

FC6P01 Project

Final Report

‘Mart’ - An Online Food Distribution Network system - A web based Food Delivery System

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# Declaration

**Module: FC6P01 Deadline: 30/05/2017**

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# Abstract

This Report is prepared to address A web based Food Delivery System solution for restaurants. Aims to conquer and redefine the current distribution network in Sri Lanka by delivering almost anything you need straight to your doorstep within approximately 30-60 minutes. This system will help for small restaurants and groceries which currently do not have an online system and own product delivery system. Partnering with this system will help those restaurants and groceries to expand their sales and market share. At initial stage of the document gives the reader clear idea about the background of the problem. Afterwards this gives an idea of the proposed system and how to overcome from the problem with given solution. Then this document provides and idea about a system construction process and some screen shots from the current process of the system. At last this report gives list of references used to prepare the document for further reference.

Acknowledgement

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# Introduction

Today, with busy life style of the people, and with the development of new technology people always trying to save their time and put that effort to do something useful or even they spent more time with their family members. These technologies based systems and devices are helping to improve the efficiency and do the traditional task in new innovative methods. This new technology supports individuals to improve their life style and business to increase their sales and earn revenue with expanding market share. (von Breitenbuch, 2004)

The ecommerce can be defined as a modern business methodology that can be address then needs of organizations, merchants and consumers to cut the costs while improving the quality of goods and services and increasing the speed of service diversity by using the internet. (Meier and Stormer, 2009)

This system providing service for Merchants and customers. This system is providing SaaS for its end users. SaaS is a simply software which is delivered from s server remote location your desktop it is an application hosted on Remote server. Software uses its own interfaces, designed to provide a special characteristics for the software. Some of the SaaS applications require to pay a subscription fee from its end users, but the proposed system only taking a small commission fee from the server, SaaS application requires active internet connection to connect to this web site so if there is no internet connection, there will be no application for client to connect, that is the main disadvantage of this system, but currently almost everyone has access to internet this will be a not a problem.(Wohl, 2008)

Online ordering of foods represents 30% of daily takeaway ordering according to Cowen and Company Research Report and it is now rapidly growing with the due to its convenience, correctness of ordering and no waiting queues. Studies show about 69% of customers using their mobile devices for online food ordering.

As the first step off the document ‘background’ section author gives clear idea about the current difficulties faced by the customers face when doing traditional take away shopping and difficulties faced by small restaurant and grocery owners when delivering food to customers and expanding their business. How to overcome for these problems by analysing those problems and over solution will help sellers to overcome from it. In addition to those parts, this section will provide details of the technologies that the system is using and the reason for selecting those technologies. It will also give a concise idea on implementation of the system.

Next section of the document will provide information on the work completed up to now. This report will be given tasks which were addressed to pre given Gantt chart in the project proposal and feasibility study, Wire frame design and some of the UML diagrams related to the project and the ER diagram of the project.

# Background

Mart is food delivery network which connects merchants and customers. Small shop owners and Restaurant owners must spend additional investments to provide a delivery service for its customers, which is big barrier for the business to grow and reach its target. Most of the small restaurants or shops do not have their own web site for their customers to reach.

When we consider form the customer’s perspective Customers have to visit the physical place to buy their favourite food or purchase food items for their needs. It is a time consuming and stressful work this generation.

Mart gives a better solution for by bridging these two types of customers by giving their platform for their delivery needs, marketing needs and sales expansion needs from the merchant side and giving quick delivery at lower cost from the client side.

Currently “Mart” is operated by a phone system and manually takes the order over the phone and then contacts the nearest delivery person and provides delivery details to him again over the phone and receiving the cash on delivery method. Customers need to provide their address every time they place and order. After purchasing the ordered items from the customer mentioned restaurant or shop.

Since this process make much more errors at the delivery stage since everything is done over the phone customers are complaining for wrong orders and that make the process more complex and financial loss for the company. Increased phone charges directly affecting to the profit of ‘Mart’.

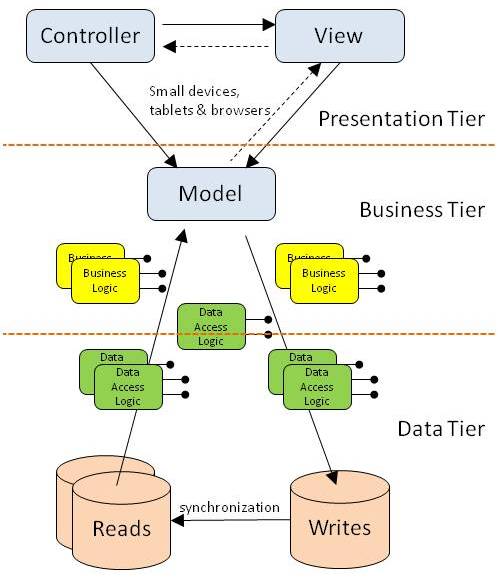
To overcome from these problems Author suggested an online platform for Mart and where gives the small restaurant and shop owners to maintain their profiles by partnering with ‘ Mart’ and after registering with systems customers can order and their favourite food products and grocery items from their devices, after placing and order Restaurant owner automatically gets the notification, and if that restaurant or the grocery request delivery method by ‘Mart’ Mart agent will pick the order from the restaurant or grocery with short amount of time and deliver for the customer provided address.

Since this a ecommerce site this site revenue generation is done by getting 5% commission from the total value of the each order customer placed through this system, also ‘Mart’ standard delivery charges will be applied for the customers who select ‘Mart Delivery’ option.

Developer used Spring Boot frame work to develop the backend of the web application, for the Database development developer used MySQL 5.5 Community Edition server. Hibernate 5 is used to object relational mapping. Materize CSS is an Open Source responsive User interface designing.

This system is developed using the Agile methodology since the requirements of the client ‘Mart’ is changing rapidly. Requirements of the mart business process are broken down to user stories and now the most priority use cased are developed in the back end.

Architecture of the system developed as MVC implemented 3 tier architecture. Use of hybrid is MVC pattern do not describe hot to best design and data access and how to manage the complexity that occur in the system. (Rawsthorne, Rawsthorne and profile, 2017)



(Anon, 2017)