CHAPTER I

INTRODUCTION

1.1 Background

Nowadays is the world of information and telecommunication. Everyday new technology and inventions are being made in the area of information, processing and travelling. There is hardly any area which had not been affected by this. Due to all this, the word distance sounds ironical in present day context. The whole world has become a small place today. Any information can be exchanged by people in few seconds and that, too, in proper and effective way without any loss of data while it is being processed.

On the one hand, all these different ways of telecommunication and information exchange have highlighted the necessity for multipurpose development and growth of information technology and on the other, the easy access and use of it has boosted the network of information exchange. All this has been possible through information technology like telephone, fax, telex, computers, websites, internet, e-mail, photocopier, printer, scanner, cellular phones, pagers, videophone, digital camera, multimedia, etc. These technologies are becoming a part and parcel of our lives and are transforming lifestyles and habits of people all over the world.

Today number of websites exceeds more than 200 million and also become one of the most powerful modern business marketing tool. Online ordering taxi gains a huge number place in business world. The online cab and car

booking is a complimentary service and even the companies find it more convenient and time saving to receive their orders online and also get their payments made online. This not only provides an utmost convenience at the customer's level but also at the management level. The taxi and car hire services offered by various ground transportation companies include special added benefits in order to encourage and attract more customers towards online booking system instead of opting for the old procedure. According to a recent statistical survey conducted in the capital and metropolitan city of London where cabs are known as its symbol, the customers are moving more and more towards online reservation and car hire and this system is going to be implemented completely in the new era making it possible for everyone to acquire online services just from anywhere.

Transfersonly.net experienced crew throughout the Mediterranean offers high quality services worldwide on best price guarantee. After you book your cheap transfers to Istanbul your vouchers and confirmation documents will be e-mailed to you instantly. At any time you are able to review your booking details online via our website on the main menu by using your booking reference. There you can re-print or re-send your voucher to your desired e-mail address or you can cancel your booking as well. Your picking up instructions will be emailed to you with your receipt. You must print or make a note of these as they will contain a telephone number for the day of travel. We advise passengers to plan to arrive at the airport 2 hours for domestic flights and 3 hours for international flights prior to flight departure to allow for possible unpredicted delays in route to or from the airport. TransfersOnly.net will not take responsibility for any passengers missing

their flight if two hours check in time was not allowed. You are free of course to arrange to get to the airport or port for a time of less than 2 hours prior to flight departure, however TransfersOnly.net accept no responsibility for any missed flight due to this.

As mentioned about importance and convenience of ordering taxi online above, unwillingly there are still transportation companies using offline system for servicing clients. Citra Maharlika Nusantara Corpora (CMNC) taxi is one of the manually system supporting their clients via telephone call. CMNC located in Pasteur Street of city Bandung. By doing offline way CMNC faces with some problems and difficulties while servicing their valued clients. CMNC taxi uses 1 line telephone system which is obviously not enough to respond all client's calls and unfortunately leaves many clients without respond. Officially rely to CMNC taxi's rules the clients must be responded after 10 minutes of their call, but unfortunately sometimes operators forget to call back their clients and causes lack of trust by users. The maximum capacity of serving clients on one day is 200. On March 2015 the number of taxi used by clients was 4504, which makes 145 per day. By doing manually service sometimes CMNC taxi operators took a long time of clients to serve them taxi and possibly sometimes forget client's needs too. Because of CMNC uses 1 line telephone it can just serve 1 client at the moment. But what if more than 1 clients on line at the same time wants to order a taxi? Based to this on Sunday May 10 2015 at 13^{37} there was a test, 2 clients tried to call at the same time to CMNC taxi service in order to order a taxi. Call of Client A was responded after 2 minutes and Client B could reach after 4 minutes. So the

delay time between 1 client and another is unpredictable, it changes frequently. But mostly it is around 5 – 10 minutes.

Another problem could be with Indonesian language, foreigners that came to Bandung City are having difficulties with speaking Bahasa, so when they want to order taxi via telephone usually got misunderstanding with operators. Nowadays people prefer to fulfill their needs by internet more than by calling. Also from the side of finance getting internet packets are much cheaper and long stable comparing with buying balance for telephone. Totally, CMNC taxi service should pass to online service system, in order to avoid difficulties and problems that faces by clients.

1.2. Identification and Problem Formulation

The identification and formulation of the problem is as follows;

1.2.1. Identify the Problem

Of the background outlined above, it can be the identification of the problem as follows:

1. Difficulties to respond all clients call especially when there are more than one client's call, because of 1 line telephone call using by CMNC Taxi Service.
2. Clients waits too long time to get their taxi and even unwillingly sometimes left without respond by operators.

3. The lack of communication in both sides between foreign clients and operators in serving taxi, which causes CMNC less trusted and admirable from the side of many tourists that comes to Bandung City.

1.2.2. Problem Formulation.

Based on the above, the importance of the formulation of the problem, namely:

1. How to design System Information for CMNC Taxi Service.
2. How to describe the design process of ordering online taxi via Web in CMNC Taxi Service.
3. How to test the online ordering taxi website in order to avoid error system functional.
4. How to implement an online website integrated with a database so that it becomes a ready-made website in the CMNC Taxi Service.

1.3. Research Objectives

The research Objectives are as follows:

1.3.1. Research Purposes

The purpose of this research is to create an online website to improve CMNC Taxi service.

1.3.2. The purpose Of This Studies

The purpose of this study is as follows:

1. To design System Information for CMNC Taxi Service.

2. To describe the design process of ordering online taxi via Web in CMNC Taxi Service.
3. To test the website online ordering taxi in order to avoid functional error system.
4. To implement an online website integrated with a database in order to become a ready-made application package in the CMNC Taxi Service.

1.4. Usability Research

The usefulness of research are as follows:

1.4.1 Usability Academic

a. The results of this study are expected to contribute ideas to other researchers and can be a reference for the improvement or development for other researchers who will examine the field or the same problem.
b. For the future researchers will be better to improve this study with including payment, create a mobile app and using GPS in the system.

1.4.2 Usability Practice

1. **Company's Side:**
    a. To help company to reach a global multi-national companies in the construction equipment rental services and transportation.
    b. Helps to provide a safe, efficient and profitable land freight transport.

c. To avoid time wasting and manually mistakes that sometimes made by operators

d. To decrease miscommunication between users and operators

2. Public's Side:

a. To become a useful tool for customers to order taxi

b. To provide a good facility for customers to book taxi online via website within a short period and safe mode.

c. To became a solution tool for companies which are still using manually way to serve their clients.

3. Driver's Side:

a. To serve clients in a best way he can

b. To make clients feel comfort and safe during bringing to their destination.

4. Staff Operator's Side:

a. Able to easily communicate with driver, manager and client

b. To find a nearest taxi for clients ordered in a short time

5. Manager's Side:

a. Able to control and see the process of work without difficulties

b. Easily can get reports of serving daily and monthly from staff operational.

1.5. Limitations

Restrictions problem used in a discussion intended to make the discussion more focused and in accordance with the objectives to be achieved. The limitations include:

1. The system is built only to make an online booking taxi via website, NO payment included.
2. The website provide a STATUS which stands for either there is/are an available taxi(s) for service or not.
3. CMNC online book taxi serves only to the clients accommodate in Bandung City.
4. In CMNC online taxi client able to book taxi only for that day and each client is allowed to order only one taxi.

1.6. Location and Time Research

The location and time are the following research:

1.6.1. Location Research

Location which is the object of this study are as follows:

Name: CMNC Taxi Service

Address: Jl. Pasteur Bandung City.

Tel: Tel 022-700 70 000

1.6.2. Time Research

In this study, the authors chose the location in CMNC Taxi Service. As time the study was as follows:

Table 1.1 Time research

SHEDULE	MONTHS - 2015 YEAR															
	SEPTEMBER				OKTOBER				NOVEMBER				DECEMBER			
Quick Plan	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
a.Observing																
b.Interview																
c.Data Collection																
Modeling Quick Design																
a.Design UML																
b.Design Database																
c.Design Interface																
Construction of Prototype																
Built Prototype																
Communication & Feedback																
a.Show prototype to customers																
b.Customer Evaluation																
c.Customers Feedback																
Development Delivery																
a.Implement a deployed system from final prototype																
b.Maintenance the System																

1.7. Systematics Writing

The Systematics Writing is as follows:

CHAPTER I INTRODUCTION

This chapter contains a description of the background research that underlies the importance of the research, identification and formulation of the problem, the intent and purpose of the study, the usefulness of the study consisted of 3 usability

sides, the academic, company and public's sides. Further limitations problem, the location and time of the study and systematic writing.

CHAPTER II THEORY

This chapter contains a description of the theory - a theory which will be used as the title theme researchers used, among others, the notion of system, information and information system, the notion of software testing, black and white box testing, understanding of website, system approach methodology, OO and Structured Approach, Software Development Methodologies, Network Topology, Database, PHP, XAMPP, MySQL, Apache and journal the results of previous studies that have been published to serve as a reference.

CHAPTER III OBJECT AND METHODS

This chapter contains a description of the object of study in which 3 points again stated that, a brief history of the company, the company's organizational structure and job descriptions. Furthermore, the method of approach and system development, analysis and design tool consisting of a Use Case, Activity Diagram, Sequence Diagram, Class Diagram, Object Diagram, Component Diagram, and Deployment Diagram. Further testing and analysis software that runs the system consisting of analysis of current procedures in which using Use Case, Use Case Scenario and Activity Diagram, and the last evaluation of the current system.

CHAPTER IV RESULTS AND DISCUSSION

This chapter contains a description of the system design, system design purposes, a general overview of the proposed system in which consists of a Use Case, Activity Diagram, Sequence Diagram, Class Diagram, Object Diagram, Component Diagram, and Deployment Diagram. Furthermore, the design of the interface consists of a menu structure, design input and output design, Network Architecture Design, implementation consisting of implementation constraints (optional) software implementation, hardware implementation, the implementation of database (SQL Syntax), interface implementation, XAMPP installation implementation of the program installation and use of the program. And the last is the testing consisting of test plans, test cases and results, and conclusions of the test results.

CHAPTER V CONCLUSIONS AND RECOMMENDATIONS

In this chapter contains a description of the main points of the conclusions and recommendations that need to be communicated to the parties concerned with the results of research and development for the purposes of the application or the other.