**CHAPTER 1**

**PREFACE**

* 1. **Background**

In the current era of globalization, technology has become a crucial part of human’s life. Various kinds of technology have been developed with the purpose of making life easier. Part of the technology advancement includes the development of internet, followed by invention of World Wide Web. At first, the web was created with the intention to make a space where information can be stored and accessed from anywhere, anytime by anyone using internet connection. But throughout years, the website has undergone a vast development that leads to a wide range of functionality that it currently has. Now, not only that it serves as a tool to collect and share information, the web has also been applied in business for various purposes, such as publicity, marketing and advertising.

The implementation of World Wide Web within businesses has sparked many changes and innovations in other industry; one of them is the food industry. In the past, people would need to make a call to have their food delivered, and that would only happen if the dining place provides a delivery service. By using such method, not only that customers would need to pay extra for the telephone charge, the dining places are also disadvantaged as telephone line is prone to congestion if many calls were received. However with the technology advancement, some well-known food chains and restaurant have now own website and even provide food delivery service online, providing more ease for the customers.

Hassee, as an aspiring business developer company, realize that the food delivery service can be further improved to be more effective for all parties involved, by creating an online food delivery service system. This delivery service system will list and provide delivery service to all agreeing restaurants, making it easier for the customer to choose from and order. Few other companies may have developed similar system, however most of the time, the service price end up to be quite high, much to the society’s dismay. Hassee realized this problem and figured that by making use of freelancers as the person to do the delivery service, and do the exact distance calculation of the delivery track, the cost can be pressed low. With such arrangement, the application is expected to be beneficial for all parties involved, which includes the restaurants, the users, the freelancers, and of course the company itself.

* 1. **Problem Definition**
     1. How to develop an online food delivery system that will satisfy customers and restaurant owners?
     2. How to keep the delivery cost low?
     3. How will the freelancers and restaurants be managed?
     4. How is the payment going to be managed?
  2. **Objectives and Benefits**
     1. **Objectives**

The objectives of this thesis project are the following:

* Makes ordering food easier and possible from any place
* Provide delivery service for all kinds of restaurant, from the top restaurants to the small growing restaurants
* Provide job for freelancers or people in their free time
* Creating a stable web application that can handle simultaneous request
* Creating an application that’s device-friendly
* Provide accurate web-based geo-tagging to prevent the freelancer from getting lost and have precise price calculation
  + 1. **Benefits**

The benefits of this thesis project are the following:

* + - * Ordering food can be done from anywhere with internet connected device
      * Order can be made from any dining place listed
      * Lower operational cost for restaurants as they don’t need to provide human resource to deliver food
      * Lower delivery cost for user
      * Providing fair payment for freelancer with the delivery service track from the dining place to destination calculation
  1. **Scope of Work**

This web application will be applied in New Zealand, with a small city called Christchurch as the starting point. In general, the web application focus on:

* + 1. Accepting registration of user, freelancer, and restaurants
    2. Provide web-based geo-tagging map
    3. Accessible from computer and mobile device
    4. Implementation of online payment method

There will be four types of user roles which are user, restaurant, freelancer, and admin. Each role should be able to perform the following functionalities:

* 1. User
     + Update registered personal info
     + View all restaurants that have been registered
     + Post and view reviews for restaurant
     + View the details and menu of each restaurants
     + Add and delete items of the restaurant’s menu from the cart
     + Choose the desired delivery destination, either using the registered address, or input new address
     + View the routes and distance from chosen restaurant to destination address
     + View the details of the freelancer responsible for the order
     + Call and text the responsible freelancer
     + Cancel the order before a freelancer accepted the order request
     + Rate the service of freelancer
     + Top up and use the e-money to pay for the food and delivery cost
     + View the finished order history
     + Receive order receipt through registered email address when the order is finished
  2. Restaurants
     + Update registered restaurant info
     + Add, delete and update the already existing menu
  3. Freelancer
     + Update registered personal info
     + Top up the e-money
     + Receive income from each delivery service done through e-money
     + Receive email as a notification whenever a new order request created
     + View all the available order request detail and accept one at a time
     + View the detailed info of user that place the order
     + Text and call the related user
     + View the detailed info of the destination restaurant
     + View the route from the current location to the restaurant then continued to the chosen destination
     + View the completed order request history
  4. Admin
     + Accept or reject the restaurant and freelancer registration
     + View, update, and delete the user, restaurant, and freelancer’s account
     + Update the delivery cost
     + Update the color theme and image of the website
     + Update the content of ‘About’ section
     + Add, update and delete the food category (also known as cuisines)
     + Be logged in as any available account that is chosen
     + Send email to all users
  5. **Research Methodology**

Research methodology used whilst developing this project is qualitative method. The research will only be done within the scope of company to adjust the company’s need. The application will be gradually developed according to the requirement of the company, and conditions asked by the clients which will be the base of the application development research.