EXPRESS COUNTER MOBILE APPLICATION

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EXPRESS COUNTER MOBILE APPLICATION

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

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2017

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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(TEH HON CHEE)

SUPERVISOR: _____ Date: 21/8/2017

(MR. MOHD HARIZ NAIM)

DEDICATION

I would like to dedicate this project to my parents for gave me the time and support throughout this project. They gave me the time that I needed to complete this project and they make me relief that I could give my 100% focus to this project. Although they are apart from me but I able to feel their support gave to me. I would like to thank my parent again that this project could finish.

Beside that I would like give thanks to my course mate that help me during the project. They gave motivation and inspiration during this project development. Without them this project will not be as complete as is.

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Mr. Mohd Hariz as my supervisor in this project he guided me throughout this project and gave me advice in some module in this project. Other than that, he also helps me a lot in the coding part. When there is bugs or errors in this system he helps, me find the problem and guide me to solve the bugs. Allowing me to say thank you Mr. Mohd Hariz that guided me in this project.

ABSTRACT

Express Counter Mobile Application is a phone mobile application that provide an alternative for mute disables and limited movement disables to pay for their groceries in supermarket. This project initiative is to help mute disables and limited movement disable in supermarket. Disables with limited movement which they found themselves having trouble when go through the narrow passage in the express payment counter. Disable with limited movement that need wheel chair could not fit through the narrow passage and when supermarket is crowded disables with movement support stick found themselves discomfort during waiting the queue for paying their groceries. Other than that, mute disables also found themselves having problem in communication during the payment. Their sign language is the only communication they could do and normal people can't understand it therefore the communication is difficult for them and prolonged the queue then worsen the supermarket crowded situation. Through express counter mobile application disables provides an alternative way make their payment without creating trouble to the others. The mobile application that could scan the barcode from the supermarket on shelf items and user could pay for their through online payment. As disables spend their time lesser in the supermarket the human traffic in the supermarket could be reduce at the same time it could increase the satisfactory of customers towards supermarket. The project development using waterfall model which is easy to implement where it gathers the requirement in the early stage of development to determine the function of the application. Next stage is the design stage where the system design based on the requirement gathered and this stage create the blueprint of the application that is needed in next stage that is implementation. The implementation stage develops the application base of the system design and this stage is to create a workable application. Next stage is test the application. Final stage deploys the mobile application. This project will benefit the disable where they could use this mobile application to pay for their groceries without having problems.

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CHAPTER I

INTRODUCTION

1.1 Introduction

Supermarket is a grocery store but in a big scale, supermarket consists of many kinds of things that intended to be sell to consumers. In the process of the shopping in supermarket consumers will grab the grocery they intended to buy and the last step in this processing is pay for the groceries. Consumers will queue up at the payment counter to pay for their groceries. Some case where consumers buys few groceries and they needed to queue up for payment counter where other consumers buy more than 10 groceries, this situation would waste those who buy few items customer time. As for the solution, supermarket introduce express payment counter which allows consumer who want to buy less than 10 groceries in the supermarket by allow those who buy less to spend less time in the payment procedure and also reduce traffic in the supermarket in order to save consumers time. When supermarket is crowded, consumers will force to queue up to pay for their groceries, as a result disables need to wait for their turn to pay for their groceries as well. Disables with impair of movement and disables needed a wheelchair who will have difficult in paying for their groceries

and slow down the overall payment process in the supermarket. Moreover, disables with impair of hearing and speaking will delay the payment process because of miscommunication between them and cashier in the express payment counter.

1.2 Problem Statement

Supermarket express payment counter is a place where it could give trouble to disable when supermarket is crowded. This situation will cause disables to queue up for a long period in order to pay their groceries in the express payment counter and eventually disable tired and feel pain. Other than that, express payment counter walkway is a very narrow path it is uncomfortable to disable with impair movement and disables with wheelchair can't even get through it. Besides that, disables with impair hearing and speaking can't communicate well with cashier at express payment counter would have slow down the payment process of the disables.

- Disables with impair movement are having not enough spaces for them to enter the express payment counter.
- Express payment counter proceeds in a slow pace when disables with impair in hearing and speaking in supermarket.

1.3 Objective

- To develop a mobile application that provide an alternative method of paying for disables to reduce the time they spend on paying process when they are in supermarket.

- To reduce the communication failure between express payments counter cashier and disables in by providing a mobile platform to pay for their items.
- To allowing disables with impair movement could pay for their items without going through express payment counter.
- To create a web site to manage the inventory system used by the mobile application.

1.4 Project Scope

- Disables with impair in hearing, speaking and movement
  The main user for this product are disable with impair movement, hearing and speaking that providing them an option to pay for their items in supermarket through mobile application.

1.5 Project Significance

The project is to provide an alternative way for disables to pay for their groceries when they are in the supermarket without burden their selves and others. Disable could use the product of this project to reduce the time they spend on payment process by reduce unnecessary engagement such as disable with impair of movement needed to use wheel chair not required to the express payment counter to pay for their groceries and the miscommunication between disables with impair of hearing and speaking and cashier at the express payment counter could have reduced.

Besides that, this project could implement on normal payment counter for consumers. This could benefit the supermarket by having less people queue up at the

payment counter and interception between consumers that cut queue will be reduced because of reduced number of consumers that queue to pay for their groceries.

1.6 Expected Output

The disable uses the mobile application and scan the barcode of each groceries and each scanned grocery will add into a list to ready for the payment. The payment will be based on online payment through a payment gate. Disables used this mobile application to pay for their groceries and the mobile application will generate a payment receipt to the disable who pay for their groceries through this mobile application. The supermarket site will have a person to check the receipt and the groceries disable brought to ensure the supermarket revenue.

1.7 Conclusion

As for conclusion, this project will benefit disables in the supermarket where they can proceed their payment procedure faster and supermarket could reduce the number of people queue up in the express payment counter. The disable one do their grocery like normal people and reduced the feeling of being discriminate.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

In this chapter, fact and finding will be discussing about the field of this project 'Express Counter Mobile' used on which is the supermarket and disables. Other than that, fact and finding also consists of a part which discuss about existing system; several existing systems will be overview and analyse. Other than that, project methodology, project requirement, project schedule and milestone will be state and detail in this chapter.

2.2 Facts and Finding

In this session, domains that will be discuss are supermarket, payment system used in supermarket, barcode, Quick Response code (QR code) scanner, disables and difficulties disables meet in supermarket. Other than that, payment system in the super market will be reviewed and analyse to succeed this project.

2.2.1 Domain

This session will discuss the field of involve in this project which is supermarket, barcode, and disables. This three field is the essential to this project where the core of this project is to help disables in the situation where they meet payment difficulties in supermarket. In sub session 2.2.1.1 supermarket will be discussed, 2.2.1.2 barcode will be explored and 2.2.1.3 disables will be reviewed.

2.2.1.1 Supermarket

Supermarket is the originally the evolution of grocery store. Grocery store is a place where consumers could buy their household product such as detergent, broom and soap. Other than that, grocery store also provides livestock, processed food, vegetables and fruit to consumers. As the grocery grows bigger in term of business scale it become into supermarket and next bigger scale is hypermarket. Hypermarket is a franchise of supermarket where supermarket could at any location such as AEON, Tesco and Giant. Inside hypermarket in also has food service shops and clothing stores rather than just only grocery department to attract consumer enter the hypermarket.

Inside supermarket there is many aisles such as vegetables and fruits, meats, cleaning and wash, processed food, livestock and beverage and drinks. This aisle is to classify the type of grocery in the supermarket and the purpose of it is to reduce the time of consumers spend in searching for their grocery in the supermarket. Aisle is a symbol of supermarket because it is hardly to be on sight in any stores. Other than that, Malaysia supermarket would have an aisle that is non-halal aisle which is not seen in Europe and united state countries. According to Halal Malaysia Official Portal Halal means authorized or allowed by law of Islam which is originated from an Arabic phrase. As the website mentions about halal in term of food is the food itself is does not contain any part of animal that forbidden to Muslim, does not have any element considered unclean in Islamic law and in the preparation, process and storage of the food used equipment and utensil which is free from impurities as state in Islamic law