");
                                                        location.href = 'index.html';
                });
                $(":text").val("");
            }
```

```
        });
      });
   });
</script>
</html>
```

Register.php

```
<?php
require("dbconn.php");

$u_fullname = $_POST['u_fullname'];
$u_user_no = $_POST['u_user_no'];
$u_weight = $_POST['u_weight'];
$u_height = $_POST['u_height'];
$u_password = $_POST['u_password'];



$sql1 = "INSERT INTO user(u_fullname, u_user_no, u_weight, u_height, u_password)
VALUES('$u_fullname', '$u_user_no', '$u_weight', '$u_height','$u_password')";

$u_weight = (isset($u_weight) && !empty($u_weight) && is_numeric($u_weight)) ?
($u_weight) : (0);
$qty = $u_weight * 1.0 / 22/0.25;
$date = date('Y-m-d');
$sql2 = "INSERT INTO water(quantity, quantity_left, date, u_user_no) VALUES('$qty', '$qty',
'$date', '$u_user_no') ";

mysql_query($sql1) or die("1|Error SQL 1: ".  mysql_error());
mysql_query($sql2) or die("1|Error SQL 2: ".  mysql_error());

die("-1|Register Success.");

?>
```

Welcome.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>
<meta name="viewport" content="width=device-width, initial-scale=1">
</head>
<body style="background-color:#D4DEE7;">
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#myNavbar">
    <span class="icon-bar"></span>
    <span class="icon-bar"></span>
    <span class="icon-bar"></span>
   </button>
   <a class="navbar-brand" href="#">Drink Right</a>
  </div>
  <div class="collapse navbar-collapse" id="myNavbar">
   <ul class="nav navbar-nav">
    <li><a href="update.html"><span class="glyphicon glyphicon-edit"></span> Info
Update</a></li>
    <li><a href="statistic.html"><span class="glyphicon glyphicon-stats"></span>
Statistic</a></li>
    <li><a href="logout.html"><span class="glyphicon glyphicon-log-out"></span>
Logout</a></li>
                </ul>
                </ul>
  </div>
 </div>
</nav>
<br></br>
    <center>
```

```
<table style="width:40%">

 <tr>
  <td width="51%" rowspan="3"><img src="assets\image\glass.png"
style="width:160px;height:200px;"></td>
  <td width="49%" height="50"><h1>Welcome!</h1></td>
 </tr>
 <tr>
  <th height="50" id= "name_papar"></th>
 </tr>
 <tr>
  <th height="50">Let's start your drink routine today</th>
 </tr>
</table>
          <br><br>
                  <button type="button" class="btn btn-success"
id="btn_start">Start</button>
     </center>

<script>
          $(document).ready(function () {
             $("#btn_start").click(function () {
        location.href = 'meter.html';
     });
                                  $.post(URL_SERVER+"userinfo.php", {
                                      u_user_no: localStorage.getItem("username"),
                                      u_password: localStorage.getItem("password")
                                  }).done(function (data) {
                                      var d = data.split("|");
                                      if (d[0] == '-1') {
                                          var name = d[1];
                                          $("#name_papar").html(name);
                                      } else {
                                          alert(d[1]);
                                      }
                                  });

                                          });


                  </script>
</html>
```

Userinfo.php

```
<?php
require("dbconn.php");

$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];

$sql = "SELECT * FROM user WHERE u_user_no = '" . $u_user_no . "' AND u_password = '" .
$u_password . "' ";
//die("1|".$sql);
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);

if ($t > 0) {
        $d = mysql_fetch_array($r);
        $name = $d['u_fullname'];
        die("-1|".$name);
} else {
        die("1|Invalid User!");
}
?>
```

Meter.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>
</head>
<body style="background-color:#D4DEE7;">
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#myNavbar">
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
   </button>
   <a class="navbar-brand" href="#">Drink Right</a>
  </div>
  <div class="collapse navbar-collapse" id="myNavbar">
   <ul class="nav navbar-nav">
    <li><a href="update.html"><span class="glyphicon glyphicon-edit"></span> Info
Update</a></li>
    <li><a href="statistic.html"><span class="glyphicon glyphicon-stats"></span>
Statistic</a></li>
    <li><a href="logout.html"><span class="glyphicon glyphicon-log-out"></span>
Logout</a></li>
                </ul>
```

```
   </div>
  </div>
</nav>
<br></br>
      <center>

<h1 align="center">Today Target</h1>

<table width="50%" align="center" style="background-color:#80bfff">
 <tr>
   <th width="45%" height="189" class="text-center" style="font-size:100px"
id="target_left" ></th>
 </tr>
 <tr>
   <th height="45" colspan="3" class="text-center"><h1>Cups<h1></th>
 </tr>
   <tr>
   <th height="45" colspan="3" class="text-center">Based on Metric Unit 250 ml per
cup</th>
 </tr>
</table>

<table width="50%" align="center">
 <tr>
       <th height="67" class="text-center ">Drinking Amount (Cup) </th>
            <td>
              <input type="number" id="d_amount" class="form-control"
placeholder="Insert your drinking amount." />
            </td>
      </tr>
</table>
          <br><br>
          <div class="container">
          <div class="progress">
                    <div class="progress-bar" id="progress-bar1" role="progressbar" aria-
valuenow="70" arial-valuemin="0" arial-valuemax="100" style="width:70%">
                              70% complete
                              </div>
          </div>
          </div>

                    <button type="button" class="btn btn-success"
id="btn_start">Calculate</button>
      </center>

<script>
```

```
        function cekTarikh() {
                $.post(URL_SERVER+"check.php", {
                        u_user_no: localStorage.getItem("username"),
                        u_password: localStorage.getItem("password")
                }).done(function (data) {
                        var d = data.split("|");
                                if (d[0] == '-1') {
                                        var qty = parseFloat(d[1]).toFixed(0);
                                        var qty_left = parseFloat(d[2]).toFixed(0);
                                        $("#target_papar").html(qty);
                                        $("#target_left").html(qty_left );
                                } else {
                                        $("#target_left").html(d[1])
                                }
                        setTimeout(cekTarikh(), 2000);
                });
        }
        cekTarikh();

  $(document).ready(function () {

                        $.post(URL_SERVER+"target.php", {
                                u_user_no: localStorage.getItem("username"),
                                u_password: localStorage.getItem("password")
                        }).done(function (data) {
                                var d = data.split("|");
                                if (d[0] == '-1') {
                                        var qty = parseFloat(d[1]).toFixed(0);
                                        var qty_left = parseFloat(d[2]).toFixed(0);
                                        $("#target_papar").html(qty );
                                        $("#target_left").html(qty_left );

                                        var percentage = parseFloat(qty_left) /
parseFloat(qty) * 100.00;
                                        percentage =
parseFloat(percentage).toFixed(2);
                                        $("#progress-bar1").attr("aria-valuenow",
""+percentage).attr("style", "width:"+percentage+"%").html(percentage+"% left");

                                } else {
                                        alert(d[1]);
                                }
                        });

                        $("#btn_start").click(function () {
                                var ask = confirm('Are you sure you drink that
much?');
```

```
                                        if (ask == false) {
                                                return;
                                        } else {
                                                var d_amount = $("#d_amount").val();
                                                $.post(URL_SERVER+"calculate.php", {
                                                        u_user_no:
localStorage.getItem("username"),
                                                        u_password:
localStorage.getItem("password"),
                                                        d_amount: d_amount
                                                }).done(function (data) {
                                                        var d = data.split("|");
                                                        if (d[0] == '-1') {
                                                                var qty_left =
parseFloat(d[1]).toFixed(0);
                                                                var qty_penuh =
parseFloat(d[2]).toFixed(0);

        $("#target_left").html(qty_left );


                                                                var percentage =
parseFloat(qty_left) / parseFloat(qty_penuh) * 100.00;
                                                                percentage =
parseFloat(percentage).toFixed(2);
                                                                $("#progress-
bar1").attr("aria-valuenow", ""+percentage).attr("style",
"width:"+percentage+"%").html(percentage+"% left");
                                                        } else {
                                                                alert(d[1]);
                                                        }
                                                });
                                        }
                                });

                        });


</script>
</html>
```

Check.php

```
<?php
```

```
require("dbconn.php");

$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];

$sql = "SELECT * FROM user u WHERE u.u_user_no = '" . $u_user_no . "' AND u.u_password =
'" . $u_password . "' ";
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);

if ($t > 0) {

        $today1 = date('Y-m-d');
        $sql1 = "SELECT * FROM user u, water w WHERE u.u_user_no = w.u_user_no AND
u.u_user_no = '" . $u_user_no . "' AND u.u_password = '" . $u_password . "' AND w.date =
'".$today1."' ";
        //die("1|".$sql1);
        $r1 = mysql_query($sql1) or die("1|Error: " . mysql_error());
        $t1= mysql_num_rows($r1);

        if ($t1 <= 0) {
                $today = date('Y-m-d');
                $d = mysql_fetch_array($r);
                $date = $d['date'];
                //die("1|".$today.":".$date);
                //if ($today != $date) {
                        $u_weight = $d['u_weight'];
                        $u_weight = (isset($u_weight) && !empty($u_weight) &&
is_numeric($u_weight)) ? ($u_weight) : (0);
                        $qty =$u_weight * 1.0 /22/0.25;
                        $sql1 = "INSERT INTO water (quantity, quantity_left, date,
u_user_no) VALUES ('" . $qty . "', '" . $qty . "', '" . $today . "', '" . $u_user_no . "' )";
                        mysql_query($sql1) or die("1|Error: " . mysql_error());
                        die("-1|".$qty."|".$qty);
                //}
        }
} else {
        die("1|Invalid user!");
}

?>
```

Target.php

```
<?php
require("dbconn.php");
```

```
$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];

$sql = "SELECT * FROM user u, water w WHERE u.u_user_no = w.u_user_no AND
u.u_user_no = '" . $u_user_no . "' AND u.u_password = '" . $u_password . "' ORDER BY
w.water_id DESC ";
//die("1|".$sql);
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);

if ($t > 0) {
        $d = mysql_fetch_array($r);
        $qty = $d['quantity'];
        $qty_left = $d['quantity_left'];
        die("-1|".$qty."|".$qty_left);
} else {
        die("1|Invalid User!");
}
?>
```

Calculate.php

```
<?php
require("dbconn.php");

$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];
$d_amount = $_POST['d_amount'];

$d_amount = (isset($d_amount) && !empty($d_amount) && is_numeric($d_amount)) ?
($d_amount) : (0);

$sql = "SELECT * FROM user u, water w WHERE u.u_user_no = w.u_user_no AND
u.u_user_no = '" . $u_user_no . "' AND u.u_password = '" . $u_password . "' ORDER BY
water_id DESC ";
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);

if ($t > 0) {
        $d = mysql_fetch_array($r);
        $qty_left = $d['quantity_left'];
        $qty_penuh = $d['quantity'];
        //die("1|".$qty_left."_".$d_amount."_".$sql);
        $qty_left = $qty_left - $d_amount;
        $qty_left = ($qty_left < 0) ? (0) : ($qty_left);
        //die("1|".$qty_left."_".$qty_penuh);
```

```
        $sql = "UPDATE water SET quantity_left = '" . $qty_left . "' WHERE u_user_no = '" .
$u_user_no . "' ";
        mysql_query($sql) or die("1|Error: ".mysql_error());
        die("-1|".$qty_left."|".$qty_penuh);
} else {
        die("1|Invalid user!");
}


?>
```

Update.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>
<meta name="viewport" content="width=device-width, initial-scale=1">
</head>
<body style="background-color:#D4DEE7;">
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#myNavbar">
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
```

```
    </button>
    <a class="navbar-brand" href="meter.html">Drink Right</a>
   </div>
   <div class="collapse navbar-collapse" id="myNavbar">
    <ul class="nav navbar-nav">
     <li><a href="update.html"><span class="glyphicon glyphicon-edit"></span> Info
Update</a></li>
     <li><a href="statistic.html"><span class="glyphicon glyphicon-stats"></span>
Statistic</a></li>
     <li><a href="logout.html"><span class="glyphicon glyphicon-log-out"></span>
Logout</a></li>
                  </ul>
                  </ul>
  </div>
 </div>
</nav>
<br></br>
     <center>

       <table width="80%">
         <tr>
          <th>Weight</th>
          <th>:</th>
          <td>
            <input type="number" id="u_weight" class="form-control" placeholder="Insert
your weight ." />
          </td>
        <tr>
          <th>Password</th>
          <th>:</th>
          <td>
            <input type="password" id="u_password" class="form-control"
placeholder="Insert your password here." />
          </td>
        </tr>
        <tr>

       </table>

       <p class="img-rounded" id="alert_paparan"></p>

      <button type="button" class="btn btn-info" id="btn_back">Back</button>
       <button type="button" class="btn btn-success" id="btn_update">Update</button>

     </center>

<script>
  $(document).ready(function () {
```

```
    $("#btn_back").click(function () {
       location.href = 'meter.html';
    });


                $("#btn_update").click(function () {
                                        var ask = confirm('Are you sure to update your
profile?');
                                        if (ask == false) {
                                                return;
                                                } else {
                                var u_weight = $("#u_weight").val();
                                var u_password_new = $("#u_password").val();
                                $.post(URL_SERVER+"updateprofile.php", {
                                        u_user_no: localStorage.getItem("username"),
                                        u_password: localStorage.getItem("password"),
                                        u_password_new: u_password_new,
                                        u_weight: u_weight
                                }).done(function (data) {
                                        var d = data.split("|");
                                        if (d[0] == '-1') {
                                                location.href='logout.html';
                                        } else {
                                                alert(d[1]);
                                        }
                                });
                        }
                });
        });
</script>
</html>
```


Updateprofile.php

```
<?php
require("dbconn.php");


$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];
$u_password_new = $_POST['u_password_new'];
$u_weight = $_POST['u_weight'];

$sql = "SELECT * FROM user u, water w WHERE u.u_user_no = w.u_user_no AND
u.u_user_no = '" . $u_user_no . "' AND u.u_password = '" . $u_password . "' ";
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
```

```
$t = mysql_num_rows($r);

if ($t > 0) {
	$d = mysql_fetch_array($r);
	if (isset($u_weight) && !empty($u_weight) && is_numeric($u_weight)) {
		$qty = $u_weight * 1.0 / 22/0.25;
		$today1 = date('Y-m-d');
		$sql = "UPDATE user SET u_weight = '" . $u_weight . "' WHERE u_user_no = '"
. $u_user_no . "' ";
		mysql_query($sql) or die("1|Error update user: "+mysql_error());
		$sql = "UPDATE water SET quantity = '" . $qty . "', quantity_left = '" . $qty . "'
WHERE u_user_no = '" . $u_user_no . "' AND date = '".$today1."' ";
		mysql_query($sql) or die("1|Error update water: "+mysql_error());
		//die("1|".$sql);
	}
	if (isset($u_password_new) && !empty($u_password_new)) {
		$sql = "UPDATE user SET u_password = '" . $u_password_new . "' WHERE
u_user_no = '" . $u_user_no . "' ";
		mysql_query($sql);
	}
	die("-1|".$qty_left);
} else {
	die("1|Invalid user!");
}

?>
```


Statistic.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="viewport" content="width=device-width, initial-scale=1">
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<script src="assets/js/highcharts.js" type="text/javascript"></script>
<script src="assets/js/jquery.highchartTable-min.js" type="text/javascript"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>
<link href="assets/css/my_style.css" rel="stylesheet" type="text/css"/>
<meta name="viewport" content="width=device-width, initial-scale=1">
</head>
<body style="background-color:#D4DEE7;">
```

```
<nav class="navbar navbar-inverse">
 <div class="container-fluid">
  <div class="navbar-header">
   <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#myNavbar">
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
     <span class="icon-bar"></span>
   </button>
   <a class="navbar-brand" href="meter.html">Drink Right</a>
  </div>
  <div class="collapse navbar-collapse" id="myNavbar">
   <ul class="nav navbar-nav">
     <li><a href="update.html"><span class="glyphicon glyphicon-edit"></span> Info
Update</a></li>
     <li><a href="statistic.html"><span class="glyphicon glyphicon-stats"></span>
Statistic</a></li>
     <li><a href="logout.html"><span class="glyphicon glyphicon-log-out"></span>
Logout</a></li>
                </ul>
                </ul>

  </div>
 </div>
</nav>
<br></br>
          <centre>
          <div id = "target_papar"></div>
                <button "type="button" class="btn btn-info" id="btn_back">Back</button>
          </center>
<script>

          $(document).ready(function () {
                    $.post(URL_SERVER+"statistic.php", {
                              u_user_no: localStorage.getItem("username"),
                              u_password: localStorage.getItem("password")
                    }).done(function (data) {
                              var d = data.split("|");
                              if (d[0] == '-1') {
                                        $("#target_papar").html(d[1]);
                              } else {
                                        alert(d[1]);
                              }
                    });

    $("#btn_back").click(function () {
       location.href = 'meter.html';
    });
```

```
        });
</script>
</html>
```

Statistic.php

```
<?php
require("dbconn.php");

$u_user_no = $_POST['u_user_no'];
$u_password = $_POST['u_password'];

$sql = "SELECT * FROM user u, water w WHERE u.u_user_no = w.u_user_no AND
u.u_user_no = '" . $u_user_no . "' AND u.u_password = '" . $u_password . "' ";
//die("1|".$sql);
$r = mysql_query($sql) or die("1|Error: " . mysql_error());
$t = mysql_num_rows($r);
$d = mysql_fetch_array($r);

if ($t > 0) {
        $str = "";
        $str .= ' <table class="highchart" data-graph-container-before="1" data-graph-
type="line" >
 <thead>
   <tr>
     <th>Date</th>
     <th>Water Amount</th>
   </tr>
  </thead>
  <tbody>';
        do {
                $date = $d['date'];
                $qty = $d['quantity'];
                $str .= '<tr>
     <td>'.$date.'</td>
     <td>'.$qty.'</td>
   </tr>';
        } while ($d = mysql_fetch_array($r));
        $str .= '</tbody>
</table>';
$str .= "<script>$(document).ready(function () {
                $('table.highchart').highchartTable();
        });</script>";
die("-1|".$str);
} else {
        die("1|Invalid User!");
}
?>
```

Logout.html

```
<script src="assets/js/jquery-1.12.3.js" type="text/javascript"></script>
<script src="assets/js/bootstrap.js" type="text/javascript"></script>
<script type="text/javascript"
src="http://maps.google.com/maps/api/js?sensor=true"></script>
<link href="assets/css/bootstrap-theme.css" rel="stylesheet" type="text/css"/>
<link href="assets/css/bootstrap.css" rel="stylesheet" type="text/css"/>
<script src="assets/js/my_config.js" type="text/javascript"></script>

<script>

  localStorage.setItem("username", "");
   localStorage.setItem("password", "");
        localStorage.setItem("loggedin", false);
        location.href = 'index.html';

</script>
```

Dbcon.php

```
<?php header('Access-Control-Allow-Origin: *'); ?>
<?php
$conn = mysql_connect("localhost", "root", "1234");
if (!$conn) {
   die("No connection to database!");
}
mysql_select_db("psm_db");
?>
```