MyOrdersLink

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# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

C Universiti Teknikal Malaysia Melaka

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JUDUL : <u>MyOrdersLink</u>

SESI PENGAJIAN : 2 014/2015

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This report is submitted in partial fulfilment of the requirements for the Bachelor of Computer Science (Software Engineering)

### FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA 2015

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### DECLARATION

I hereby declare that this project report entitled

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is written by me and is my own effort and that no part has been plagiarized without citations.

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### DEDICATION

This work is dedicated to my beloved family, who passed on a love of reading and respect for education.

### ACKNOWLEDGEMENT

First and foremost, a thousand thanks to my supervisor, DR MASSILA KAMALRUDIN for the guidance she gave so that I was able to keep focused, structured and motivated. I learnt a lot from her comment, guidance and it really helped me a lot into doing my best. Thank you for everything.

Finally, I also place my sense of gratitude to everyone who directly or indirectly help me on this Final Year Project.

### ABSTRACT

Ordering is a process of the customers specifying what they want, so that the order can be recorded by using a note, form, computer system and others, followed by passing it to the relevant department for processing and finally delivery of the services or products to the customers based on the order. Food ordering can be computerized or done manually.

This project is to create a simple application for smartphone user which consist a few functions and modules. This application named MyOrdersLink. MyOrdersLink is a mobile application that able to help customers in making orders from their own phone. It also could help customers to avoid delays and errors while making orders. In addition, this application also helps the restaurant's owner to automatically receive accurate orders from customer.

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### **CHAPTER I**

### **INTRODUCTION**

### 1.1 Project Background

This food ordering system – MyOrdersLink is very helpful for owner and customer. It helps customers in making orders from their own phone and avoid delays and errors while making orders. In addition, this application also helps the restaurant's owner to automatically receive accurate orders from customer. Besides that, it will track the customer location. The purpose I do the tracking system is for the admin to track their customer, with the tracking system admin will know where the customer live at. This will easy for admin to send advertisement or promotion announcement to the customer to inform them the latest news of our restaurant. Furthermore, admin will know more clearly about where their customer from. In order to expand our restaurant we can distribute more advertisement and brochure at the area where less or no customer area to attract the customer to come forward to our restaurant.

### **1.2 Problem statement**

Nowadays most of the restaurants are still using old system which is hand write ordering system. By using this old system many problems will be face by the restaurant. Problems identified in the current situations of restaurants are normally delays and long time to make orders. Sometimes customers need to wait the waiters for a long period to come for order the foods especially during the peak lunch or dinner hours. This will make customers feel disappointed and dissatisfied with the restaurant services.

Besides that, error in ordering such as incorrectness of orders occurred during the process of making orders also a normal problem face by the restaurant. All the front-end staffs need to take orders, collect payments and at the same time deliver food based on the orders. They will feel pressure when they need to be rush to complete a lot of things in one time. They cannot concentrate on their work and may make mistakes in taking or delivering orders.

### 1.3 Objective

### The objectives of this project are:

### i) To discover the customer from.

Customer can login to choose their living state when register. This will make the restaurant owner easily know where their clients come from. The static will be so useful whether the restaurant owner want distribute the promotion or have branches at the area. If the restaurant owner have wisely use the statistic data this will be a better further improvement for the restaurant and make the restaurant become famous around the country.

### ii) To ensure correctness of orders by customer.

This ordering system basically use by customer, this mean that the user can make order themselves without waiting waiter to serve. Since the order is make by customer and they have to ensure their order is correct before they send to the cashier and kitchen for order their meal. The customers have to take the responsibility in what they have orders, this will lowest the rates of wrong orders occur unless the customer wrong press.

# iii) To attract more customer orders by smartphone and view orders in broadcast.

Since this ordering system is quit a new style of ordering meal this will attract customer attention to come and try, especially the young generation who have smartphone. Every restaurant have their own focus point for this restaurant which customer use their own smartphone to make order and their orders is shown on the television immediately, this will also be one kind of promotion or unique that symbolize the restaurant. This will attract more customers who are curious about this new style of ordering system.

### iv) To save paper work in ordering food.

By using this system, which is using smartphone for making order not like others restaurant still using paper to take order, this will greatly reduce the use of paper. Besides that, there are also has some system use by admin in the shop. Management system is the system that use by admin, the staff can generate the report and manage the menu all by system, which then the menu will be show at the customer phone. All these are done by system and it is paper free at all.

### 1.4 Scope

The scope of this project is to construct a system that will facilitate ordering process in a restaurant in more efficient and convenient way.

There are two users involved in this system which are restaurant owner and customer.

The modules involved are:

### 1) Apps customer register

This function is for customers to register, which the purpose is to get the customer address and display in web GPS for restaurant prediction and further planning purpose.

### 2) Global Positioning System (GPS)

Admin can view the customer location that will show in the GPS web system.

### 3) Broadcast

Customer can view their orders and make sure their orders are correct.

### **1.5 Project significance**

With the use of the android application the customer are able to make their order with faster way and also minimize the time taken to make order which sometime the customer may not able to have free waiter to take orders.

Besides that, restaurant owner are also can save up a sum of money, which they can only hire minimum worker to serve the food to customer.

### **1.6 Expected Output**

At the end of this development, this project will come out with an application, which is MyOrdersLink mobile application that acts as an order system to assist waiter to take customer order. Besides that, this android application provides customer a clear list of menu which have shown the food information like name and price. This application can be register by customer which then restaurant use the customer information to improve their business scale or future purpose. MyOrdersLink application, it is believe that customer can be attracted and willing to use it in Malaysia restaurants.

### 1.7 Conclusion

This application can be used by restaurant's customer that want to make order at the restaurant without waiting for the waiter to take their order. It also facilitates the owner of the restaurant because the owner can prevent incorrectness of orders occurred during the process of making order. Furthermore, ORDER SAYA is believed could help the restaurant's owner to improve their business by satisfying their customer with fast and accurate service of orders.

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### **CHAPTER II**

### LITERATURE REVIEW AND PROJECT METHODOLOGY

### 2.1 Introduction

This section will discuss about the literature review and methodology used for this project. The domain of this study is food order system. Basically food order system which is a process that customer order food and send it to waiter. There are several methods to order foods, in my current research I am going to propose it by using smart phone to order foods. Therefore here have several research projects and existing system were chosen for the literature study. A comparison will be made to identify the strength and weakness of each existing research project.

### 2.2 Facts and findings

In this section will discuss about the others researches worked they done before.

### 2.2.1 Domain

In twenty-first century, technological advances and their rapid and wide applications are having a significant impact on the ways of life. Khairunnisa K. (2009) stated that with the increasing use of handheld device in restaurants will become an important tool for the restaurant to improve their management and also increase the effective for restaurants and caterers by saving time, reducing human error and provide a higher quality customer service.

Nowadays we can clear to see that wireless technology such as internet will be replace for most of the thing moreover computer and information technology become more and more dependent on it. James Purnama, Andrea Yunita Wibowo (2007) have mention that if the wireless technology is apply in the application it will improve the restaurant service by saving the waiter time to pass the order to kitchen. This will greatly improve the restaurant management system.

Nur Hanis Binti Ihsan (2011) suggested use an ordering system which is Restaurant Ordering System Using Mobile Application (ROSUMA). This system is using intranet as the bridge to communicate with mobile and main server. Then the restaurant server will connect to cashier department and also kitchen department.

Raja Zulfiz Bin Raja Zahabuddin (2006) suggested upgrade the personal digital assistants (PDA) system to Wireless Integrated System for Efficient Restaurant with Bluethooth (WISERbt). WISERbt is just a prototype to integrate wireless network with Bluethooth technology. WISERbt method used Bluetooth technology to improve the restaurant ordering system.

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Author	Year	Tool/Project Name	Strength	Weakness
Norshahril bin	2005	Executive Restaurant Order	Broadcast screen show real time	Waiter still need to take order from
Abu Talib		System (EROS)	ordered food in kitchen	customer
				Needed others System to support it.
Raja Zulfiz	2006	Wireless Integrated System for	Security level of using Bluetooth is	Limited range connection
Bin Raja		Efficient Restaurant with	higher than wireless	
Zahabuddin		Bluetooth (WISERbt)		
Nur Izzah	2010	Food Ordering System Using	Can be adapted to others system	Limited range connection which
Binti Zakaria		Mobile (FOSUM)		use intranet
Nur Hanis	2011	Restaurant Ordering System	Lower the rate of cheating case which if	Limited range connection
Binti Ihsan		Using Mobile Application	out of the range of intranet area	Waiter still need to take order from
		(ROSUMA)	customer cannot make order	customer
			Food quantity can be detect which if	
			the food is out of stock then an alert	
			message will inform the customer	
Komsun	2011	Wireless Two-way Restaurant	Provide detail of food	
Togsap and		Ordering System Via Touch	Customer information managed	
Daranee		Screen		

# Table 2.1 : Compare with Research Projects

Hormdee		
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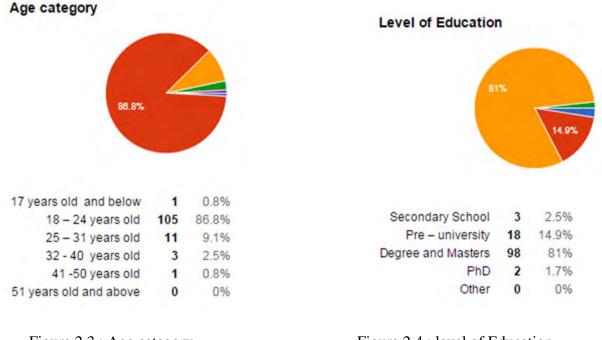
2.2.2 Existing System

	WISERbt	FOSUM	ROSUMA	EBOS	Wireless Two-way Ordering System	MyOrdersLink
Check orders		<ul> <li>✓</li> </ul>	✓		<ul> <li>✓</li> </ul>	~
Calculate bill		✓	✓	~		✓
Upgrade menu			✓		✓	✓
Bluetooth	✓					
Wireless		✓	✓	~	✓	✓
Local Area Network				<ul> <li>✓</li> </ul>		
Customer order food	✓				✓	✓
themselves						
Waiter order food for		✓	✓	✓		
customers						
Sale report view		✓	✓			✓
Service call to waiter					✓	✓
View food calories						✓

# Table 2.2 : Compare with Existing System

### **Research on questionnaire survey**

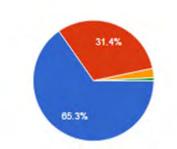
> User detail





Race





Malay	79	65.3%
Chinese	38	31.4%
Indian	3	2.5%
Other	1	0.8%

Figure 2.5 : Race

Based on our survey there are total 121 responses have involve in this questionnaire section. Basically our responses are around the 18-24 years old, they are also mostly in Degree and Masters educate level and there are 79 Malay, 38 Chinese and 1 Indian.

#### > User behaviour

How long have you been using smart phones?

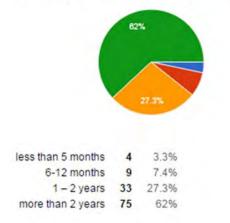
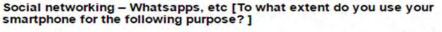


Figure 2.6 : Duration of smartphone user



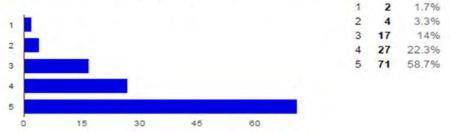
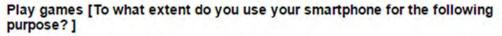


Figure 2.7 : Entertainment of smart phoneuser



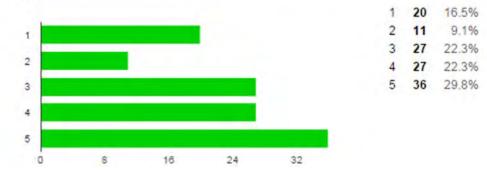


Figure 2.8 : Number of player in smartphone user