BORANG PENGESAHAN STATUS TESIS

JUDUL: RAKAN LAP

SESI PENGAJIAN: 2008 /2009

Saya NUR HANISAH BINTI ZUBIR
(HURUF BESAR)

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Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

RAKAN LAP

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This report submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Computer Networking)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
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2009

DECLARATION

I hereby declare that this project report entitled

RAKAN LAP

is written by me and is my own effort and that no part has been plagiarized withtout citations.

STUDENT : _____ Date: _____

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SUPERVISOR : _____ Date: _____

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DEDICATION

To my dearest family, my supportive supervisor and for those who had given me the inspiration and spirit to move on and not to give up completing this project...

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In the name of Allah, Most Benificent, Most merciful

Praise to Allah for giving me strength and patience to complete the Projek of Sarjana Muda 1 throughout this semester. Special thanks go to En Ariff Bin Idris, my supervisor for his invaluable guidance, constructive suggestions and advices throughout this project that help me to progress through out the system.

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Last but not least, I wish to express my deepest appreciation and heartfelt thanks to my beloved family and my closest friend for their understanding, motivation, support and sacrifices that I was able to complete the Projek Sarjana Muda 1.

ABSTRACT

Rakan LAP has been developed using Macromedia Dreamweaver MX 2004 as a graphical user interface and PHP as scripting language. The application used to connect PHP, MySQL and GSM Modem is Ozeki Message Server. The methodology used in this system is System Development Life Cycle (SDLC). Rakan LAP is developed to improve the current inefficient services provided by this organization. This system is aimed to provide a better complaint system, information system and hopefully a faster way for customer to check their unpaid bill.

ABSTRAK

Rakan LAP ialah sebuah sistem yang dibangunkan dengan menggunakan perisian Macromedia Dreamweaver MX 2004 sebagai antara muka dan PHP sebagai bahasa pengaturcaraan. Aplikasi bagi menghubungkan PHP, MySQL dan GSM Modem adalah Ozeki Message Server. Metodologi yang digunakan dalam membangunkan sistem ini ialah Software Development Life Cycle (SDLC). Sistem ini dibangunkan bertujuan untuk menjadikan urusan antara pengguna dan pihak Lembaga Air Perak lebih mudah dan pantas.

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LAP	-	Lembaga Air Perak
SSWD		Sabah State Water Department
PNP		Philippines National Policeg
SMS	-	Short Message Service
GSM	-	Global System for Mobile Communications
SIM	-	Subscriber Identity Module
USB		Universal Serial Bus
IIS		Internet Information Server
PHP		Personal Home Page
HTML		Hyper Text Markup Language
HTTP		Hypertext Transfer Protocol
SDLC		System Development Life Cycle

CHAPTER 1

INTRODUCTION

1.1 Project Background

This project is developed to be used by Lembaga Air Perak (LAP) which is a semi-government organization in Perak. This organization holds a big responsibility in managing the water supply service and distribution for Perak citizens. However, LAP only has a hotline number for their customers to give complaint for the time being. Besides, citizen in Perak can only check their unpaid bill when they received the bill receipt at the end of the month. Thus, Rakan LAP is developed to improve the current inefficient services provided by this organization. This system is aimed to provide a better complaint system, information system and hopefully a faster way for customer to check their unpaid bill.

Rakan LAP is designed and developed to provide a better service to the LAP customer. This system enabled customers to make a complaint or report on any problem that should be solved by LAP via SMS or browsing through the website. Customers can make their complaints or report when they spotted any pipe burst, stolen water meters, disconnection of water supply and any other related problems. The administrator will determine the location of the existing problem when the system receives complaint from the customer. Then, admin will instruct LAP staffs on duty for each service centre, zone or district also via SMS to fix the problem. In this way, the staffs will easily get the details through their handphones. Next, the LAP staffs will update the current situation

whether the problem has been fixed or not. This technology provides more efficient ways in settling complaints made by customers as soon as possible.

Besides that, this system also allows customers to perform bill checking via SMS as well as website. This system will also provide information of LAP services to the customers via SMS. For instance, customers will be provided with the latest information on water supply disruption, disconnection of water supply and many more.

1.2 Problem Statement

Nowadays, LAP only provides a hotline number for customer to contact them when any problem occurs. Based on some researches and interviews, the hotline number was very difficult to reach and the complaint was not updated and only resolved after a few days. Sometimes, LAP took a long time to settle a report thus proved the inefficient system that is used at the moment. This can cause difficulties to customers. Customers also can only check their unpaid bill charges at the end of the month when the bill receipt arrive or if it is not received, they need to go to the LAP office to check their bill. This process will involve many procedures and can cause delay. LAP only gives information to customers through notice and announce it in the newspaper. It can cause difficulties to customer if they do not alert when the water supply disruption will be occurred. Thus, proper system needs to be developed and implement to ensure that the customer satisfaction and communication system of LAP can be improved.

1.3 Objective

The purposes of developing Rakan LAP are as follows:

i. To develop a complaint system using PHP and send message using GSM communication.

ii. To be able to send message over the network. This system must be able to send message between LAP customer and LAP staff in charge.

iii. To provide information to LAP customers as soon as possible via SMS and website.

iv. To enable LAP customer to check their unpaid bill charges via SMS and website.

1.4 Scope

There are four scopes for this system. First and foremost, this system is developed for LAP customer who wants to make complaint whether they were registered or not via SMS and website. This system is for registered customer of LAP to check their unpaid bill charges via SMS and website and to gets latest information about LAP services. This system will be developed for admin, registered customer and unregistered customer.

1.5 Project Significant

The significance of this project is that, it is important to make each customer of LAP satisfies with services provided by LAP. Thus, this system allows LAP staff to settle any problem occurs in a short time depending on the complaint made by customer via SMS or website. This system also allow registered customer to check their unpaid bill charges via SMS or website.

1.6 Expected Output

There are many expected output for this system. One of the expected output is to provide LAP customers a faster ways in making complaint and the problem will be solved as soon as possible. Besides, this system also provides LAP customer a faster way to check their unpaid bill and gets latest information. Plus, it is expected to be a user friendly system and easier to use.

1.7 Conclusion

This project is basically about developing a system that allow LAP customer to makes complaints easier and help LAP to manage all the complaints faster and effective via SMS and web. This system can be used by everyone that has accessed to internet and hand phone. With this system hopefully, it can help satisfy LAP customer.

Henceforth, in the next chapter literature review and project methodology will be discussed. Literature review will review about the previous system and make a comparison with this system. It will also discuss the technique used throughout this study.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter will describe about related literature review, which is very important for the research and development. It is a glossary or abstract from past researches or case studies and it represents the method of searching, collecting, analyzing and drawing conclusion about certain topic. In literature review, this project will be described in detail through fact and finding method. This chapter will focus on the research of the current, past and new system that will be developed.

Project methodology is very important to make sure the development of the system is on the track followed by the due date. The methodology should result in a good quality that meets user expectations, within time, works effectively and as planned in preliminary stage. In this section, selected approaches or methodologies will help to describe the activities in every stage.

The next process that needs to be focused after defining methodology is project schedule and milestones. It acts as a guideline that will help the developer to complete the project on time.

2.2 Literature Review

2.2.1 Domain

The domain of this application is a complaint system and information system. This system can benefit the customers of LAP and also to the LAP staff. This application will be designed to fulfill the needs because of many reasons. The SMS will be used as the human-machine interaction because of efficiency and well-known technology that can be used widely. The LAP customer and LAP staff can gives complaint via SMS or website. Customer also can check their unpaid bill and will be able to receive any information regarding to LAP services such as water disruption, cutting of water supply and others via SMS which is more practical. Generally, the customer and staff may have own mobile phone, so they will get the updates as soon as possible from the system. The list of benefits to adding the technology to send and receive SMS into the public is endless.

2.2.2 Keyword

2.2.2.1 LAP

LAP stands for Lembaga Air Perak. It is a semi-government organization that holds a big responsibility in managing the water supply service and distribution for Perak citizens.

2.2.2.2 SMS

SMS is an abbreviation for Short Message Service. SMS is a communication protocol allowing the interchange of short message between mobile telephony devices.