

**HMP&GRUB: A WEB AND MOBILE-BASED E-COMMERCE  
PLATFORM FOR HOMEMADE FOOD PRODUCTS**

A Proposal

Presented to the Faculty of the  
College of Computer Studies, University of Cebu – Main Campus

In Partial Fulfillment of the Requirements  
For the degree Bachelor of Science in Information Technology

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## **ABSTRACT**

Homemade food production is an emerging niche market due to its appeal with the local community, food bloggers, travellers and tourists. Homemade food producers value the quality of their products over quantity, since it is disadvantageous for them to compete with mass produced products. Since being in a local community improves well-knit close relationships with one another, it creates a support for businesses by providing local employment and helps small-scale businesses put food to their families table. There are problems cited by the homemade food producers while conducting this study such as the lack of resources for developing an online store, the time spent on the development and sometimes the e-commerce platform solution cannot successfully meet end with the homemade food producers.

HMP&GRUB is a Web and Mobile-Based E-Commerce platform for homemade food products that aims to promote and enable locals to market their food products. It will let individuals who may or may not possess certain culinary degrees to continue their passion for cooking and profit from the food products they make, helping small-scale food manufacturers to market their product without having to make it costly and easy to reach.

For the development of this system, Agile Software Development Cycle was been used for the software methodology. To be able to build this system, we used PHP, materialize and MySQL. In order to verify that the system will run accordingly with its desired expectations, the researcher conducted various testing methods such as unit testing, integration testing, alpha testing and acceptance testing. The developers concluded that this study will be a great help especially to the homemade products producers. From the moment, we're focusing Cebu as our reliable source and current target to test the system.

Keywords: E-Commerce, Homemade Products, Food Producers, Food Bloggers, Platform.

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Again, thank you so much for the support. God bless and more power to us!

The Researchers

## **DEDICATION**

We dedicate this project to our Lord Jesus for helping our team by giving us strength and power in order to finish all tasks. We thank you Lord from guiding us always. Without him, things will be more difficult. We also dedicate this project to our family and friends by helping us through prayers.

Thank you and God bless.

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## **CHAPTER I**

### **INTRODUCTION**

#### **Rationale of the Study**

Homemade food production is an emerging niche market due to its appeal with the local community, food bloggers, travelers and tourists. Homemade food producers value the quality of their products over quantity, since it is disadvantageous for them to compete with mass produced products. Since being in a local community improves well-knit close relationships with one another, it creates a support for businesses by providing local employment and helps small-scale businesses put food to their families table.

Food bloggers are always on the hunt for the next trendy food sensation. They will at least try local delicacies or anything that appeals to their exotic taste that can spark the interests and attention of their followers. Their search may go high or low but we can expect more local delicacies going mainstream due to the popularity and relevance by food bloggers. Tourist and travelers alike will pick up with the word of the mouth generated in social media and news that is more likely to pique their interest on the product having it experience or taste themselves.

Not every homemade food producers has the luxury of resources for developing an online store. It would be a waste of resources for them to make their own online store from scratch because they would not only need to hire someone to develop and design the website for them, it would incur more unnecessary expenses in development as well as hiring someone to maintain the system. The time spent on development would take up to several working days at most even weeks.

Sometimes, the existing e-commerce platform solution cannot successfully meet ends with the homemade food producers. Subscriptions and other shady fees from these services is not cheap and creates doubt on the ability for the system to work for itself.

Because of these problems, the researchers came up with an idea of developing a web and mobile-based e-commerce for homemade food products that aims to promote and enable locals to market their food products. HMP&Grub will answer to the development needs that let individuals who may or may not possess certain culinary degrees to continue their passion for cooking and profit from the food products they make, helping small-scale food manufacturers to market their product without having to make it costly and easy to reach.

## **Objectives of the Study**

### **General Objectives**

The primary objectives of the study are to design and develop the web and mobile-based e-commerce platform for homemade food products that will give small-scale food suppliers and producers the ability to manage market and advertise their product without having to compete with the more established labels and corporate brands.

### **Specific Objectives**

Specifically, the system aims to:

1. Generate a web and mobile facility with the following transactions
  - a. Manage and maintain food producer account as well as the subscription, product profiles, customer orders, inventory, favorite's lists, notifications and reviews and ratings.
  - b. Monitor payment and delivery status.
  - c. Transact with products thru e-cart.
  - d. Inquire product profiles, homemade food producer accounts, reviews and ratings.
  - e. View reports such as heat map, store locators.

### **Scope and Limitations of the Study**

The study focuses on the development of the web and mobile-based e-commerce platform for homemade food products. The following stated are the scope of the proposed system.

1. The proposed system shall be implemented as a web and android application and made accessible online thru the specified platform it is to be developed;
2. The proposed system while e-commerce in nature will cater only homemade food products;
3. The proposed system shall enable customer users to search and view for product and food producer profiles based on the preferences, tags and keywords used in the query;
4. The proposed system shall let the user order online thru a e-cart system, track order and delivery statuses with notifications;
5. The proposed system shall enable food producer to set up a profile for their brand and create product profiles which will include necessary information such as prices, ingredients used, quantity in stock and description;

6. The proposed system shall enable the food producer to track orders and payments with notifications. They can also automatically update available product quantity with every product sold;
7. The proposed system shall enable its administrators to manage the user subscriptions, food product profile content created by food producers as well as flagged or reported content by the customers; and
8. The proposed system shall allow the customer to write reviews and comments.

The following stated are imposed limitations of the proposed system.

1. The proposed system shall not handle any manual delivery options the food producer may opt to deliver the product;
2. The proposed system will not cater other products aside from the homemade food products made by small scale food producers/manufacturers/suppliers;
3. The proposed system shall not handle any online payment transaction but use a 3<sup>rd</sup> party online payment option to support the monitoring and delivery of the product, once the product has been successfully delivered by the food producer to the customer to be verified using the delivery codes, they money shall be transferred to the food producers account. This is done to ensure the integrity of the food producer to actually deliver the product in a stipulated amount of time agreed upon;
4. The proposed system will not include income statement reports;
5. The proposed system will not cater customized order requested by the customer users;
6. The proposed system will only provide platform in which the food producers and connect to the customer users so that it will be the food producer's responsibility to maintain the integrity and quality of the product they sell;
7. The proposed system though e-commerce in nature shall not handle the warehousing aspect of any product listed or sold thru the application;
8. The proposed system's development for an iOS version is to be evaluated first but currently will not be included in the development platforms supported.

## **Significance of the Study**

This study focuses on providing a common platform for homemade food products to be marketed and sold between the users and food manufacturers.

This study is beneficial to the following people:

**Customers.** The main users and customers of the application, they are the primary user that will generate the traffic usage of the system.

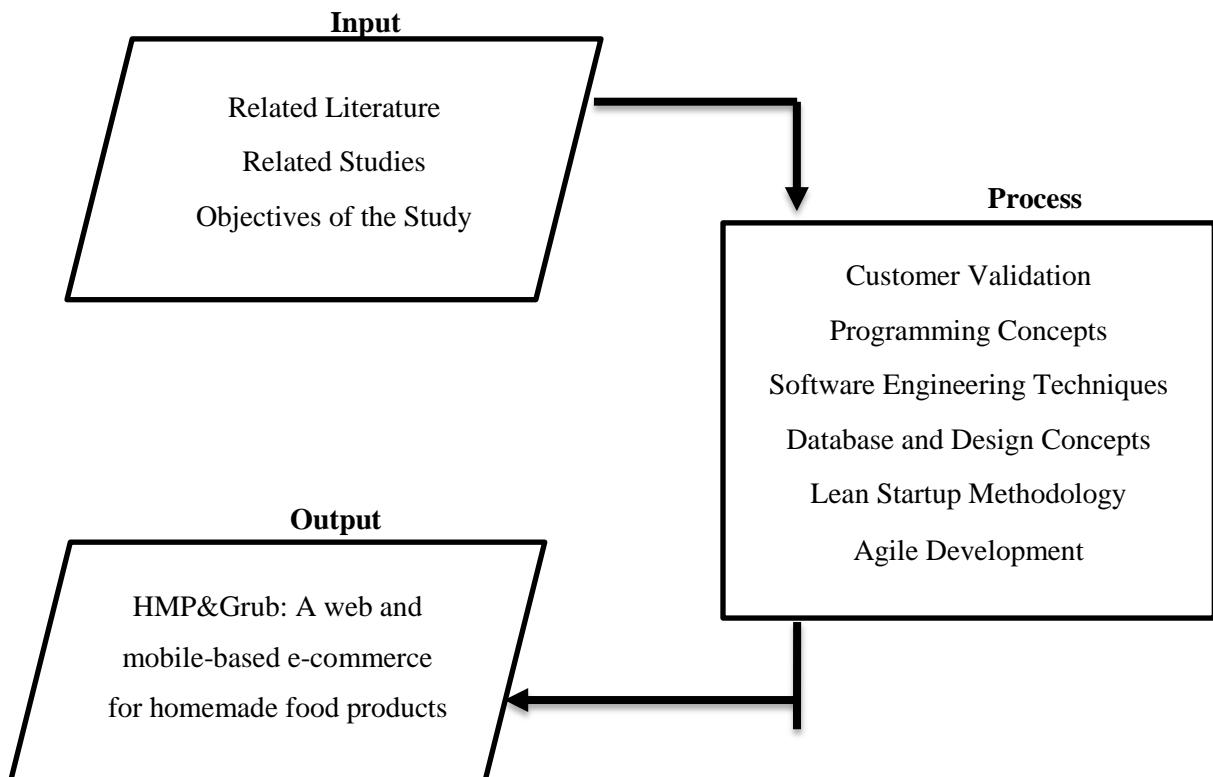
**Small Scale Food Manufacturers/Suppliers/Producers.** Enables their product to be presented to a targeted market and reach out to potential customers. It is also beneficial in the marketing aspect as to they would not need to compete with big brands.

**Researchers.** This will allow the researchers to utilize the knowledge and skills that they learned from school and enhance their ability to develop a software guided by the principles of software development and research.

**Future Researches.** The study is a useful reference for further research if they plan to conduct the same study and nature. This project can serve as a reference for future researchers who are also dealing with the same study. This will also serve as a guide for conducting further studies for improvement of this study or a development of a new study related to this topic.

### **Flow of the Study**

The flow of the study depicts how the data gathered is being analyzed and processed. Thus, the researchers came up with a solution from the problem presented in the rationale.



**Figure 1: Flow of the Study**

## Definition of Terms

These are the terms defined by the researchers in the conduct of their study. It briefly explains the following words and terminologies used in the study to further understand what the word means.

**Agile Development.** Agile software development describes a set of values and principles for software development under which requirements and solutions evolve through the collaborative effort of self-organizing cross-functional teams. It advocates adaptive planning, evolutionary development, early delivery, and continuous improvement, and it encourages rapid and flexible response to change.

**E-Commerce.** Transaction of buying or selling online.

**HMP&Grub.** (Home Made Product and Grub), an online web and mobile-based e-commerce platform for homemade food products.

**Point of Sales.** A system typically includes a cash register (which in recent times comprises a computer, monitor, cash drawer, receipt printer, customer display and a barcode scanner) and the majority of retail POS systems include a debit/credit card reader.

**Social Media.** Computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks

## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE AND STUDIES**

#### **Related Literature**

What makes a meal or food, homemade? The definition of a home-cooked meal has changed over time as new options for less-involved meal preparation have entered the marketplace. It is an ever-shifting target, making it difficult to gauge what consumers want when they decide to make home-cooked meals for their families. In some cases, consumers are saying it does not even need to be completely from scratch in order for the food to be considered homemade.

Consumers define home-cooked, four themes emerged: home-cooked meals are made from scratch, made at home, made from fresh or raw ingredients, and made personally. When asked to decide whether specific dishes are home-cooked, consumers decisively concluded that some dishes are home-cooked (those made from scratch or those that require a lot of effort) and some are not (those that “doctor” a frozen meal or a kit meal). Still other criteria are not quite as clear, like the time required to prepare a meal is not a deciding factor for a home-cooked meal, and most consumers don’t think that more ingredients will make a dish home-cooked.

Young adults, ages 25 to 34, and older age groups think alike when it comes to cooking at home. Both of these age groups want some level of involvement in cooking and preparing the food they eat although the 25 to 34 age group began cooking at home at an earlier age than the older age groups did. It is the youngest adult consumers, ages 18 to 24, who differ in their behaviors and attitudes toward home cooking because they are less likely to cook at home.

Consumers’ desire for home-cooked meals and increasing fresh food usage by younger generations signals opportunities for food manufacturers to be trusted partners in the kitchen, in addition to addressing consumer need for finished or partially-finished meal offerings, manufacturers should help consumers expand their repertoire of home-cooked meals that use fresh ingredients by bringing new flavors and experiences to the forefront.

There may not be a one-size-fits-all solution to getting people to cook more. Time and financial constraints are important barriers to healthy cooking and frequent cooking may not be feasible for everyone. However, people who cook infrequently may benefit from cooking classes, menu preparation coaching or even lessons in how to navigate the grocery store or read calorie counts on menus in restaurants.

## Related Studies

The study is based on different web and mobile applications that have similar features with the proposed system. This features will served as a guide to the researchers in creating the application in accordance to the problem encountered by the shoppers.

### Shamrock

We have carefully selected and examined the following competitors and the existing alternatives that may offer the same services as to our product. We have listed five major competitors.

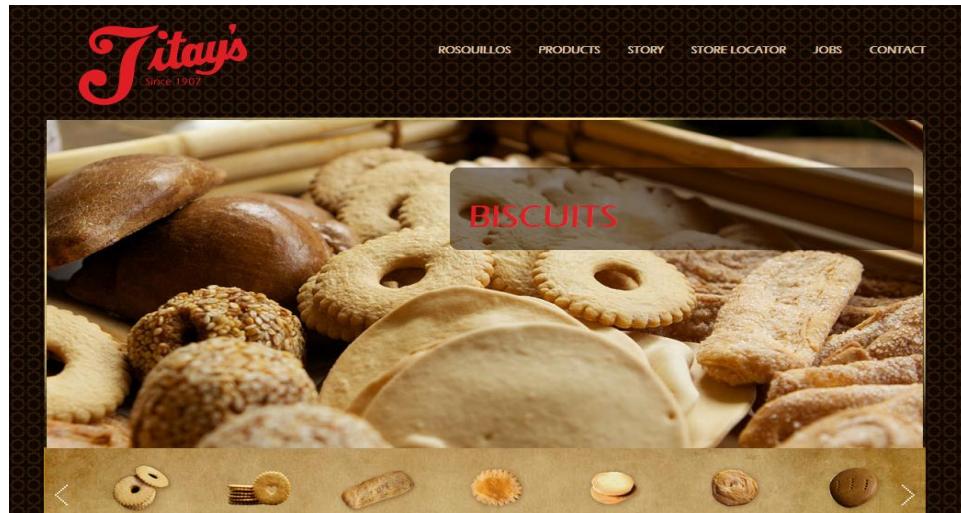


**Figure 2: Shamrock**

Shamrock is a one stop shop for “pasalubong” treats and delicacies famous in cebu, they have several products and services for travelers who wish to either relax or eat. Mostly popular with their products’ homemade style recipe, they serve delicacies such as potato breads, polvoron, lady finginers, sweets and more.

### Titay's

Titay's is a bread & pastries delicacies shop where they sell a variety of homemade style products and alike. In 2007, titay's celebrated their centennial anniversary and has been a staple name for cebu's delicacies renowned all over the Philippines.



**Figure 3: Titay's Liloan**

### Mise En Plus Foods Inc.

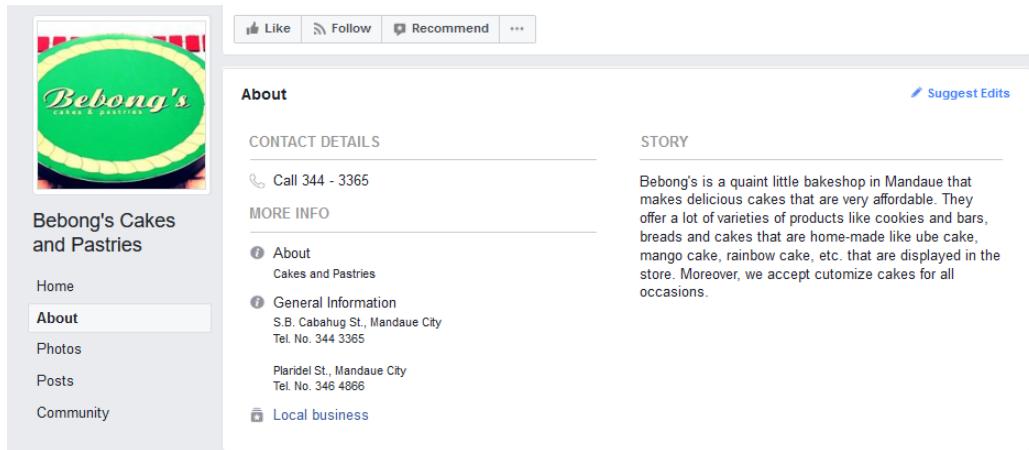
Mise en Plus Foods, Inc. is a food manufacturing company specializing in ready-to-eat and frozen baked products like breads and cakes, slowly diversifying into other ready-to-eat meals like pastas and sandwiches.



**Figure 4:Mise En Plus Foods Inc.**

### Bebong's Cakes and Pastries

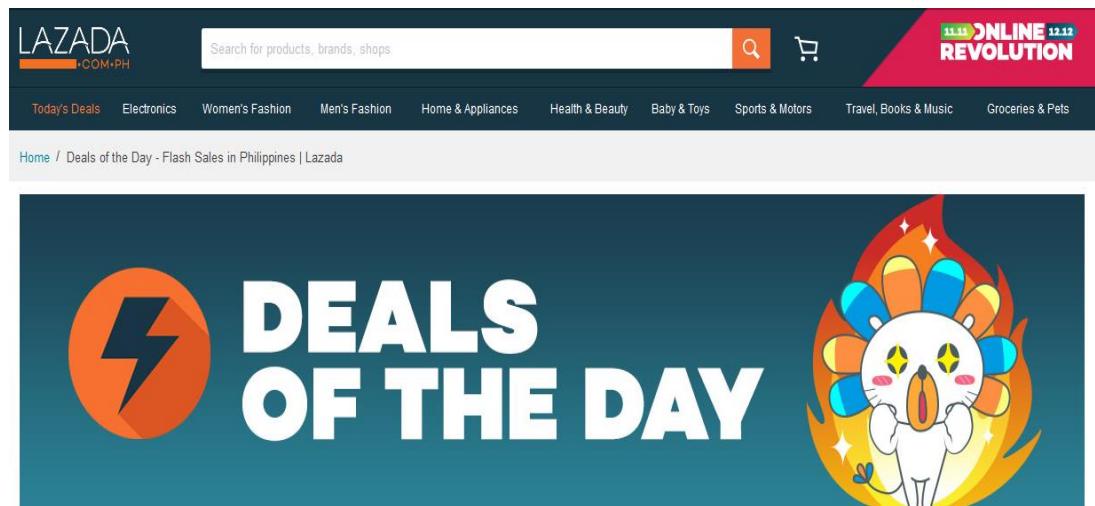
Bebong's cakes and pastries sells their product thru social media and establishes customer relations thru quick response messages in facebook. They sell their products with low prices to attract customers.



**Figure 5: Bebong's Cakes and Pastries**

## Lazada

Lazada is an online e-commerce marketplace for various consumer products, about almost anything legal can be found and sold here. With a business model of selling inventory to customers from its own warehouses, it quickly attracted user and internet traffic with its bargain deals and efficient customer support services.



**Figure 6: Lazada**

**Table 1**  
**Competitor's Analysis**

Related Studies	Features	Limitations	Platform	Support	Monetization
<p>Name: Shamrock  Year: 1945  URL: <a href="http://shamrockotap.com">http://shamrockotap.com</a>  /about-the-company  Proponents:  • Honoria Paras</p>	<p>Displays product line on their website  Shows contact numbers and store locators.  Shows other services offered by shamrock</p>	<p>Website is limited to online providing information  Does not offer any e-commerce services in their site</p>	Website	Hotline Customer Support service	Store Retail
<p>Name: Titay's Liloan  Year: 1900  URL: <a href="http://www.titays.com">http://www.titays.com</a>  Proponents:  • Corazon Frasco</p>	<p>Displays product line on their website  Shows contact numbers for business, store locators, and job openings.  Shows history Timeline of Titay's Liloan</p>	<p>Website is limited to online providing information  Does not offer any e-commerce services in their site</p>	Website	Hotline Customer Support service	Store Retail
<p>Name: Bebong's Cakes and Pastries  Year: 2007  URL: <a href="https://www.facebook.com/Bebongs-Cakes-and-Pastries">https://www.facebook.com/Bebongs-Cakes-and-Pastries</a>  Proponents:</p>	<p>Posts product information thru social media  Informs user about their products with their page</p>	<p>Orders are contacted thru text or telephone and requires manual verification and COD for online orders  Limited Information is given with</p>	Social Media: Facebook page	Facebook Messenger Customer Hotline	Store Retail

Related Studies	Features	Limitations	Platform	Support	Monetization
<p>Name: Mise En Plus Foods Inc.</p> <p>Year: 2006</p> <p>Proponents:</p> <ul style="list-style-type: none"> <li>▪ Alexander Samwer</li> <li>▪ Marc Samwer</li> <li>▪ Oliver Samwer</li> </ul>	<p>Displays product line on their website</p> <p>Shows contact numbers and store locators.</p> <p>Shows other services offered by shamrock</p>	<p>Website is limited to online providing information</p> <p>Does not offer any e-commerce services in their site</p>	Website	Hotline Customer Support service	Store Retail
<p>Name: Lazada</p> <p>Year: 2012</p> <p>Proponents:</p> <ul style="list-style-type: none"> <li>▪ Alexander Samwer</li> <li>▪ Marc Samwer</li> <li>▪ Oliver Samwer</li> </ul>	<p>Displays product by its tags and categories</p> <p>E-carts and online payment for products</p> <p>Order Tracking</p>	<p>Order Volume Limits maintains customer satisfaction.</p> <p>Lazada is only available in selected regions of SE-Asia</p>	<p>Website</p> <p>Mobile Application (Android &amp; iOS)</p>	<p>24/7 Customer Service for Region based Hotlines</p> <p>Email Support &amp; Customer Service</p>	<p>Advertisements</p> <p>Transaction fees</p> <p>Commission Fee</p> <p>Payment Fee</p>

**Table 2**  
**Comparative Matrix**

Key Features	Bebong's	Titay's Liloan	Shamrock	Lazada	Mise En Plus	HMP&Grub	Total %
Product profiling	•	•	•	•	•	•	100%
Tags and keyword searching				•		•	20%
E-cart management				•		•	40%
Inventory management				•		•	40%
3 <sup>rd</sup> Party online payment support						•	20%
Heat maps and store locators						•	20%
Review and ratings mechanics	•			•		•	60%
Push notifications				•		•	40%
Delivery Tracking				•		•	20%
Order management				•		•	40%
Delivery status notifications				•		•	40%
Payment tracking notifications				•		•	40%
Account recovery support				•		•	40%
Web and mobile support				•		•	40%
Total %	20%	10%	10%	70%	10%	100%	

## CHAPTER III

### RESEARCH METHODOLOGIES

#### **Software Engineering Methodology**

Agile software development describes a set of values and principles for software development under which requirements and solutions evolve through the collaborative effort of self-organizing cross-functional teams. It advocates adaptive planning, evolutionary development, early delivery, and continuous improvement, and it encourages rapid and flexible response to change.

Most agile development methods break product development work into small increments that minimize the amount of up-front planning and design. Iterations are short time frames (time boxes) that typically last from one to four weeks. Each iteration involves a cross-functional team working in all functions: planning, analysis, design, coding, unit testing, and acceptance testing. At the end of the iteration, a working product is demonstrated to stakeholders. This minimizes overall risk and allows the product to adapt to changes quickly. An iteration might not add enough functionality to warrant a market release, but the goal is to have an available release (with minimal bugs) at the end of each iteration. Multiple iterations might be required to release a product or new features.

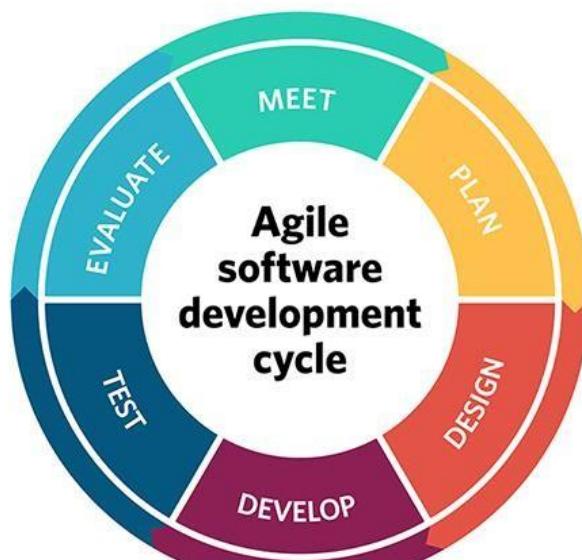
No matter which development method is followed, every team should include a customer representative Scrum Master in Scrum. This person is agreed by stakeholders to act on their behalf and makes a personal commitment to being available for developers to answer questions throughout the iteration. At the end of each iteration, stakeholders and the customer representative review progress and re-evaluate priorities with a view to optimizing the return on investment (ROI) and ensuring alignment with customer needs and company goals.

In agile software development, an information radiator is a (normally large) physical display located prominently near the development team, where passers-by can see it. It presents an up-to-date summary of the product development status. A build light indicator may also be used to inform a team about the status of their product development.

A common characteristic in agile software development is the daily stand-up (also known as the daily scrum). In a brief session, team members report to each other what they did the previous day toward their team's iteration goal, what they intend to do today toward the goal, and any roadblocks or impediments they can see to the goal.

Specific tools and techniques, such as continuous integration, automated unit testing, pair programming, test-driven development, design patterns, domain-driven design, code refactoring and other techniques are often used to improve quality and enhance product development agility.

Compared to traditional software engineering, agile software development mainly targets complex systems and product development with dynamic, non-deterministic and non-linear characteristics. Accurate estimates, stable plans, and predictions are often hard to get in early stages, and confidence in them is likely to be low. Agile practitioners will seek to reduce the "leap-of-faith" that is needed before any evidence of value can be obtained. Requirements and design are held to be emergent. Big up-front specifications would probably cause a lot of waste in such cases, i.e., are not economically sound. These basic arguments and previous industry experiences, learned from years of successes and failures, have helped shape agile development's favor of adaptive, iterative and evolutionary development.



**Figure 7: Agile SDLC**

### **Planning/Conception-Initiation Phase**

During the planning/conception-initiation phase the researchers used the following tools such as business model canvas, program workflow, validation board, gantt chart and functional decomposition diagram in order to come-up with a plan in delivering the requirements.

## Business Model Canvas

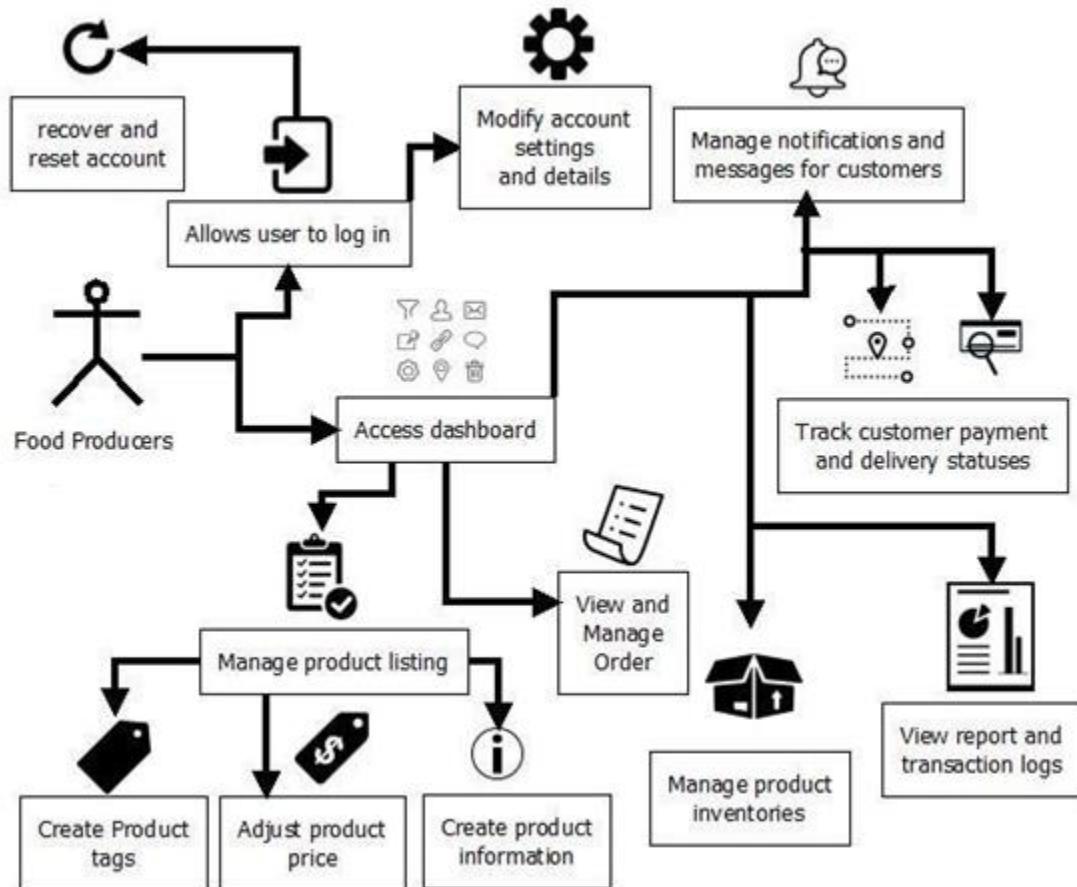
A business model canvas can be described at a set of nine building blocks. These building blocks were derived from an in-depth literature review of previous conceptualization business models.

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
FDA (PH)  DTI  BIR  SEC	Notification E-cart & Inventory management  Product Profiling  Writing reviews Heat Maps & Locator  Key Resources  Quality Control Institutes and Organizations  Financial  IT infrastructure Services	Purchase homemade baked goods and  Dashboard for monitoring orders  No Competition against Corporate brands	Loyalty Reward system  Referral  Inquiry and Contact Support  Channels  Mobile(Android) Application  Web Application	Food Producers  Customer
Cost Structure	Revenue Streams			
Marketing and Sales and Marketing	Product Development R&D Costs		Freemium  Advertisements	Subscription Fee

*Figure 8: Business Model Canvass*

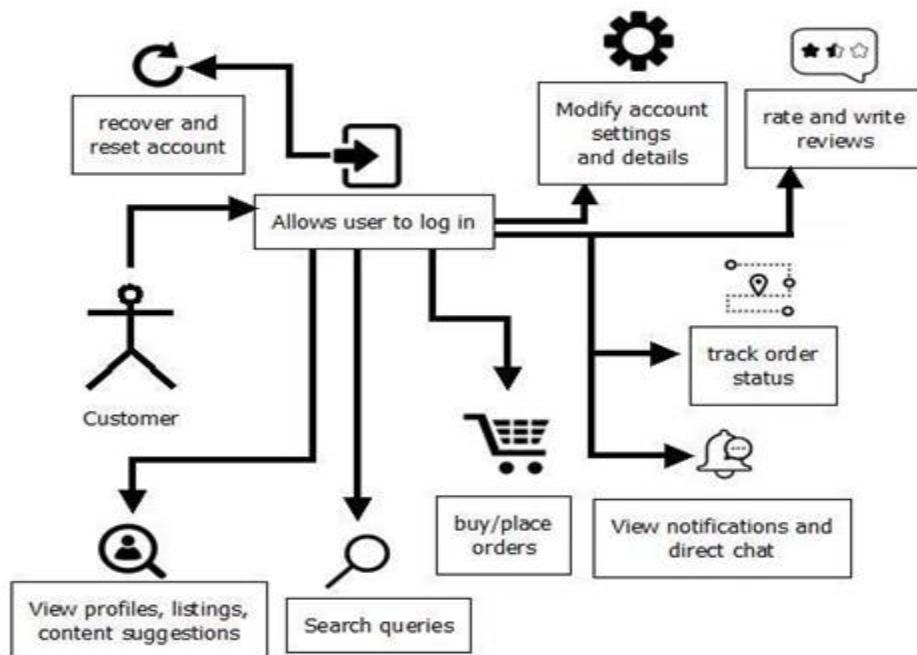
## Program Workflow

The user (food producer) can register and log-in to their personalized accounts to set up their own personal and business profile, once the accounts has been registered, they can now start to customize their product catalogue and access their business dashboard to quickly review order, manage personal inventories, review transaction and order logs, manage notifications and messages, manage product listings such as setting prices, product tags, information about the product.



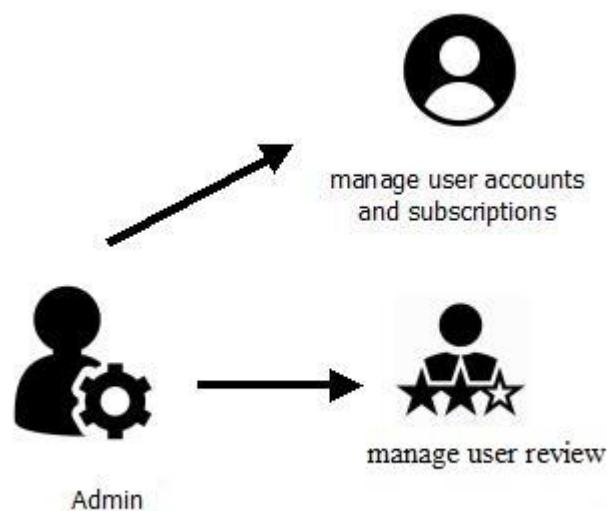
**Figure 9 : Food Supplier – Program workflow**

The customer user can register and login into the system to access several operations such as search via filters, tags, reviews and ratings or name. View food producer's content profile, place orders online, view notifications, track order statuses, write and rate reviews and even contact customer support.



**Figure 10: Mobile- Program Workflow**

Administrators' manage user accounts, subscriptions, reviews and ratings by the users.



**Figure 11: Administrator's Program Workflow**

## Validation Board (Stage 1 and 2)

The Validation Board, by the Lean Startup Machine, is a free tool to test remaining assumptions for your (start-up) idea, product or service. Coming up with new ideas is not the hardest part of true innovation. The hard part is to check if someone is waiting for it in the market. It was based on Eric Ries's Lean Startup methodology.

**Table 3**

**Validation Board Stage 1**

<b>Customer Validation Board</b>					
Startup Idea:	HMP&GRUB: A WEB AND MOBILE-BASED E-COMMERCE PLATFORM for HOMEMADE FOOD				
Stage:	Stage 1 - Problem Validation				
<b>Experiment</b>	1	2	3	4	5
<b>Customer</b>	Homemade Food Producers	Homemade Food Producers	Homemade Food Producers	Homemade Food Producers	
<b>Problem</b>	Small time local food producers can't compete with established brands	Small time food producers do not have the platform to advertise their products	Reaching out to potential buyers & market is hard because of the market oversaturation	Rising popularity of fast food chains makes people opt less for homemade food products	
<b>Solution</b>					
<b>Riskiest Assumption</b>	The problem exists	Young parents are sleep deprived.	The problem exists.	The problem exists.	
<b>Success Criteria</b>	70%	70%	70%	70%	
<b>GET OUT OF THE BUILDING</b>					
<b>Results &amp; Discussions</b>	30/30 PERSEVERE	28/30 PERSEVERE	27/30 PERSEVERE	26/30 PERSEVERE	
<b>Learnings</b>	Most Chef/cooks/ food producers struggle to compete with brands	They do not have the funds to advertisement as to it is very costly	Originality is challenged and personal branding and consumer trust is hard to make	It's hard to keep out with the voluminous amount of requests and orders as to they are only a small scale production line	

The researchers conducted a survey and got 30 respondents. 10 middle-aged men (19-35 years old), 10 middle aged women (19-35 years old) and 10 chefs whose age varies from (30-45 years old) both men and women. The reason why they would like to cook is to enjoy their passion while they can as well as make a sustainable earning while doing so. All respondents have confirmed that they are willing to use

the application for selling their homemade food products. They also expressed their willingness to market, deliver and make their product. The result of the survey was shown on Table 3 and Table 4.

**Table 4**  
**Validation Board (Stage 2)**

<b>Customer Validation Board</b>					
Startup Idea:	HMP&GRUB: A WEB AND MOBILE-BASED E-COMMERCE PLATFORM for HOMEMADE FOOD				
Stage:	Stage 2 - Problem Validation				
Experiment	1	2	3	4	5
<b>Customer</b>	Homemade Food Producers	Homemade Food Producers	Homemade Food Producers	Homemade Food Producers	
<b>Problem</b>	Small time local food producers can't compete with established brands	Small time food producers do not have the platform to advertise their products	Reaching out to potential buyers & market is hard because of the market oversaturation	Rising popularity of fast food chains makes people opt less for homemade food products	
<b>Solution</b>	Establish a platform without the major competition with	Help food producers establish an online store with minimal cost and effort	Gather potential customers in one platform to utilize the number of buyers	<i>Fast food products leads to lesser satisfaction with repeated consumption making homemade products more desirable because of its quality and variety</i>	
<b>Riskiest Assumption</b>	The problem exists	Young parents are sleep deprived.	The problem exists.	The problem exists.	
<b>Success Criteria</b>	70%	70%	70%	70%	
<b>GET OUT OF THE BUILDING</b>					
<b>Results &amp; Discussions</b>	30/30 PERSEVERE	28/30 PERSEVERE	27/30 PERSEVERE	26/30 PERSEVERE	
<b>Learnings</b>	Most Cheftcooks/ food producers struggle to compete with brands	They do not have the funds to advertisement as to it is very costly	Originality is challenged and personal branding and consumer trust is hard to make	It's hard to keep out with the voluminous amount of requests and orders as to they are only a small scale production line	

### Gantt chart

A Gantt chart is a graphical depiction of a project schedule. A Gantt chart is a type of bar chart that shows the start and finish dates of several elements of a project that include resources, milestones, tasks and dependencies.

Table 5, 6, and 7 shows the Gantt chart of this study. The researchers have followed and kept track of their activities and recorded it accordingly.

**Table 5**  
**GANTT CHART – CAPSTONE41-A**

Task ID	Task Name	Task Lead	Start Date	End Date	July 2017				August 2017				September 2017				October 2017			
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Title Hearing	All	July 13	July 13																
			July 13	July 13																
2	Rationale of the Study	Hustler	July 18	July 18																
			July 18	July 18																
3	Objectives of the Study	Hustler	July 18	July 20																
			July 18	July 20																
4	Scope and Limitation of the Study	Hustler	July 18	July 20																
			July 18	September 15																
5	Significance of the Study	Hustler	July 18	July 20																
			July 18	July 20																
6	Flow of the Study	Hustler	July 18	July 20																
			July 18	July 22																
7	Definition of Terms	Hustler	July 18	July 20																
			July 18	July 20																
8	Validation Board	All	July 18	August 5																
			July 18	August 5																
9	Business Model Canvass	Hustler	August 8	August 8																
			August 8	August 8																
10	Functional Decomposition Diagram	All	August 3	August 10																
			August 3	October 6																
11	Use Case Diagrams	Hacker	August 17	August 22																
			August 17	October 13																
12	Entity-Relationship Diagram	All	August 29	September 5																
			August 29	October 13																
13	Data Dictionary	Hipster	September 2	September 2																
			September 2	October 13																
14	Software Engineering Methodology	Hustler	August 29	August 31																
			August 29	August 31																

Legend:

Estimated Time Duration 

Actual Time Duration 

**Table 6 – GANTT CHART CAPSTONE41-B**

**Table 7**  
**GANTT CHART -CAPSTONE42**

Task ID	Task Name	Task Lead	Start Date	End Date	November 2017				December 2017				January 2017				February 2017				March 2017				
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
1	Feedback Assessment	Hustler and Hipster	Nov 14																						
2	Converting design into code	Hacker	Nov 15																						
3	Testing	All	Nov 21																						
4	Finalize the system	All	Feb 1	Feb 27																					
5	User-Guide	Hustler and Director	Feb 15	Feb 27																					
6	Completion of Requirements	All	Feb 24	Feb 27																					
7	Finalize documentation	All	Feb 27	March 16																					

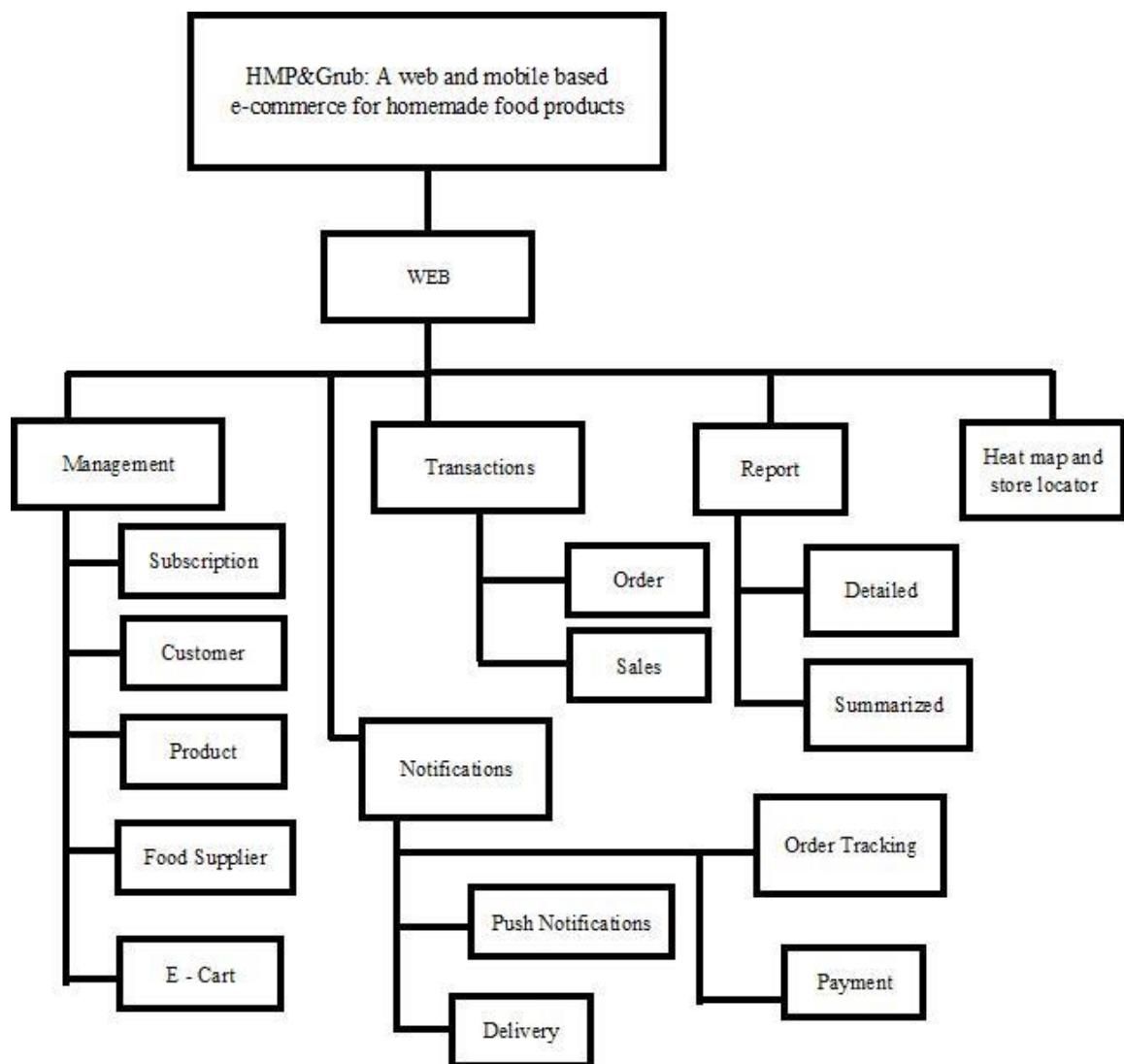
Legend:

Estimated Time Duration 

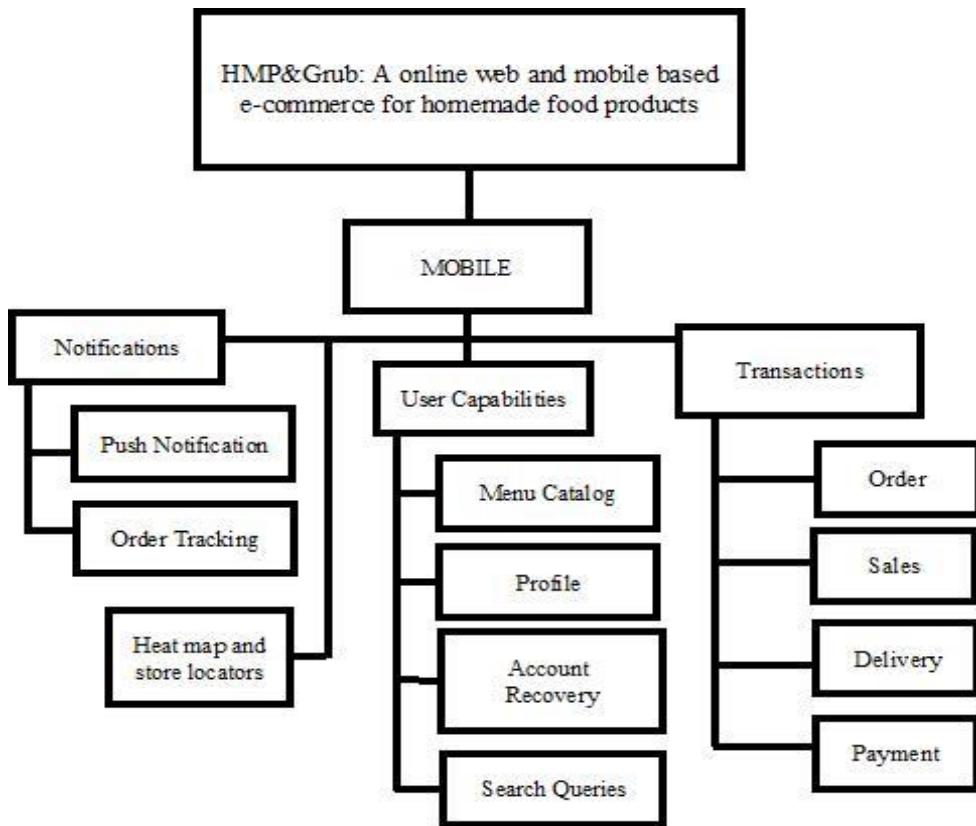
Actual Time Duration 

## Functional Decomposition Diagram

Functional Decomposition Diagram shows a hierarchical organization of the proposed system functions that comprises the system operation. The proponents used this model to show how the system is organized into lower-level processes. These processes translate into program modules during application development.



**Figure 12: FUNCTIONAL DECOMPOSITION DIAGRAM – WEB**



**Figure 13: FUNCTIONAL DECOMPOSITION DIAGRAM – MOBILE**

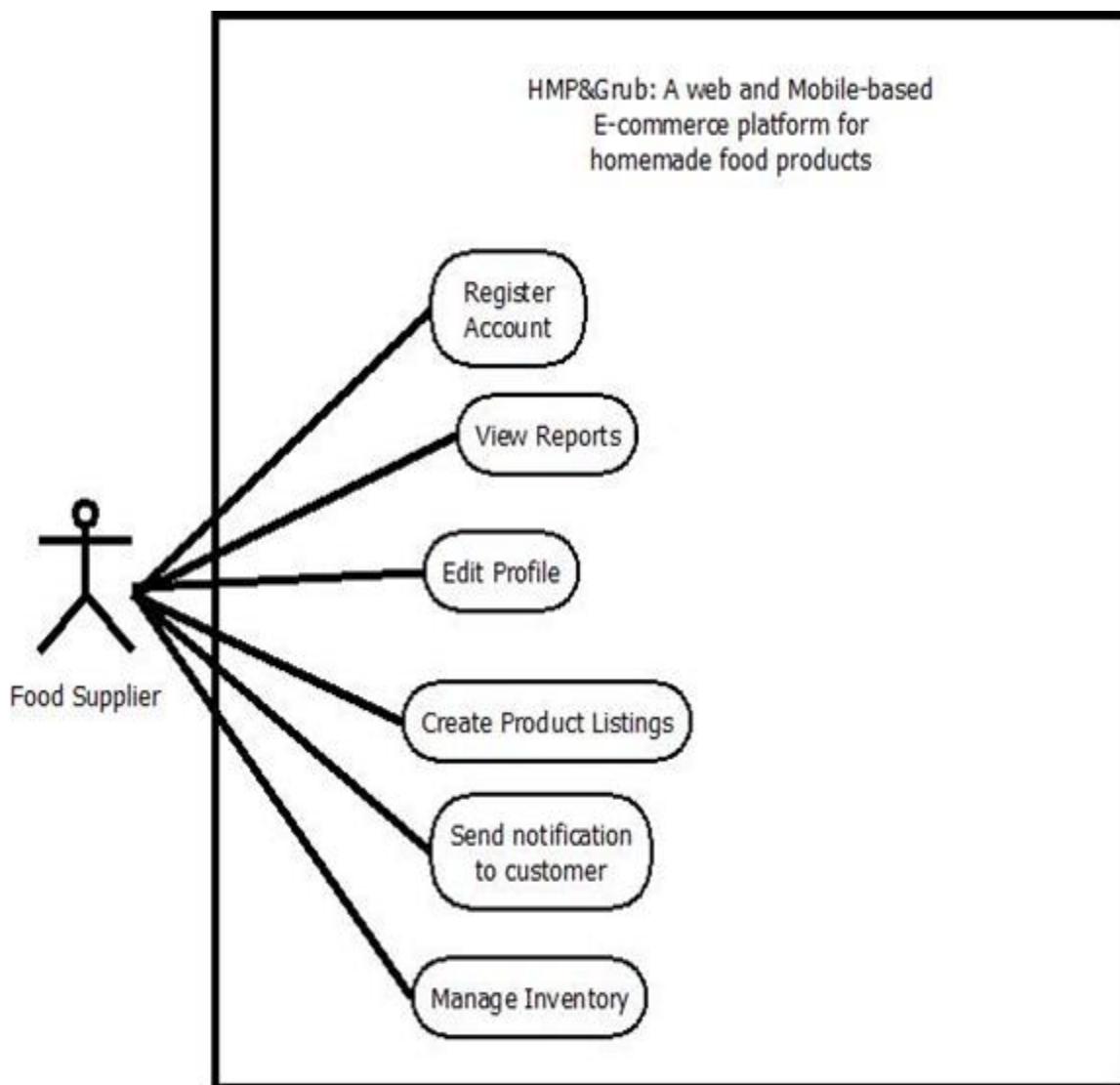
### Analysis-Design Phase

During the analysis-design phase, the researchers made use of the use case diagram, created a storyboard, designed the database and network that will be used for this project.

### Use Case Diagram

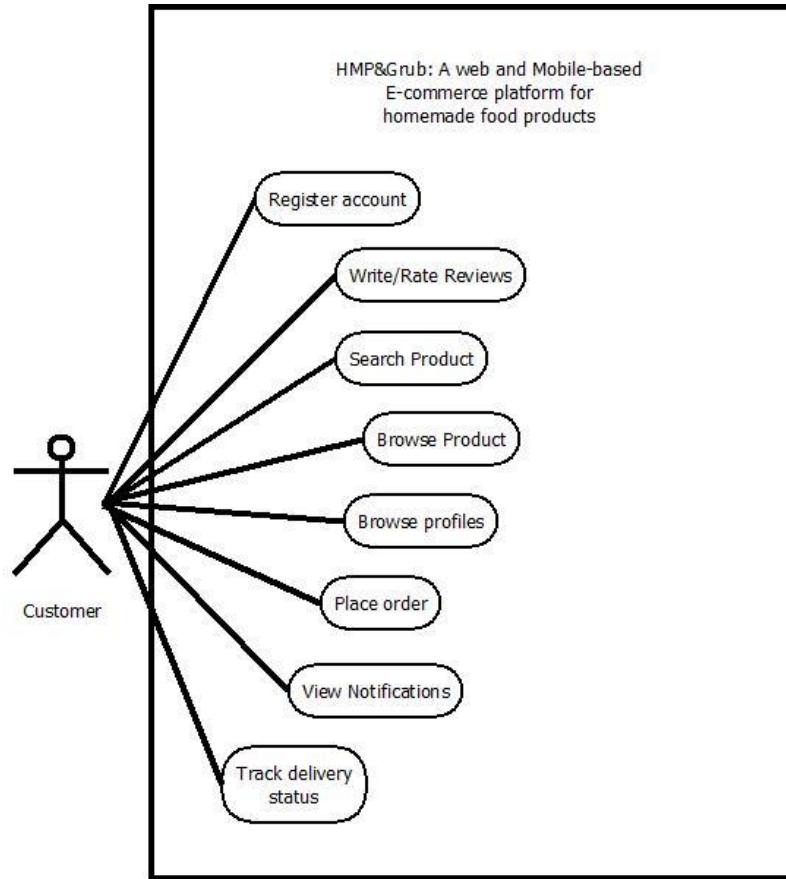
A use case diagram is a graphic depiction of the interactions among the elements of a system.

The food producers can manage their own accounts as soon as they have registered, they can now access different transactions in the website such as editing their own profile, creating a product listing, managing their account's inventory- reports and transactions, notifications, set price and content which is shown on Figure 14.



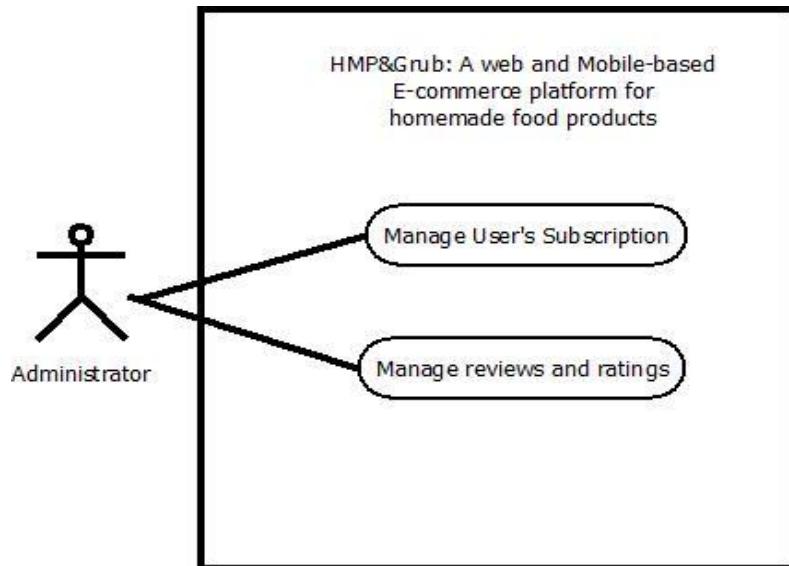
**Figure 14: Use case diagram – Food Producer**

A customer can use the different transactions in the website as soon as he/she has been registered or has an existing account to use. The transactions are such as browsing and searching for a food product and profiles, purchase and order online and also pay online, view notifications, track delivery status, write reviews and contact technical support for any difficulties or problems which is shown on Figure 15.



**Figure 15: Customer**

Administrators manage the user's accounts subscriptions, reviews, ratings, and flag items reviewed by the user.



**Figure 16: Use case diagram - Admin**

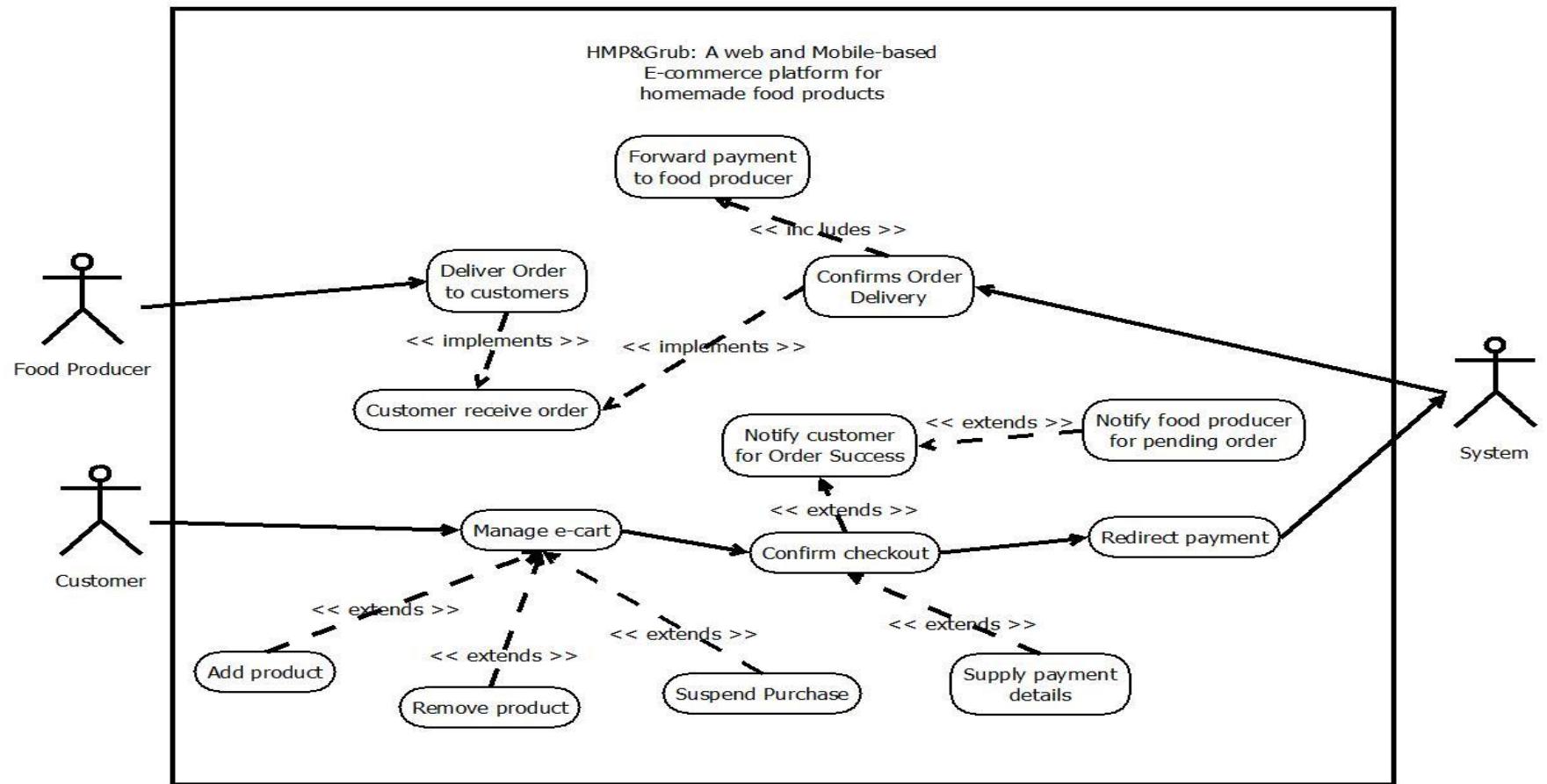
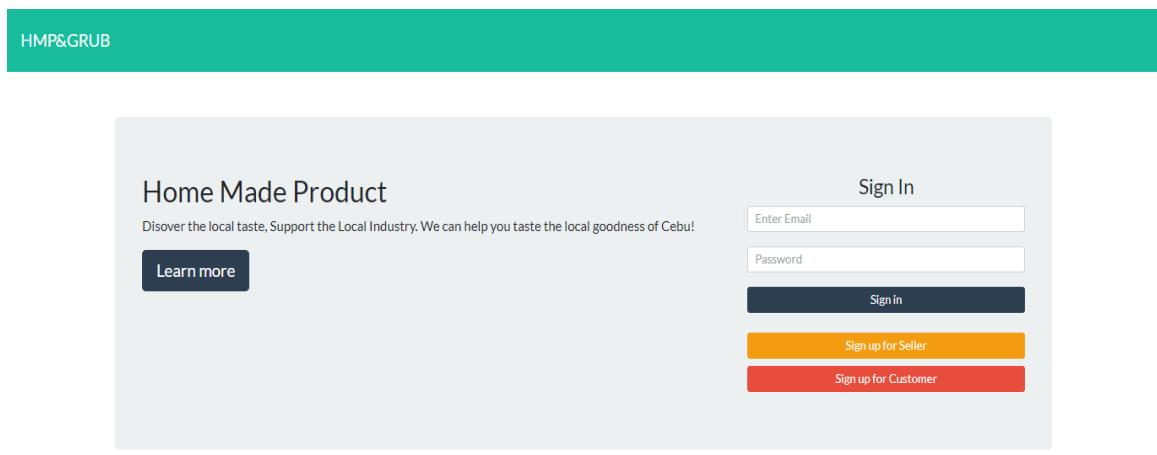


Figure 17: Order and Payment Management

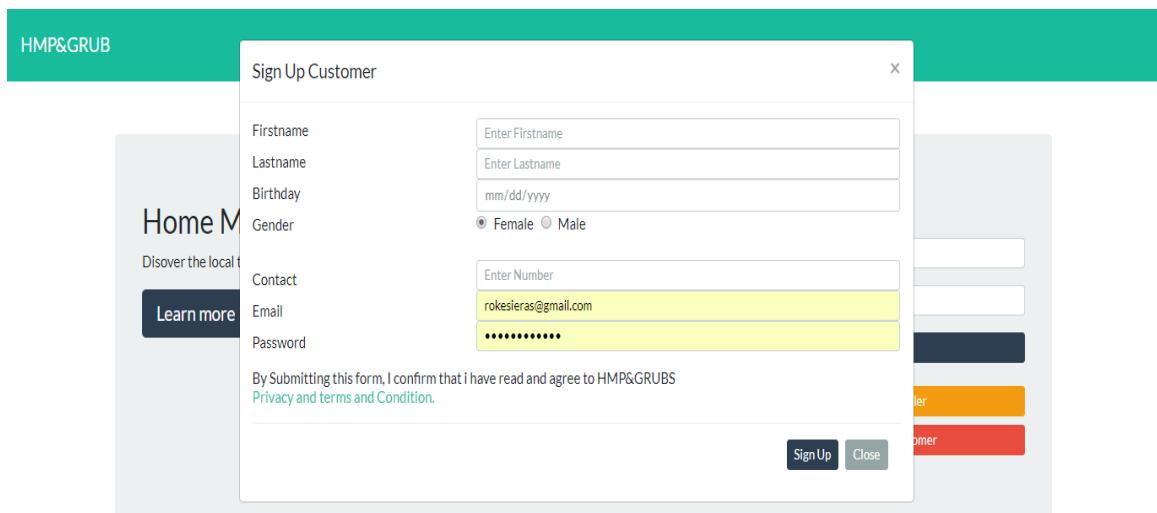
## Storyboard

A storyboard is a graphic organizer that provides the viewer with a high-level view of a Project.



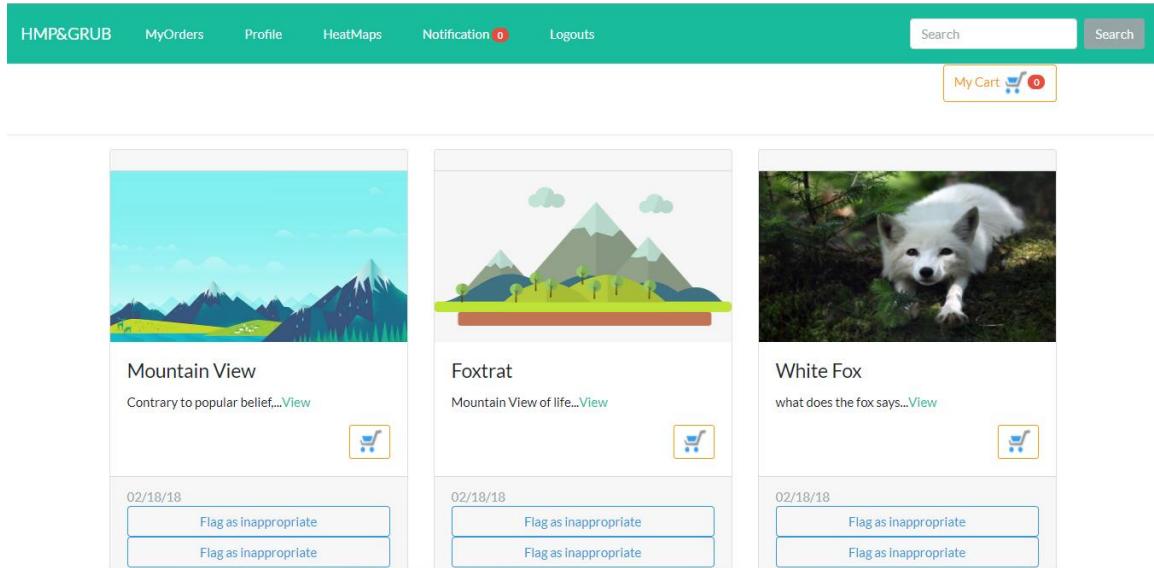
**Figure 18: Home Screen**

Figure 18 shows the main screen of the HMP&GRUB website.



**Figure 19: Sign- Up form for Customers**

Figure 19 shows the sign-up form for customers.



**Figure 20: Index Page for Customer**

Figure 20 shows the index page for customers.

The screenshot shows a product view page with a teal header bar containing navigation links: HMP&GRUB, MyOrders, Profile, HeatMaps, Notification (0), Logouts, a search bar, and a 'Search' button. The main content area includes:

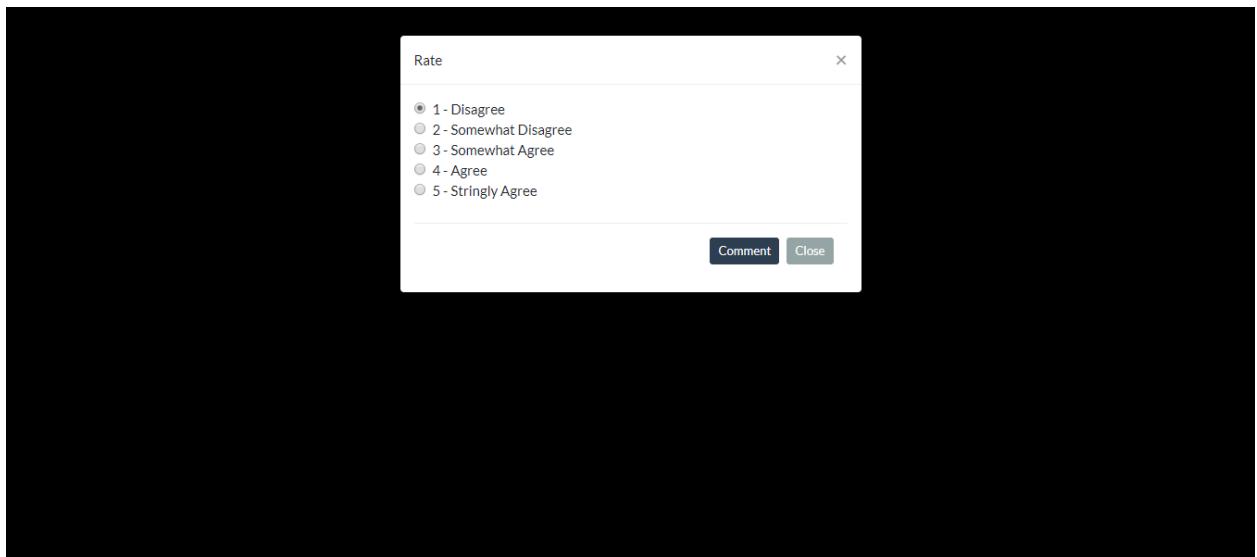
- A large image of a white fox.
- Product details: Name: White Fox, Price: 1200.00.
- Category: [Category](#), Stock Quantity: 77.
- Description: what does the fox says The standard chunk of Lorem Ipsum used since the 1500s is reproduced below for those interested. Sections 1.10.32 and 1.10.33 from "de Finibus Bonorum et Malorum" by Cicero are also included.
- Social sharing icons: Instagram, Twitter, Facebook.
- A rating section titled 'Rating's' with a scale from 1 to 5, where a green dot is at 4. A 'Rate' button is located at the bottom right of the scale.
- A comment input field labeled 'Comment...'.
- A comments section titled 'Comment's'.

**Figure 21: View Product**

This screen will appear after you click the 'view' button in the customer index page.

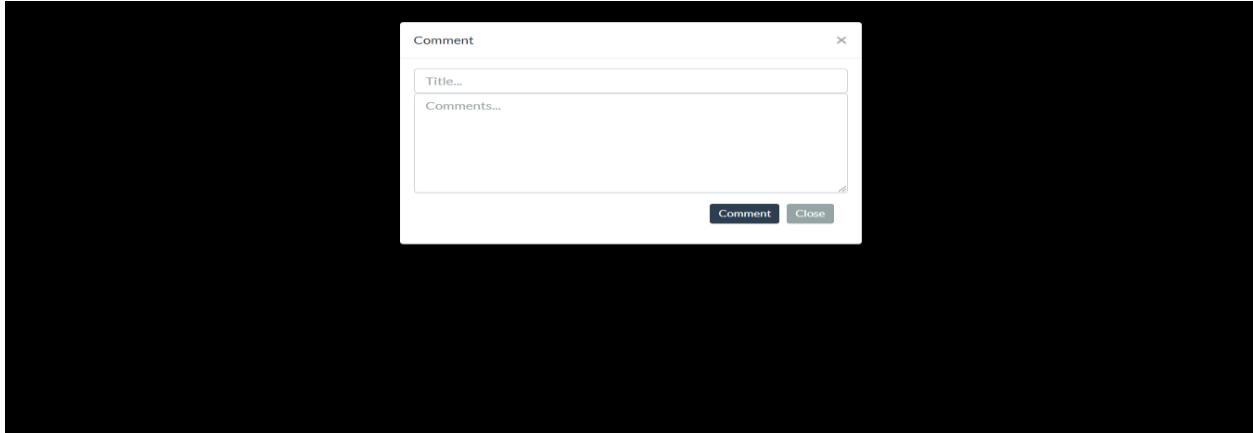
**Figure 22: View Cart**

This screen will appear after you click the ‘cart icon’ in the customer index page.



**Figure 23: Rate Product**

This popup form will appear after you click the ‘rate’ button in the view product page.



**Figure 24: Write Comment**

This popup form will appear after you click the ‘write comment’ button in the view product page.

Name	Price	Quantity	Amount	Delivery?
Foxtrot	1220	11	13420	pending
White Fox	1200	7	8400	pending

Name	Price	Quantity	Amount	Delivery?
Foxtrot	1220	121	147620	pending
		12	0	pending

Name	Price	Quantity	Amount	Delivery?
Foxtrot	1220	200	244000	pending

**Figure 25: User order page**

This screen will appear after you click the ‘MyOrders’ tab on the navigation bar.

The screenshot shows a user profile form with two main sections: 'Location' and 'User Settings'. The 'Location' section contains fields for Street, House No, Brgy, and City, each with a corresponding input field. A 'Save' button is located at the bottom right of this section. The 'User Settings' section contains fields for Firstname (sacurom), Lastname (wena), Birthday (02/09/2018), Gender (Female selected), Contact (32049234234), Email (wena@gmail.com), Old Password (Enter Password), New Password (Enter New Password), and Confirm Password (Enter Confirm Password). A 'Save' button is also located at the bottom right of this section.

**Figure 26: User Profile Form**

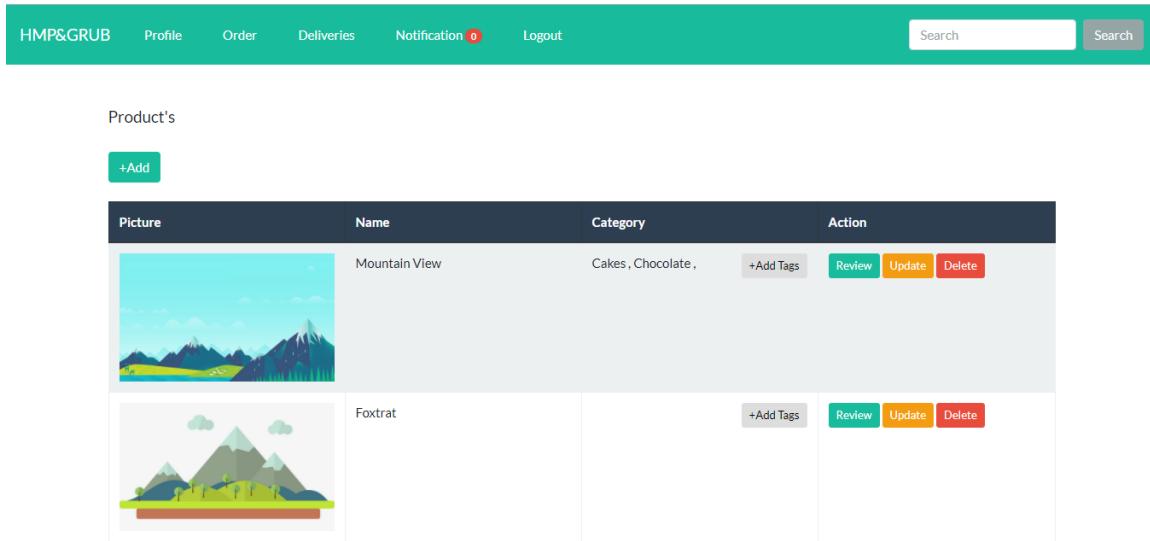
This screen will appear after you click the ‘Profile’ tab on the navigation bar.

The screenshot shows a table titled 'Notification' with columns: #, Picture, Name, and Action. There is one entry: #1, Column content, Column content, and a blue 'View' button under the Action column.

#	Picture	Name	Action
1	Column content	Column content	<button>View</button>

**Figure 27: Notification**

This screen will appear after you click the ‘notification’ tab on the navigation tab.

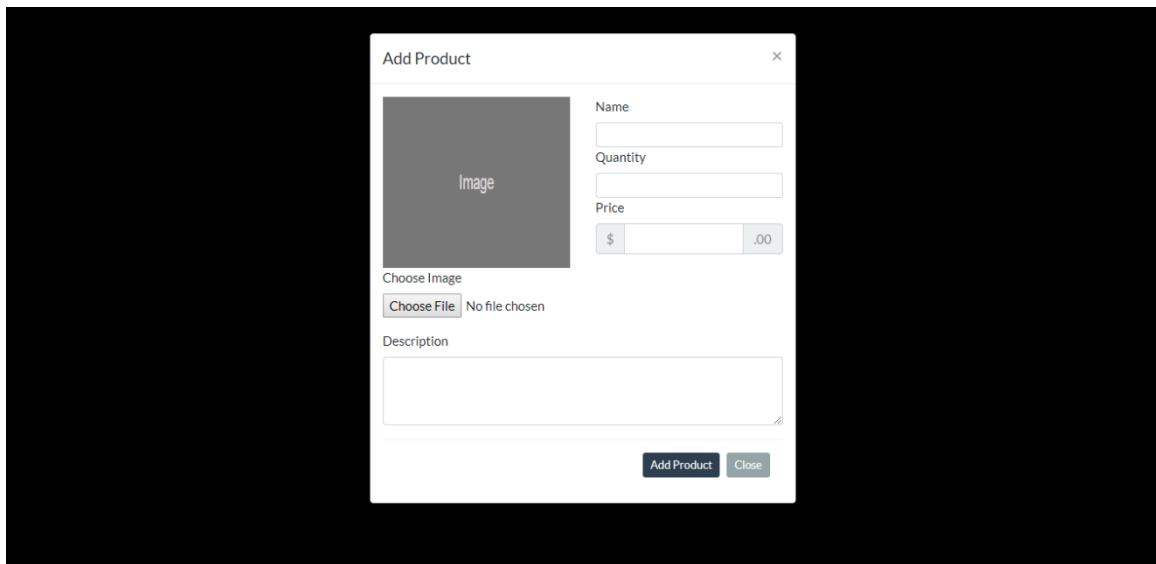


The screenshot shows the HMP&GRUB application interface. At the top, there is a navigation bar with links: HMP&GRUB, Profile, Order, Deliveries, Notification (0), and Logout. To the right of the navigation bar is a search bar with a 'Search' button. Below the navigation bar, the page title 'Product's' is displayed. A green 'Add' button is located above a table. The table has four columns: Picture, Name, Category, and Action. It contains two rows of data:

Picture	Name	Category	Action
	Mountain View	Cakes, Chocolate ,	+Add Tags <span style="background-color: #e0e0e0;">Review</span> <span style="background-color: #ffcc00;">Update</span> <span style="background-color: #ff0000;">Delete</span>
	Foxrat		+Add Tags <span style="background-color: #e0e0e0;">Review</span> <span style="background-color: #ffcc00;">Update</span> <span style="background-color: #ff0000;">Delete</span>

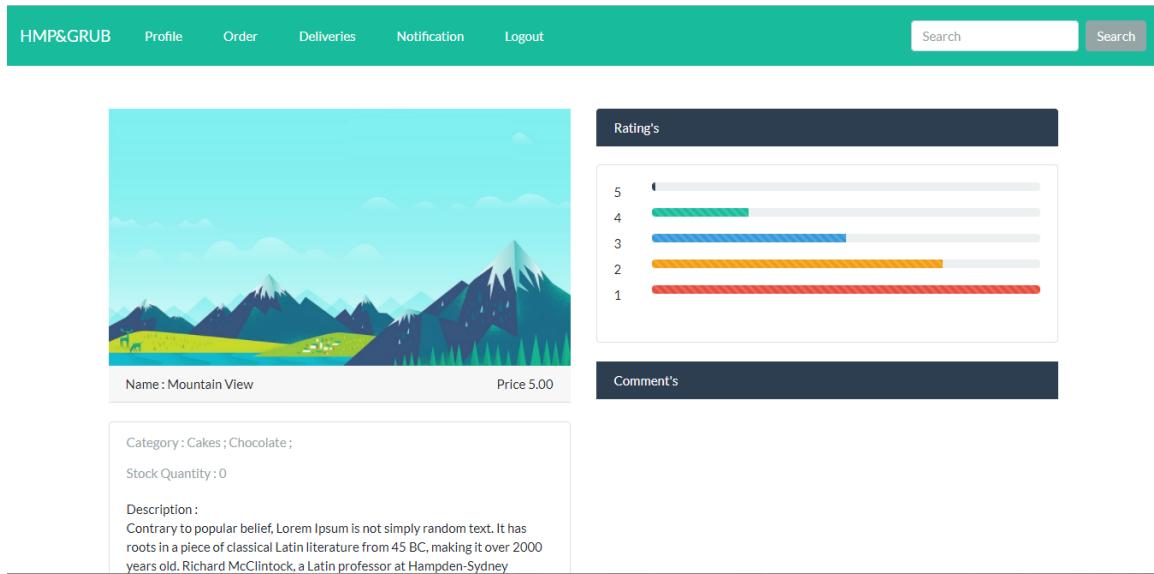
**Figure 28: Index page for Food Producer**

This screen will appear once the food producer will log-in to his/her account.



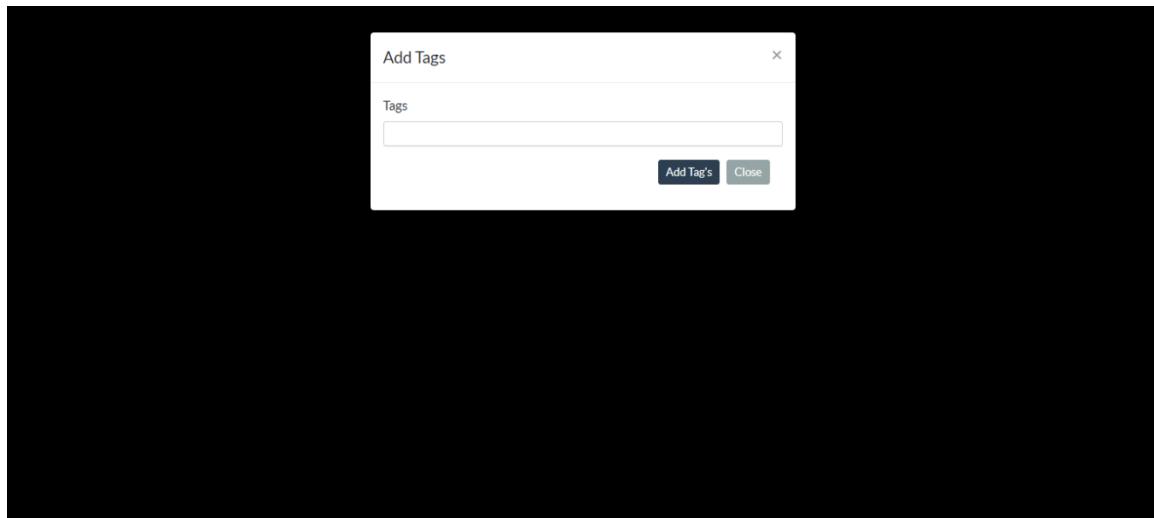
**Figure 29: Add Product**

This is the form in adding a new product.



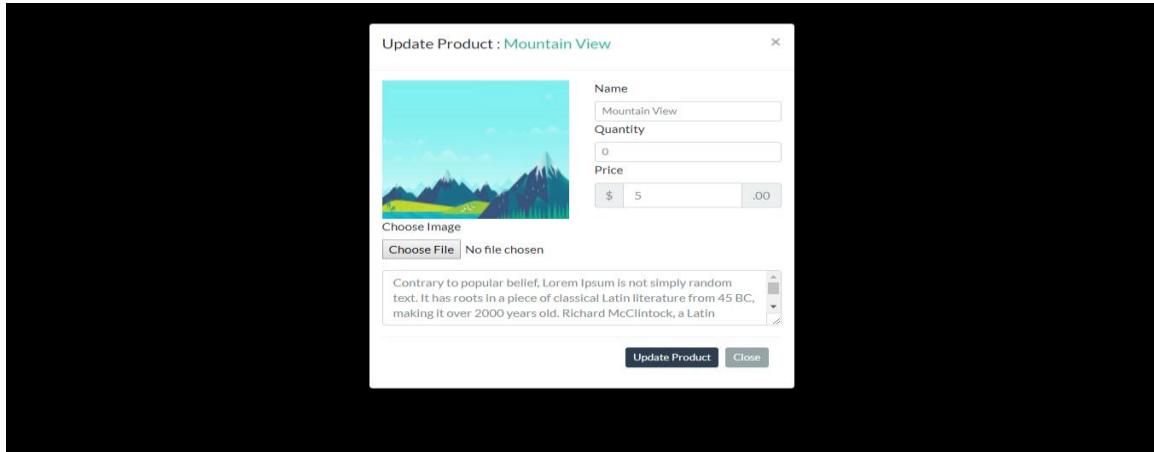
**Figure 30: Review Product**

This page will show the reviews and ratings of the product.



**Figure 31: Add Tags**

This pop-up form is for tagging.



**Figure 32: Update Product**

This form is for updating the product pricing, quantity and definition.

HMP&GRUB    Profile    Order    Deliveries    Notifications 0    Logout

Search    Search

Home Made Product Subscription  
Discover the local taste. Support the Local Industry. We can help you taste the local goodness of Cebu!

Learn more

Monthly - ₱ 115

1 Month Subscription

Subscribe

My Home

**Business Setting**

Business Name: lsweetsandcupcakes@gmail.com  
Business Email: Jureen's Sweets and Cupcakes  
Contact No: 09876543211

Location:  
Street: Unit 3  
House No: 450  
Brgy: Kalunasan  
City: Cebu City

**User Settings**

Firstname: Jureen  
Lastname: De Castro  
Birthday: 08/17/2017  
Gender:  Female  Male

Contact:  
Email: 09771620258  
Jureen@gmail.com

Old Password  
New Password  
Confirm Password

Enter Password  
Enter New Password  
Enter Confirm Password

**Figure 33: Food Producer's Profile**

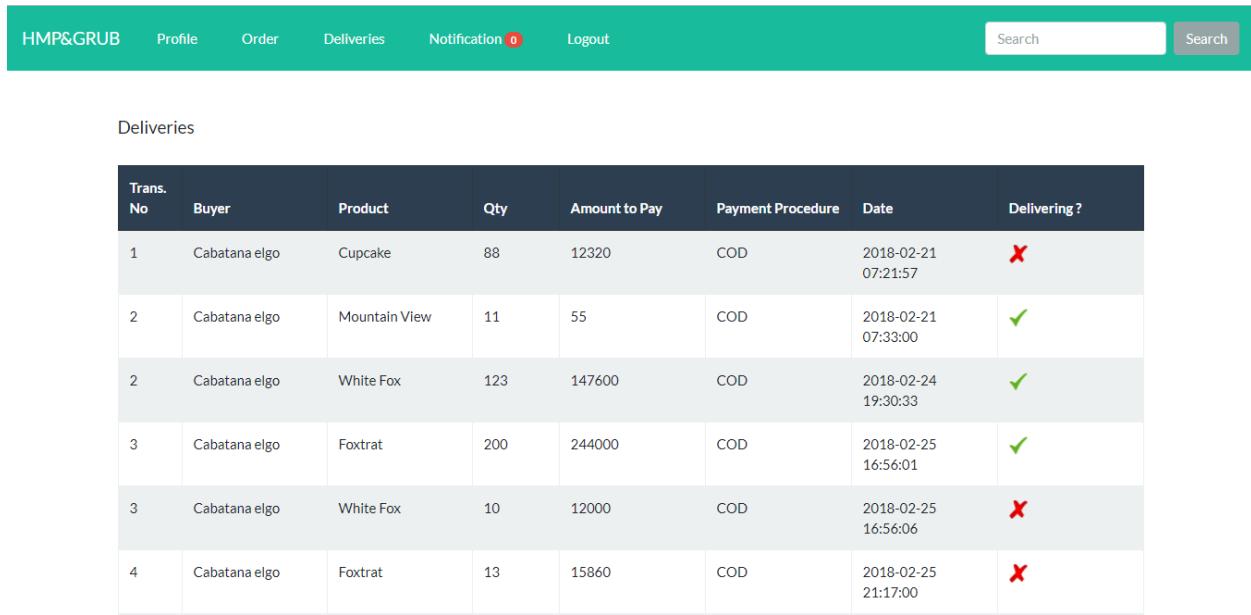
This screen will appear after you click the 'profile' tab on the navigation bar.

The screenshot shows the 'Orders' page of the HMP&GRUB application. At the top, there is a navigation bar with links for 'Profile', 'Order', 'Deliveries', 'Notification 0', and 'Logout'. To the right of the navigation bar are a 'Search' input field and a 'Search' button. Below the navigation bar, the page title 'Order's' is displayed. The main content area contains a table with 8 columns: 'Trans. No', 'Buyer', 'Buyer Info.', 'Product', 'Qty', 'Amount to Pay', 'Payment Procedure', 'Date', and 'Delivering?'. There are 8 rows of data in the table, each representing a delivery order. The 'Buyer' column for all rows is 'Cabatana elgo'. The 'Buyer Info.' column for row 1 contains: 'Phone No : 0987654321', 'Street : alaska st', 'HouseNo : 098', 'Brgy : mambaling', and 'City : cebu city'. The 'Product' column for row 1 is 'Cupcake'. The 'Qty' column for row 1 is 88. The 'Amount to Pay' column for row 1 is 12320. The 'Payment Procedure' column for row 1 is COD. The 'Date' column for row 1 is 2018-02-21 07:21:57. The 'Delivering?' column for row 1 has a green checkmark. Rows 2 through 8 have identical data for Buyer, Buyer Info., Product, Qty, Amount to Pay, Payment Procedure, Date, and Delivering?. The 'Delivering?' column for rows 2 through 8 contains a red button labeled 'Delivering'.

Trans. No	Buyer	Buyer Info.	Product	Qty	Amount to Pay	Payment Procedure	Date	Delivering?
1	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	Cupcake	88	12320	COD	2018-02-21 07:21:57	
2	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	Mountain View	11	55	COD	2018-02-21 07:33:00	✓
2	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	White Fox	123	147600	COD	2018-02-24 19:30:33	✓
3	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	Foxtrat	200	244000	COD	2018-02-25 16:56:01	✓
3	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	White Fox	10	12000	COD	2018-02-25 16:56:06	Delivering
4	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	Foxtrat	13	15860	COD	2018-02-25 21:17:00	Delivering
4	Cabatana elgo	Phone No : 0987654321 Street : alaska st HouseNo : 098 Brgy : mambaling City : cebu city	White Fox	14	16800	COD	2018-02-25 21:17:06	Delivering

**Figure 34: Orders Page**

This screen will appear after you click the 'Orders' tab on the navigation bar.

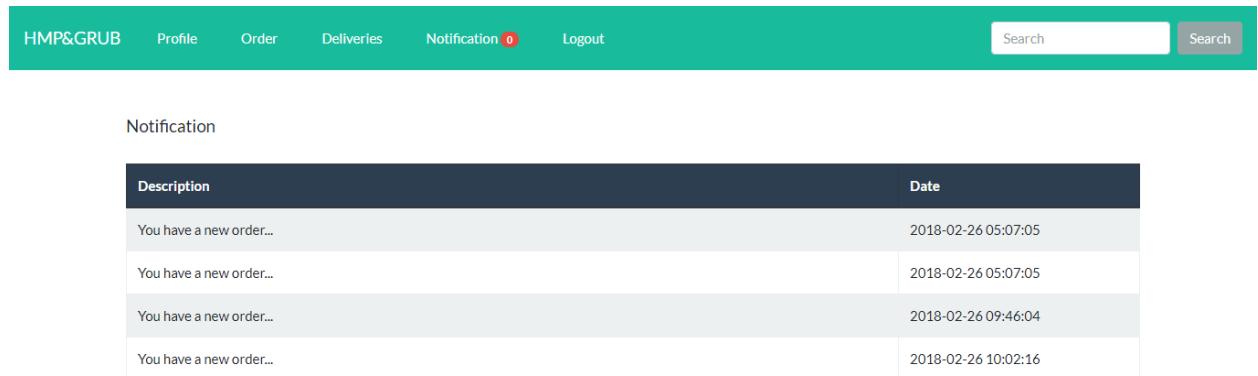


The screenshot shows a table titled 'Deliveries' with the following data:

Trans. No	Buyer	Product	Qty	Amount to Pay	Payment Procedure	Date	Delivering ?
1	Cabatana elgo	Cupcake	88	12320	COD	2018-02-21 07:21:57	X
2	Cabatana elgo	Mountain View	11	55	COD	2018-02-21 07:33:00	✓
2	Cabatana elgo	White Fox	123	147600	COD	2018-02-24 19:30:33	✓
3	Cabatana elgo	Foxtrot	200	244000	COD	2018-02-25 16:56:01	✓
3	Cabatana elgo	White Fox	10	12000	COD	2018-02-25 16:56:06	X
4	Cabatana elgo	Foxtrot	13	15860	COD	2018-02-25 21:17:00	X

**Figure 35: Deliveries**

This screen will appear after you click the 'Deliveries' tab on the navigation bar.



The screenshot shows a table titled 'Notification' with the following data:

Description	Date
You have a new order...	2018-02-26 05:07:05
You have a new order...	2018-02-26 05:07:05
You have a new order...	2018-02-26 09:46:04
You have a new order...	2018-02-26 10:02:16

**Figure 36: Notification**

This screen will appear after you click the 'Notification' tab on the navigation bar.

## Database Design

Database design is the process of producing a detailed data model of database. This data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a data definition language, which can then be used to create a database.

## Entity-Relationship Diagram

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is a component of data. It illustrates the logical structure of databases. Figure 19 below shows the ER diagram of our system.

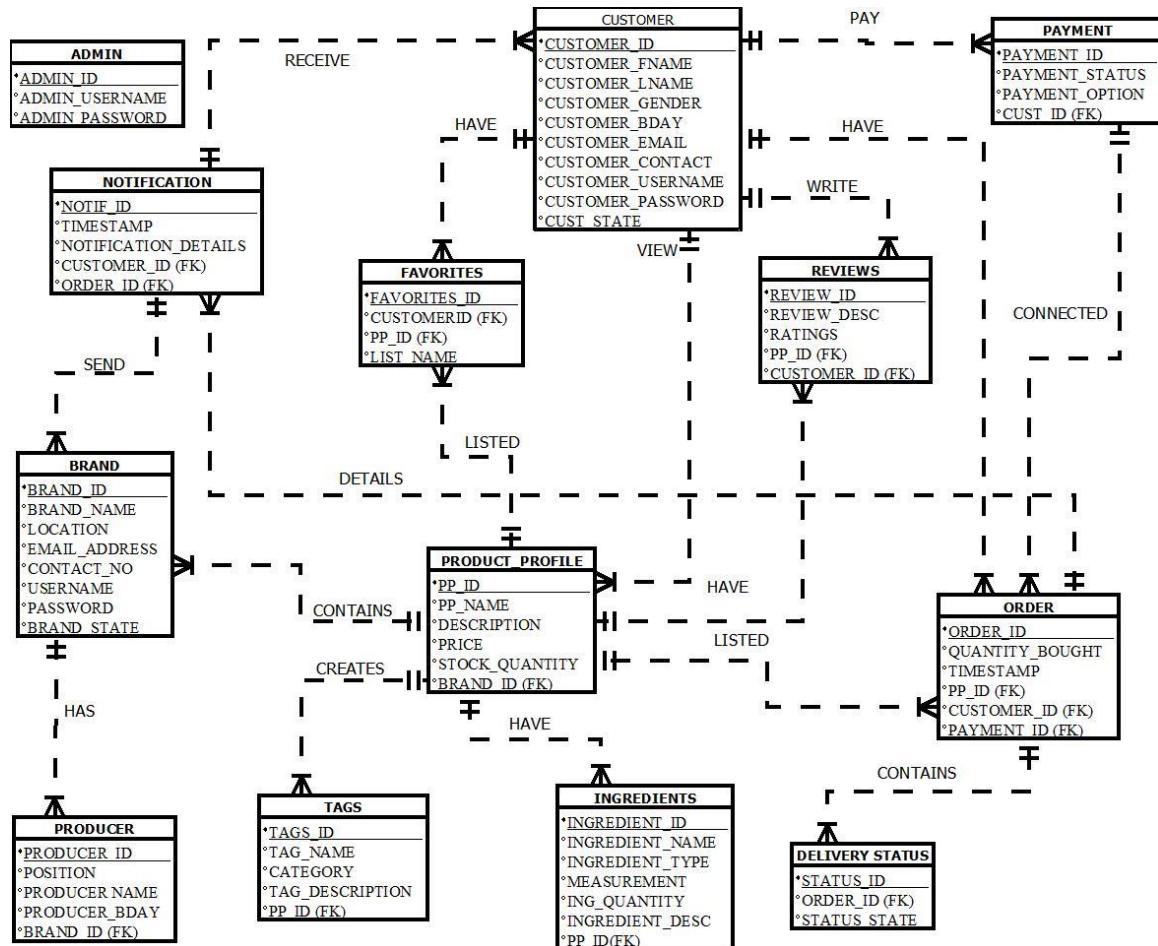


Figure 37: Entity-Relationship Diagram

## Data Dictionary

A data dictionary is a collection of descriptions of the data objects or items in a data model for the benefit of programmers and others who need to refer to them. A first step in analyzing a system of objects with which users interact is to identify each object and its relationship to other objects. This process is called data modeling and results in a picture of object relationships.

**Table 8**  
**CUSTOMER TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
CUSTOMER_ID	INT		NO	Primary Key, unique record identifier, auto-generated
CUSTOMER_FNAME	VARCHAR	20	NO	Describes the users first name
CUSTOMER_LNAME	VARCHAR	20	NO	Describes the users last name
CUSTOMER_GENDER	VARCHAR	1	NO	Describes the users gender
CUSTOMER_BDAY	DATE		NO	Describes the users birthdate
CUSTOMER_EMAIL	VARCHAR	50	NO	Describes the users email acc
CUSTOMER_CONTACT	VARHAR	12	NO	Describes the users contact
CUSTOMER_USERNAME	VARCHAR	25	NO	Describes the username of user
CUSTOMER_PASSWORD	VARCAHR	25	NO	Describes the user's password

**Table 9**  
**BRAND TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
BRAND_ID	INT		NO	Primary Key, unique equipment record identifier, auto-generated
BRAND_NAME	VARCHAR	25	NO	Describes the brands name
LOCATION	VARCHAR	50	NO	Describes the brands location
EMAIL_ADDRESS	VARCHAR	30	NO	Describes the brands email ad
CONTACT_NO	VARCHAR	13	NO	Describes the brands contact no
USERNAME	VARCHAR	20	NO	Describes the brands username
PASSWORD	VARCHAR	20	NO	Describes the brands password
BRAND STATE	VARCHAR	20	NO	Describes the state of activeness of the account

**Table 10**  
**FAVORITES TABLES**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
FAVORITESID	INT		NO	Primary Key, unique record identifier, auto-generated
LIST_NAME	VARCHAR	20	NO	Describes the favorites' custom name
PP_ID	INT		NO	Foreign Key from table Product_Profile
CUSTOMER_ID	INT		NO	Foreign Key from table Customer

**Table 11**  
**PRODUCER TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
PRODUCER_ID	INT		NO	Primary Key, unique record identifier, auto-generated
PRODUCER_NAME	VARCHAR	25	NO	Describes the producer's name by the brand
POSITION	VARCHAR	20	NO	Describes the position of the person on brand
PRODUCER_BDAY	DATE		NO	Describes the producer's birthdate
BRAND_ID	INT		NO	Foreign Key from table BRAND

**Table 12**  
**NOTIFICATIONS TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
NOTIF_ID	INT		NO	Primary Key, unique record identifier, auto-generated
TIMESTAMP	DATE & TIME		NO	Describes the time the notification was sent.
NOTIFICATION_DETAILS	VARCHAR	50	NO	Describes the details of the notifications
CUSTOMER_ID	INT		NO	Foreign key from table CUSTOMERS
ORDER_ID	INT		NO	Foreign Key from table ORDERS

**Table 13****ADMIN TABLE**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>LENGTH</b>	<b>NULL</b>	<b>DESCRIPTION</b>
ADMIN_ID	INT		NO	Primary Key, unique record identifier, auto-generated
ADMIN_USERNAME	VARCHAR	30	NO	Describes the admin's username
ADMIN_PASSWORD	VARCHAR	30	NO	Describes the admin's password

**Table 14****PRODUCT\_PROFILE TABLE**

<b>FIELD NAME</b>	<b>DATA TYPE</b>	<b>LENGTH</b>	<b>NULL</b>	<b>DESCRIPTION</b>
PP_ID	INT		NO	Primary Key, unique record identifier, auto-generated
PP_NAME	VARCHAR	20	NO	Describes the name of the product
DESCRIPTION	VARCHAR	50	NO	Describes the product in the profile.
PRICE	INT	6	NO	Describes the products price
STOCK_QUANTITY	INT	5	NO	Describes the amount of stock available per item
BRAND_ID	INT		NO	Foreign Key from table BRAND

**Table 15**  
**ORDER TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
ORDER_ID	INT		NO	Primary Key, unique record identifier, auto-generated
QUANTITY_BOUGHT	INT	5	NO	Describes the number of item purchased
TIMESTAMP	DATE&TIME		NO	Describes the time the items
PP_ID	INT		NO	Foreign Key from table PRODUCT_PROFILE
CUSTOMER_ID	INT		NO	Foreign Key from table CUSTOMER
PAYMENT_ID	INT		NO	Foreign Key from table PAYMENTS

**Table 16**  
**PAYMENTS TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
PAYMENT_ID	INT		NO	Primary Key, unique record identifier, auto-generated
PAYMENT_STATUS	BOOLEAN		NO	Describes the payment state of the order
PAYMENT_OPTION	VARCHAR	15	NO	Describes the mode of payment opted by user
CUSTOMER_ID	INT		NO	Foreign Key from table PAYMENTS

**Table 17**  
**REVIEWS TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
REVIEW_ID	INT		NO	Primary Key, unique record identifier, auto-

				generated
REVIEW_DESC	VARCHAR	40	NO	Summarizes the reviews
RATINGS	VARCHAR	2	NO	Describes the ratings thru the number of stars
PP_ID	INT		NO	Foreign Key from table PRODUCT_PROFILE
CUSTOMER_ID	INT		NO	Foreign key from table CUSTOMER

**Table 18****TAGS TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
TAGS_ID	INT		NO	Primary Key, unique record identifier, auto-generated
TAG_NAME	VARCHAR	30	NO	Describes the tag name of the product
CATEGORY	VARCHAR	30	NO	Further describes the tag by categorical means
TAG_DESCRIPTION	VARCHAR	50	NO	Describes the nature of the ingredient
PP_ID	INT		NO	Foreign Key from table PRODUCT_PROFILE

**Table 19****INGREDIENTS TABLE**

FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
INGREDIENT_ID	VARCHAR		NO	Primary Key, unique record identifier, auto-generated
INGREDIENT_NAME	VARCHAR	20	NO	Describes the ingredient name
INGREDIENT_TYPE	VARCHAR	20	NO	Describes the ingredient type
MEASUREMENT	VARCHAR	5	No	Type of Measurement per ingredient

ING_QUANTITY	INT	5	NO	Describes the numerical amount of measurement
INGREDIENT_DESC	VARCHAR	50	NO	Describes the ingredients nature

**Table 20**  
**DELIVERY STATUS TABLE**

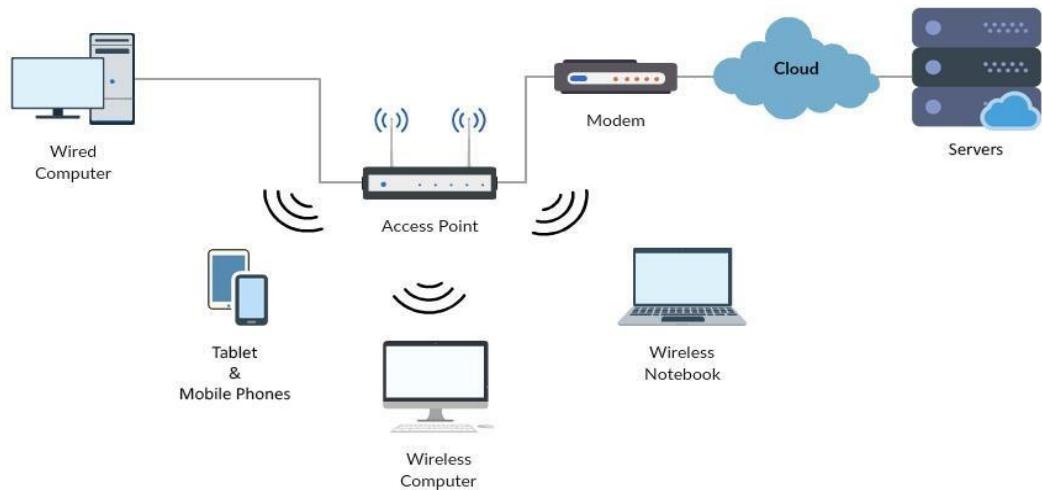
FIELD NAME	DATA TYPE	LENGTH	NULL	DESCRIPTION
STATUS_ID	INT		NO	Primary Key, unique record identifier, auto-generated
ORDER_ID	INT		NO	Foreign Key from Table ORDER
STATUS_STATE	BOOLEAN		NO	Describes the state of the delivery of the product

### **Network Design**

Network design refers to the planning of the implementation of a computer network infrastructure. Network design involves evaluating, understanding and scoping the network to be implemented. The whole network design is usually represented as a network diagram that serves as the blueprint for implementing the network physically.

### **Network Model**

The network model is a database model conceived as a flexible way of representing objects and their relationships. Its distinguishing feature is that the schema, viewed as a graph in which object types are nodes and relationship types are arcs, is not restricted to being a hierarchy or lattice.



**Figure 38: Network Model**

The network model replaces the hierarchical model with a graph thus allowing more general connections among the nodes. The main difference of the network model from the hierarchical model is its ability to handle many to many relationships. In other words, it allows a record to have more than one parent.

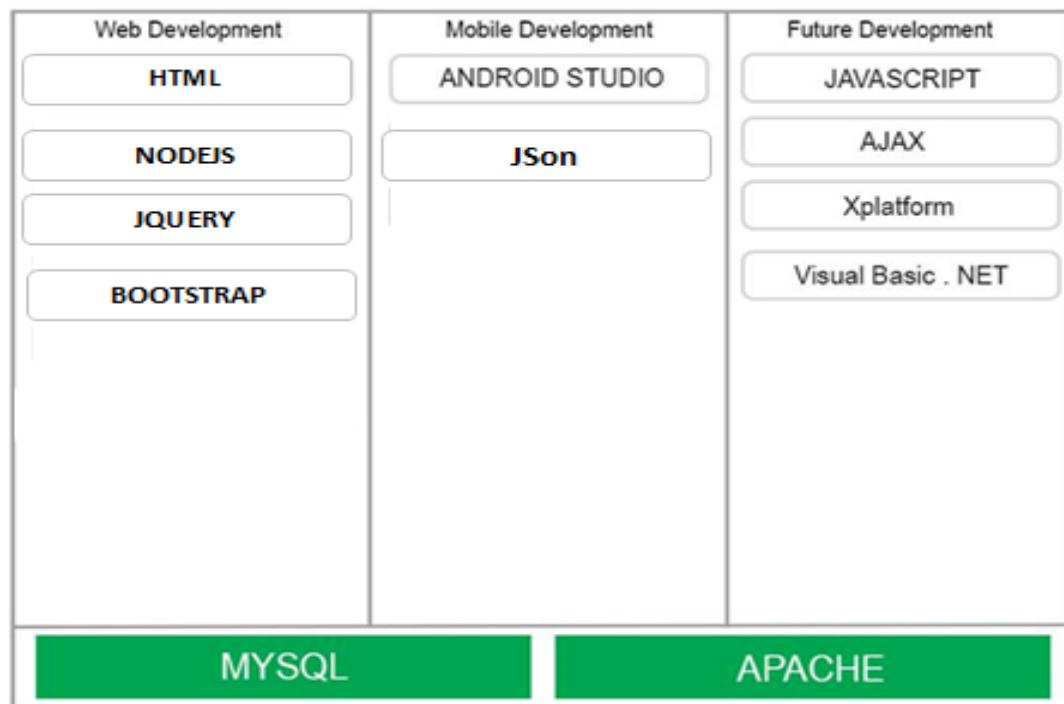
### **Developmental/Construction/Build Phase**

During the developmental/construction/build phase the researchers has used the technology stack, specified the program, and made a list of modules that will be used for this project. The modules will be tested independently and will be integrated with other modules. Construction and testing will be iterated as the researchers enter this phase.

## Technology Stack Diagram

Technology stack is a combination of software products and programming languages used to create a web or mobile application. Applications have two software components: client-side and server-side, also known as front-end and back-end.

Figure 39 shows the technology stack diagram that will be used on the creation of this project and hopefully for the future development.



**Figure 39: Technology Stack Diagram**

## Software Specification

The software specification supplies the definition of essential software needed by the proposed system. It provides the technologies that will be used by the proponents in developing the proposed system. These technologies are chosen, purely of functionality and cohesiveness to the proposed system's aim and structure. To widen its reach in terms the proposed system, HMP&Grub is to be developed on two platforms; the web and mobile platform. Since it going to be on two platforms, it has categorized its software specification into two respectively.

**Table 21**  
**SOFTWARE SPECIFICATION FOR DEVELOPMENT**

SOFTWARE SPECIFICATION DEVELOPMENT		
WEB	MOBILE	
<b>HTML 5</b>		ANDROID STUDIO
<b>CSS</b>		SDK TOOLS
<b>PHP</b>		
<b>JQUERY</b>		
<b>BOOTSTRAP 3</b>		
<b>MySQL</b>		
<b>SUBLIME 3</b>		
<b>APACHE</b>		
<b>GOOGLE FIREFOX</b>	CHROME, MOZILLA	

**Table 22**  
**SOFTWARE SPECIFICATION DEPLOYMENT**

SOFTWARE SPECIFICATION DEPLOYMENT		
WEB	MOBILE	
<b>WINDOWS XP,7,8,8.1,10</b>		
<b>GOOGLE FIREFOX, IE</b>	CHROME, MOZILLA	ANDROID 4.0 ICE CREAM SANDWICH OR HIGHER
<b>INTERNET CONNECTION WITH 3+MBPS</b>		

## Hardware Specification

**Table 23**  
**HARDWARE SPECIFICATION FOR DEVELOPMENT**

HARDWARE SPECIFICATION FOR DEVELOPMENT	
WEB	
<b>Processor</b>	Intel Core i3-i7 2.40 Ghz
<b>RAM</b>	4GB
<b>Display</b>	14"HD
<b>Hard Drive</b>	500 GB
<b>Weight</b>	2 kg
MOBILE	
Dimensions	144.6 X 69.7 X 9.6 mm
Weight	157 g
Display Type	Super LCD 3 capacitive touchscreen
Size	5.0 inch
Resolution	1080 X 1920 pixels
CPU	Quad-core 1.5 Ghz
GPU	Adreno 430
Internal Memory	32 GB
RAM	3GB
Battery	2840 mAh battery

**Table 24**  
**HARDWARE SPECIFICATION FOR DEPLOYMENT**

HARDWARE SPECIFICATION FOR DEPLOYMENT	
WEB	
<b>Processor</b>	Intel Core i3-i7 2.40 Ghz
<b>RAM</b>	2 GB OR HIGHER
<b>Display</b>	14"HD
<b>Hard Drive</b>	120 GB OR HIGHER
MOBILE	
<b>RAM</b>	500 MB
<b>Internal Storage</b>	150MB HIGHER

### **Program Specification**

A program specification is a statement of the precise functions that are to be carried out by a computer program, including descriptions of the input to be processed by the program, the processing needed, and the output from the program.

### **List of Modules**

In software, a module is a part of a program. Programs are composed of one or more independently developed modules that are not combined until the program is linked. A single module can contain one or several routines.

**Table 25**  
**List of Modules- Web**

Programmer	Modules	Food Producer	Customer	Admin
	Account Management			
	Create account profile	●	●	
	Update account profile	●	●	
	Subscription Management			●
	Total # of Modules	1	1	1
	Product Listing			
	Create product profile	●		
	Edit product profile	●		
	Flag product profile		●	
	Remove product profile			●
	Total # of Modules	1	1	1
	Reviews and Ratings			
	Write Reviews and Set Ratings		●	
	Manage Reviews and Ratings			●
	Total # of Modules		1	1
	Queries and Reports			
	View account profiles	●	●	●
	View ratings and reviews	●	●	●
	View product profile	●	●	●
	View and edit cart content		●	
	View product heatmap		●	
	View customer orders	●		
	Check delivery status		●	
	Checkout order		●	
	Total # of Modules	1	1	1
	Payment System			
	3 <sup>rd</sup> party payment support	●	●	
	Total # of Modules	1	1	
	Social Media Integration			
	Sharing thru social media	●	●	
	Total # of Modules	1	1	
	Notifications and Alerts			
	Receive order quantity availability	●	●	
	Receive order notifications	●	●	
	Total # of Modules	1	1	
	Number of Modules per User	6	7	4
	Total Number of Modules		17	

**Table 26**  
**List of Modules- Mobile**

Programmer	Modules	Food Producer	Customer	Admin
	Account Management			
	Create account profile		●	
	Update account profile		●	
	Subscription Management			
	Total # of Modules		1	
	Product Listing			
	Create product profile			
	Edit product profile			
	Flag product profile		●	
	Remove product profile			
	Total # of Modules		1	
	Queries and Reports			
	View account profiles		●	
	View ratings and reviews		●	
	View product profile		●	
	View and edit cart content		●	
	View product heatmap		●	
	View customer orders			
	Check delivery status		●	
	Checkout order		●	
	Total # of Modules		1	
	Payment System			
	3 <sup>rd</sup> party payment support		●	
	Total # of Modules		1	
	Social Media Integration			
	Sharing thru social media		●	
	Total # of Modules		1	
	Notifications and Alerts			
	Receive order quantity availability		●	
	Receive order notifications		●	
	Total # of Modules		1	
	Number of Modules per User		6	
	Total Number of Modules		6	

## Testing/Quality Assurance Phase

The proponents have decided to conduct a unit testing to ensure that the system works appropriately as planned. The proponents used integration testing to verify functional, performance and reliability requirements of the system. Then, next is alpha testing to evaluate the systems actual operational testing by potential users. The final testing will be the acceptance testing, this is to certify that the agreed requirements are met by the system.

### Unit Testing

The proponents used this method in order to ensure that HMP&GRUB is working properly. The goal of this method is to test every single unit that comprises the system to ensure that every single unit or module functions to its intended purposes before it will be integrated with other methods.

**Table 27**

**Web Unit Testing**

Module	Unit Feature	Date Tested	Expected Result	Actual Result	Remarks
Account Management (Food Producer)	Create account profile	Feb 17-18	The food producer can sign up to a new account	Performed as expected	OK
	Update account profile	Feb 17-18	Proceed as intended	Updated info reflects immediately	OK
Account Management (Customer)	Create account profile	Feb 17-18	The customer can create a new account	User will redirect to home customer page after registration	OK
	Update account profile	Feb 17-18	Customers can update their own information	Updated info reflects immediately	OK
Account Management (admin)	Subscription Management	Feb 17-18	Admin can manage the food producers' subscription.	This feature was not integrated properly	Re-do
Product Listing	Create product profile	Feb 17-18	Create a product profile as	Performed as expected	Ok

(Food Producer)			intended with values entered		
	Edit product profile	Feb 17-18	Update the product profile as intended input	Performed as expected	Ok
Product Listing (Customer)	Flag product	Feb 17-18	Product flagged would appear to admin side	Performs as expected	Ok
Product Listing (Admin)	Remove product profile	Feb 17-18	Flagged products could be deleted as admin	This feature was not integrated properly	Re-do
Reviews and Ratings (Customer)	Write reviews and set ratings	Feb 17-18	Customers can write reviews and set ratings	Feature for writings reviews should be properly integrated	Re-do
Reviews and Ratings (Admin)	Manage reviews and ratings	Feb 17-18	Admin acts if reviews are appropriate or not	This feature was not integrated properly	Re-do
Queries and Reports (Food Producer)	View account profiles	Feb 20	Account profiles could be viewed	Performs as expected	OK
	View ratings and reviews	Feb 20	Food producers can view the reviews attached to their products	Performs as expected	OK
	View product profile	Feb 20	Food producers can view their product profiles	Performs as expected	Ok
	View customer orders	Feb 20	Food sellers can see the list of orders from different	Performs as expected	OK
Queries and Reports (Customer)	View account profiles	Feb 20	Customers can view account profiles of sellers	Feature not integrated properly with the system.	Re-do
	View ratings and reviews	Feb 20	View ratings and reviews of product profiles	Performs as expected	OK
	View product profiles	Feb 20	View product profiles of food producers	Performs as expected	OK
	View and edit	Feb 20	Add contents of	Performs as	OK

	cart content		cart	expected	
	View product heat map	Feb 20	View heatmap for products sold	Module not implemented	Redo
	Check delivery status	Feb 20	Check the statuses of ordered products	Performs as expected	OK
	Checkout order	Feb 20	Perform checkout of carts	Performs as expected	OK
Payment System (Customer)	3 <sup>rd</sup> party payment support	Feb 22-23	Integrate a 3 <sup>rd</sup> party online payment support	Module implemented	Redo
Payment System (Food Producer)	3 <sup>rd</sup> party payment support	Feb 22-23	Integrate a 3 <sup>rd</sup> party online payment support	Cash-on-delivery options	Redo
Social Media Integration (Customer)	Sharing on social media platforms	Feb 22-23	Share product profiles on social media	Module not implemented	Redo
Social Media Integration (Food Producer)	Sharing on social media platforms	Feb 22-23	Share product profiles on social media	Module implemented	Redo
Notifications and Alerts (Customer)	Receive order quantity availability	Feb 22-23	Receive alerts on low quantity food products	Performs as expected	OK
	Receive order notifications	Feb 22-23	Notifies customer for updates in their ordered products	Performs as expected	OK
Notifications and Alerts (Food Producer)	Receive order quantity availability	Feb 22-23	Receive alerts on low quantity food products	Performs as expected	OK
	Receive order notifications	Feb 22-23	Notifies customer for updates in their ordered products	Performs as expected	OK

## Integration Testing

Integration testing is used to test the interactions between different modules where the individual modules combined and tested as a group. It will identify possible problems that may occur when combining all the units.

**Table 28**  
**Integration Testing**

Test Case ID	Module 1	Integration Process	Module 2	Pre-Condition	Result	Remarks
1	Account Management	User has to login in order to access all the features of the system.	Product Listing	User credentials must exists in the system	Performed as expected	Passed
2	Account Management	User has to have an existing account to write reviews	Reviews and Ratings	User must be logged in to the system.	Performed as expected	Passed
3	Account Management	Users has to be logged in to access reports and reviews	Queries and Reports	User must be logged in to the system	Performed as expected	Passed
4	Account Management	Users must be logged in to access notifications	Notifications and Alerts	User must be logged in with registered account	Performed as expected	Passed
5	Account Management	Payments should be Identifiable to its buyers	Payment System	User must be logged in with registered account	Performed as Expected	Passed
6	Product Listings	Products must be available to be rated or reviewed	Reviews and Ratings System	Products should contain sufficient info to be identifiable	Performed as Expected	Passed
7	Product Listings	Products should have necessary info for carting	Payment System	User must checkout items first then select payment methods	Cash on delivery payment option is only	Pending

					available	
8	Queries and Reports	Actions between food producer and customer must be mutually notified	Notifications and Alerts	Both users must have existing accounts to get notifications	Performed as Expected	Passed
9	Social Media Integration	Customers should be able to share their items on social media	Product Listings	User must have corresponding account to that platform	Studying API	Pending

## Alpha Testing

This method is to test a nearly complete prototype of a system. Alpha testing is simulated or actual operational testing by potential users or an independent test team at the developers' site.

**Table 29**

### Alpha Testing – Web

Test Criteria	Poor	Fair	Good	Very Good
<b>Graphical User Interface (GUI)</b>				
Consistency (The user interface is of the same formatting style and icons throughout the system.)			✓	
Reusability (The system contains reusable GUI components such as familiar buttons, text and check boxes, and other tools.)			✓	
Forgiveness and Tolerance (The interface displays message or confirmation prompts that would allow the users to undo or redo critical actions.)			✓	
Simplicity (The GUI design include simple GUI buttons, such as simple screens with clear, uncrowded messages.)			✓	
Readability (The interface has appropriate colors, font sizes, and styles that is convenient to the target users.)			✓	
Clarity (Displayed error, help, and warning messages are clear, concise, and as elementary as possible to assist user in operating the software.)			✓	

Flexibility (The system includes user preferences setting to allow changes, for example, increasing the font size.)			✓	
User-friendliness (The GUI design must be user-friendly, by providing helpful, courteous, and non-offending messages.)			✓	
<b>System Performance</b>				
Conformance to the Requirements (The system effectively met all the identified features and/or requirements.)		✓		
Conformance to the Objectives (All specific objectives of the system are met by the program.)		✓		
Efficiency (The entire system functions efficiently. It doesn't have delay in any transaction.)		✓		
Security (The system is secured. Login details are authenticated. Input parameters are ensured prior to the execution of the transaction.)		✓		
Integrity (The software allows the registered user to have control over its own private information.)		✓		
Overall Impression (In general, the program or system is functional and useful.)		✓		

## Implementation/Development Phase

Implementation phase is when the establish development best practices to detect and remove security and privacy issues early in the development cycle. It contains the budget cost, what specifications used and the guides for the user and installation of ClassRecPH.

### Implementation Budget/Cost Specification

#### Supplies

Compact Disk	P 40.00
Sticker	P 5.00
A. Photocopies	P 450.00
B. Bookbinding	P 60.00

C. Others	
Server	P 245.00
Hosting	P 386.00
<b>TOTAL</b>	<b>P 1,186 .00</b>

### **Investment Cost**

Needed Capital P500, 000

Breakdown:

- 70% - Salaries and Production
- 20% - Hosting, Data Centers /Servers
- 10% - Ads, General & Administrative Expenses (Office rental, utilities, etc.)

### **Human Resources Specification**

**Human Resources Specification** describes the knowledge, skills, education, experience, and abilities of individuals that are essential in performing a particular project.

Position Needed

#### 1. Project Manager (PM)

- Plan and organize resources and people to make sure projects finish on time, stay within budget and meet the requirements.
- Planning, Executing and Closing Projects – defining the project, building its comprehensive work plan.
- Managing Teams –facilitating commitment and productivity, removing obstacles, and motivating team members.

- Managing Expectations – aligning projects to business goals, managing stakeholders, and communicating project status, milestones, and unexpected difficulties effectively.
- Good at juggling several tasks at the same time, have excellent skills and can lead a team.
- Finding out what the client wants to achieve.
- Agreeing the timescales, costs and resources needed.
- Drawing up detailed plan and schedule for each stage of the project.
- Selecting and leading a project team.
- Perform their duties under general supervision and are responsible for all aspects of the project for the life of the project.
- Lead and direct cross – functional teams to deliver projects within the constraints of schedule, budget, and resources.
- Demonstrate sufficient knowledge and experience to appropriately apply a methodology to projects that have reasonably well – defined project requirements and deliverables.

## 2. System Analysts/Database Designers (SA/DD)

- work with analysts on the feasibility of a conceptual design by taking technical specifications prepared by the analyst and designing system components to meet the set requirements
- draw up detailed design documentation including charts and diagrams that indicate the various components involved
- prepare instructions for programmer implementation
- talk with other team members (analysts and programmers) to ensure functionality according to systems specifications, and develop solutions as problems or issues arise
- Design monitoring and performance measurement processes.
- Works designs and implements computer databases for the collection, protection and analysis of data.

- Analyzing data inquiry needs, ensuring security of information and organizing layout to best present the information needed.

### 3. Network Designers/UI Designers (ND/UID)

- Responsible for creating functional and visually appealing user interfaces for websites, databases, computer programs and applications.
- Must ensure that icons and features displayed on the interface of a computer program can be easily interpreted by users without excessive explanation, thus making areas where users directly interact with technology easy and intuitive to use.
- Organize information to be contained on the interface

### 4. Software Engineers/Programmers (SE/P)

- Must be familiar with many different software programs and have the ability to learn to use new software quickly.
- Responsible for the development, maintenance and operation of computer software to enable businesses and organizations to function as efficiently as possible.
- Works with a business analyst or computer programmer to identify the needs of a company and to develop the specifications of the engineering project.
- Skills to write code and create software programs that tell computers to accomplish certain tasks like retrieving data.
- May also rewrite, debug, maintain and test these programs.

### 5. QA Testers

- Test, tune, debug and suggest the detailed refinements that ensure the quality of the system.
- Test for bugs in the software, from complete crashes to minor glitches in the program.
- Responsible for assuring quality in the final product and for finding all the flaws in a system before it goes public.
- Look for program bugs - spelling mistakes, localization problems.

## User-Guide

User-Guide is a technical communication document intended to give assistance to people using a particular system.

## Web User-Guide

### Sign Up

1. Click “Signup” on the landing page menu
2. Provide Email Address
3. Provide Personal Information
4. Provide a password
  - a. Must be at least 3 characters
  - b. May not be greater than 30 characters
  - c. May contain letters and numbers
5. Click Register Button

### Sign in

1. Provide username (must be currently registered in the database)
2. Provide the correct password
3. Click sign in

### Update account profile

1. Go to profile tab
2. Fill out the fields with the information you wish to change
3. Click Save Button to save the changes you made.

### Create product profile

1. (While on HMP&Grub Tab) Click add product
2. Upload an image of the product
3. Fill out the necessary information, such as name, price and quantity
4. Click add button to add the product to your product list.

### Edit product profile

1. Select a product profile
2. Select the update button
3. Execute necessary adjustments done to the product

4. Click save when done.

### **Flag product profile**

1. Select a product profile
2. Click flag as inappropriate
3. Select a reason for flagging the product;
4. Or write your own comment why a product has been flagged.
5. Click submit button

### **Write reviews and ratings**

1. Select a product profile
2. Click write reviews and ratings
3. Select your rating.
4. Write product review
5. Click save button

### **Installation Guide**

Installation guide explains how to perform at or what are the procedures to follow upon using the system.

#### **Web**

1. Purchase "hmpandgrub.io" domain
2. Purchase Virtual Private Server
3. Install Apache, MySQL, and PHP to server
4. Install Composer
5. Configure Virtual Hosts in server

#### **Mobile**

1. Go to Google Play Store App
2. Search HMP&Grub application
3. Click Install.
4. Wait for installation to finish. Open Application.

## Project Roadmap

Project Roadmap is a graphical, high level overview of the project's goals and deliverables presented on a timeline. Unlike the project plan where details are fleshed out, the roadmap should be simple and free of minutiae. Project goals and objectives.

	DESCRIPTION	ESTIMATED TIMELINE
Sign-up and log-in using Facebook and Google+	Allows users to use their social network accounts to sign-up and log-in to the system	4 months - 6 months
A more comprehensive inventory report for food producer	Allows to generate a more comprehensive inventory in order for the food producer to easily monitor the supplies of his product.	1 year - 1.5 years
A GPS Track for customers and food producer for the delivery of the product	The customer can monitor the delivery of the ordered product at the same time with the food producer	2 years - 3 years
A Re-Order System	Allows the customer to re-orders his/her previous transactions	2 years - 3 years
Chat between food producers and customer	Allows food producers and customers to interact with each other	1.5 years - 2 years
An IOS version	An IOS platform for iPhone users	6 months - 1 year
Lite mobile version	A lite version for mobile platform to have a small memory space	2 years - 3 years

## CONCLUSION

In summary, In summary, the proponents were able to arrive at these conclusions based on the findings of the study. This research's main purpose is to develop an online based platform for home made products. It offers a better service on the web and mobile application to cater the food producer's needs in promoting their delicious homemade products. The proponents conclude that with the implementation of this system, food producers are given the means to sell their products through the internet and for the customer it is easy for them to look for a delicious homemade products that near them.

The primary objective of the study is to design and develop a platform for homemade products. The objectives that were defined in Chapter 1 have been achieved. The proponents provided a Web and mobile application for both consumer and food suppliers. The proponents believe that this study will cater the needs of the various Users namely; food producers who want to earn more income and the same time they can continue their passion in making delicious homemade products.

In addition to this, HMP&GRUB has a number of features that enhances the user's experience in managing their product such as tracking the customer's orders and the status of deliveries, the tagging and writing comments about the product and also the customers can rate the products. The proponents were able to develop a system that is useful and easy-to-use for teachers.

## RECOMMENDATIONS

Like most systems, perfection is not attainable. The developments of the HMP&GRUB was never completed due to limited time and resources. HMP&GRUB is very scalable and there are a lot of potential and space for improvement and future research. Based on the foregoing findings of this system/study, the following are some recommended future enhancements for HMP&GRUB:

1. The researchers of HMPandGrub suggest that the application require more market research to fully support the application as a marketable and profitable business. It is recommended to commit a trial test run on the local community which wishes to leverage the application's platform.
2. For the following individuals who would like to use the application to sell their product, the sellers themselves should uphold the product integrity that they sell and that to ensure the quality of their product should commit to the food processing standards for health safety;
3. If the application were subjected to promote local food products, the application can act as a product menu for foreigners, travellers and visitors to try and explore local delicacies discovered thru the application ;
4. For future development, it is imperative to shape the design and user experience of the applications to cater its users ;
5. Finally, the researchers recommend that HMPandGrub should be updated as time progresses to ensure that the technology stack used to develop and maintain the application would not get obsolete to ensure the adaptability the

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## CURRICULUM VITAE



### **Personal Information**

Name : Christine Marie Plarisan  
 Address : Maracas Lahug, Cebu City  
 Contact No. : 09436928423  
 Email : [christine06292014@gmail.com](mailto:christine06292014@gmail.com)  
 Date of Birth : February 2, 1998  
 Citizenship : Filipino  
 Civil Status : Single  
 Place of Birth : Cebu City, Philippines

### **Educational Background:**

2004-2010

Elementary Level  
 Lahug Elementary School  
 Gorordo Ave. Lahug, Cebu City

2010 – 2014

Secondary Level  
 Abellana National School  
 Osmena Blvd., Cebu City

2014 – Present

Tertiary Level  
 University of Cebu – Main  
 Sanciangko St., Cebu City

## CURRICULUM VITAE

### **Personal Information**



Name : Ramon T. Paculanang Jr.  
 Address : Alaska Mambaling Cebu, City  
 Contact No. : 0975-069-3272  
 Email : [mlac.pax@gmail.com](mailto:mlac.pax@gmail.com)

Date of Birth : October 1, 1997  
 Citizenship : Filipino  
 Civil Status : Single  
 Place of Birth : Quezon City, Manila

### **EDUCATIONAL BACKGROUND**

2004-2010

Elementary Level

Sto. Domingo Academy  
 626 Holy Spirit, Quezon City

2010 – 2014

Secondary Level

University of Cebu – Main  
 Sanciangko St., Cebu City

2014 – Present

Tertiary Level

University of Cebu – Main  
 Sanciangko St., Cebu City

## CURRICULUM VITAE



### Personal Information

Name : Robert Kevin N. Sieras  
Address : USDA Dormitory Hotel Pelaez St ,  
Cebu City  
Contact No. : 09056219790  
Email : [rokesieras@gmail.com](mailto:rokesieras@gmail.com)

Date of Birth : October 22, 1997  
Citizenship : Filipino  
Civil Status : Single  
Place of Birth : Cebu City, Philippines

### Educational Background:

2004-2010

Elementary Level

Basak Community Elementary School

Cabreros St., Basak San Nicolas Cebu City

2010 – 2014

Secondary Level

Saint Isidore the farmer catholic school

Catambo-an,Lazi,Siquijor

Cebu City

2014 – Present

Tertiary Level

University of Cebu – Main

Sanciangko St., Cebu City

## APPENDICES

### Appendix A: Capstone 41 Oath of Confirmation Form

*Appendix A: Capstone41 Oath of Confirmation Form*

**UC** University of Cebu  
College of Computer Studies

Date: 07-05-17

**OATH OF CONFIRMATION\*\***

This is to attest that I, PLARICAN, CHRISTINE MARIE, a BSIT-4 student currently enrolled in the course **Capstone41 (Capstone Project 1)**, have aptly received a copy; religiously read and conscientiously understood its contents; and openly submit to the terms, rules, conditions and regulations stated in the **Capstone Project Manual 2014** document implemented by the **College of Computer Studies**, University of Cebu (MAIN Campus)

This is also to affirm that said guidelines was judiciously discussed and explicitly elaborated in a forum conducted by the Faculty and Dean of the college.

<p><b>CONFORME:</b>  <u>CHRISTINE MARIE PLARICAN / 07-05-17</u>  <small>(Signature of Student over printed name) / Date</small></p> <p><b>NOTED:</b>  <u>TEODORO MARVIN A. AVERGONZADO JR.</u>  <small>(Signature of Adviser over printed name)</small></p>	<p><b>CONFORME:</b>  <u>MARVIN PLARICAN</u>  <small>(Signature of Parent/Guardian over printed name)</small></p> <p><b>NOTED:</b>  <u>MELVIN M. NINAL, Ph.D.</u>  <small>Dean</small></p>
---	---

**\*\*to be submitted before taking Role-based Exam**

Page | 23

*Appendix A: Capstone41 Oath of Confirmation Form*

**UC** University of Cebu  
College of Computer Studies

Date: 07/05/17

**OATH OF CONFIRMATION\*\***

This is to attest that I, MARIE GEL S. HERNANDEZ, a BSIT-4 student currently enrolled in the course **Capstone41 (Capstone Project 1)**, have aptly received a copy; religiously read and conscientiously understood its contents; and openly submit to the terms, rules, conditions and regulations stated in the **Capstone Project Manual 2014** document implemented by the **College of Computer Studies**, University of Cebu (MAIN Campus)

This is also to affirm that said guidelines was judiciously discussed and explicitly elaborated in a forum conducted by the Faculty and Dean of the college.

<p><b>CONFORME:</b>  <u>MARIE GEL S. HERNANDEZ / 07/05/17</u>  <small>(Signature of Student over printed name) / Date</small></p> <p><b>NOTED:</b>  <u>MELVIN M. NINAL, Ph.D.</u>  <small>Dean</small></p>	<p><b>CONFORME:</b>  <u>GUILHERMO B. HERNANDEZ</u>  <small>(Signature of Parent/Guardian over printed name)</small></p> <p><b>NOTED:</b>  <u>MELVIN M. NINAL, Ph.D.</u>  <small>Dean</small></p>
--	--

**\*\*to be submitted before taking Role-based Exam**

Page | 23

*Appendix A: Capstone41 Oath of Confirmation Form*

**UC** University of Cebu  
College of Computer Studies

Date: 06-05-17

**OATH OF CONFIRMATION\*\***

This is to attest that I, Robert Kevin M. Segovia, a BSIT-4 student currently enrolled in the course **Capstone41 (Capstone Project 1)**, have aptly received a copy; religiously read and conscientiously understood its contents; and openly submit to the terms, rules, conditions and regulations stated in the **Capstone Project Manual 2014** document implemented by the **College of Computer Studies**, University of Cebu (MAIN Campus)

This is also to affirm that said guidelines was judiciously discussed and explicitly elaborated in a forum conducted by the Faculty and Dean of the college.

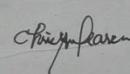
<p><b>CONFORME:</b>  <u>ROBERT KEVIN M. SEGOVIA / 06-05-17</u>  <small>(Signature of Student over printed name) / Date</small></p> <p><b>NOTED:</b>  <u>MELVIN M. NINAL, Ph.D.</u>  <small>Dean</small></p>	<p><b>CONFORME:</b>  <u>B. SEGOVIA</u>  <small>(Signature of Parent/Guardian over printed name)</small></p> <p><b>NOTED:</b>  <u>MELVIN M. NINAL, Ph.D.</u>  <small>Dean</small></p>
---	--

## Appendix B: Capstone Project Team Composition Form

*Appendix B: Capstone Project Team Composition Form*

  
 University of Cebu  
 College of Computer Studies  
 Cebu City

Date: 07-08-17

Name	Signature	Role Assignment	Email	Contact #
1. CHRISTINE MARIE PLARICAN		HUSTLER / HIPSTER	christine06292014@gmail.com	09436928923
2. Robert Kevin N. Sieras		HIPSTER / HACKER	madrabbitisghostpro201@gmail.com	09056219790
3. MARK GEL HERNANDEZ		HACKER	imachernandez101@gmail.com	09236832799
4.				
5.				
6.				

## Appendix C: Capstone Project Working Title Form

*Appendix E: Capstone Project Working Title Form*

  
 University of Cebu  
 College of Computer Studies  
 Cebu City

**Research Working Title Approval Form**

Name of Proponents:

CHRISTINE MARIE PLARICAN	2. Robert KEVIN NIERAS
MARK GEL HERNANDEZ	4.
	6.

Proposed Research Title:

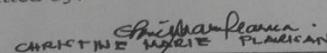
GROCELINK : A Web & mobile Platform for Grocery Shopping

good title has several characteristics:

- Creates a positive impression and stimulates reader interest
- Is retrievable in standard indexes and abstracts using appropriate key words [check applicable thesauri and classification schemes]
- Uses current nomenclature of the field
- Indicates subject and scope with some accuracy
- Identifies key variables, both dependent and independent
- Suggests a relationship between variables which supports the major hypothesis
- Is limited to 15 to 20 substantive words
- Does not include "study of," "analysis of" or similar constructions so that every word is absolutely necessary

Date: 7/12/17

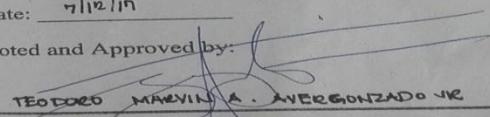
Submitted by:

  
 CHRISTINE MARIE PLARICAN

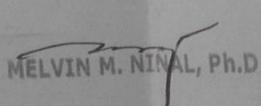
(Signature of Leader over printed name)

Date: 7/12/17

Noted and Approved by:

  
 TEODORO MARVIN A. VERGONZADO JR.

(Signature of Adviser over printed name)

  
 MELVIN M. NINAL, Ph.D.

JUL 26 2

## Appendix D: Capstone 41 Consultation Log Forms

  
 University of Cebu  
 College of Computer Studies  
Capstone41 (Capstone Project 1) Consultation Logs Form

Capstone Project Title:	<u>GROELINK: A WEB &amp; MOBILE PLATFORM FOR GROCERY SHOPPING</u>		
Names of Proponents:	CHRISTINE MARIE PLARISAN ROBERT KEVIN SIERAS MARK GEL HERNANDEZ		
Group Name:			
Consultations	Date and Time of Consultation	Project Manager's Signature	Adviser's Signature
1st Consultation should be within:	8/9/2017 - 9:30 PM	<i>Christine</i>	<i>[Signature]</i>
Chapter 1 must be completely delivered for adviser's evaluation <i>Revised chapter 1 and 2</i>			
2nd Consultation should be within:	9/5/17 - 8:00 PM	<i>Christine</i>	<i>[Signature]</i>
Chapters 1 and 2 must be completely delivered for adviser's evaluation <i>Just clarify the ff:</i> <i>Objectives of the study</i> <i>Rationale</i> <i>Scope &amp; Limitations</i>			

3rd Consultation should be within:	9/26/17 - 9:30 PM	<i>Christine</i>	<i>[Signature]</i>
Chapters 1, 2 and 3 must be completely delivered for adviser's evaluation <i>Finalize ERD</i> <i>Revise the FF</i> <i>use correct Diagrams</i> <i>TDD</i>			
4th Consultation should be within:	10/11/17 - 9:30 PM	<i>Christine</i>	<i>[Signature]</i>
Chapters 1, 2, 3 including initial and final pages must be completely delivered for adviser's evaluation <i>Finalize the documents for Capstone 41 manuscript.</i>			
This is to certify that I have been regularly consulted by my advisees; have reviewed their system prototype as well as the required manuscript of the above-stated study. As their adviser, I therefore submit them ready for <b>Proposal Hearing</b> as the <i>Chapters 1 through 3 and the pertinent parts of their manuscript are complete.</i>			
NOTE: Defense week: <u>10-21-17</u>		Signed: <u>TEODORO AYBREZADO JR., MECS, MSc</u> <small>(Signature or Adviser over printed name)</small>	

## Appendix E: Censor/Technical Editor's Certificate Form

*Appendix H: Censor/Technical Editor's Certificate Form*

**UC** University of Cebu  
College of Computer Studies

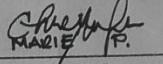
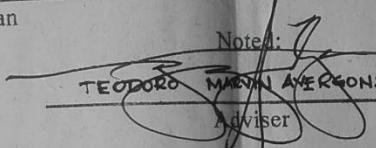
Date: OCTOBER 13, 2017

**C E N S O R 'S C E R T I F I C A T E**

This is to certify that the undersigned has reviewed and went through all the pages of the proposed project study/research manuscript titled:

GROCELINK: A MOBILE AND WEB PLATFORM FOR GROCERY SHOPPING

as against the set of structural rules that govern the composition of *sentences, phrases, and words* in the English language as well as the technical terms, syntax (format, etc.) and semantics appropriate for the Information Technology and Computing fields.

<p>Signed: </p> <p>LEAH B. YBANEZ</p> <p>Grammarians</p>	<p>Conforme: </p> <p>CHRISTINE MARIE P. PLARIGAN</p> <p>Project Manager</p>
<p>Noted: </p> <p>TEODORO MARVIN AVENGONZO JR., MScC, MScIT</p> <p>Adviser</p>	

**UC** University of Cebu  
College of Computer Studies

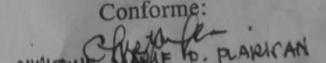
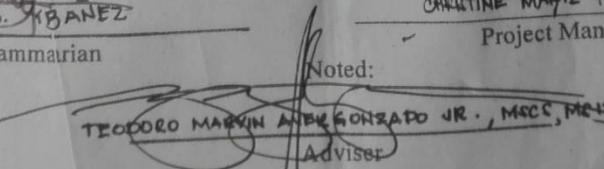
Date: OCTOBER 13, 2017

**C E N S O R 'S C E R T I F I C A T E**

This is to certify that the undersigned has reviewed and went through all the pages of the proposed project study/research manuscript titled:

GROCELINK : A MOBILE AND WEB PLATFORM FOR GROCERY SHOPPING

as against the set of structural rules that govern the composition of *sentences, phrases, and words* in the English language as well as the technical terms, syntax (format, etc.) and semantics appropriate for the Information Technology and Computing fields.

<p>Signed: </p> <p>LEAH B. YBANEZ</p> <p>Grammarians</p>	<p>Conforme: </p> <p>CHRISTINE MARIE P. PLARIGAN</p> <p>Project Manager</p>
<p>Noted: </p> <p>TEODORO MARVIN AVENGONZO JR., MScC, MScIT</p> <p>Adviser</p>	

## Appendix F: Capstone Project Hearing Notice Form

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*Appendix L: Capstone Project Hearing Notice Form*

**UC**  
University of Cebu  
College of Computer Studies  
Cebu City

**PROJECT/RESEARCH HEARING NOTICE**

Date filed: \_\_\_\_\_  
Ref. Code: \_\_\_\_\_

[  ] PROPOSAL HEARING  
[  ] ORAL DEFENSE

Research Hearing  
Date: October 21, 2011 Time: 7:00 PM Venue: Room 535

Research Title:  
Grocelink! A web and mobile platform for grocery shopping

Proponents / Researchers:

<u>CHRISTINE MARIE PLARISAN</u>	<u>HUSTLER</u>	<u>Christine</u>
<u>ROBERT KEVIN MIERAS</u>	<u>HIPSTER</u>	<u>RKM</u>
<u>MARK GEL HERNANDEZ</u>	<u>HACKER</u>	<u>MGH</u>

**CERTIFICATION**

The undersigned members comprising the panel for oral examination hereby agree to the schedule of hearing for the above research. [Please PRINT NAME and SIGN]

<u>TEODORO AVENG CABRADO, JR., MCS, MSIT</u> RESEARCH ADVISER	<u>LEAH B. YANEZ</u> TECHNICAL EDITOR / Censor
<u>NEIL A. BACABE</u> PANEL MEMBER 1	<u>EMELIE C. VILLAGERAN, MIT</u> PANEL MEMBER 2 / Content Expert
<u>HELI S. CAMPANILLA, MS IT</u> PROGRAM RESEARCH COORDINATOR	<u>DR. MELVIN M. NIÑAL, PhD</u> PANEL CHAIR

NOTED/APPROVED BY:

DR. MELVIN M. NIÑAL, PhD  
Dean, CCS

APPROVED:

JONATHAN O. ETCUBANI  
Research Director / Campus Research Coordinator

## Appendix G: Capstone Project Panel Honoraria (Form 10)

### *(Appendix M: Capstone Project Panel Honoraria (Form 10))*



University of Cebu  
College of Computer Studies  
Cebu City

Standard Form #10  
(for UC-CCS)

#### Honoraria for Proposal Hearing / Oral Defense Panel (Undergraduate Thesis/Capstone Project)

Date: 10-13-17  
Name of Lead Researcher: CHRISTINE MARIE P. PLARICAN  
College / Department: COLLEGE OF COMPUTER STUDIES  
Program / Course: BS IT  
Research / Project Title: GROCELINK! A WEB AND MOBILE PLATFORM FOR GROCERY SHOPPING

Date:	10-13-17
Name of Lead Researcher:	CHRISTINE MARIE P. PLARICAN
College / Department:	COLLEGE OF COMPUTER STUDIES
Program / Course:	BS IT
Research / Project Title:	GROCELINK! A WEB AND MOBILE PLATFORM FOR GROCERY SHOPPING

Position	Honorarium	Name	Conformed
Adviser	PHP800.00	TEODORO AVERGONZADO JR., MSC	
Chairman	PHP500.00	DR. MELVIN M. NIÑAL, PhD	
Panel Member 1	PHP400.00	NEIL A. BACABE	
Content Expert/Statistician	PHP400.00	EMELIE C. VILLACERAN, MIT	
Technical Editor / Censor	PHP400.00	LEAH B. YBANEZ	
Administrative Fee	PHP500.00		

Prepared by:

CHRISTINE MARIE PLARICAN

Name & Signature of Lead Researcher

Research Class Instructor

Noted by:

BELL CAMPANILLA

Program Research Coordinator

DR. MELVIN M. NIÑAL

College Dean

Approved by:

JONATHAN O. ETCUBAN, PhD

Campus Research Coordinator

JONATHAN O. ETCUBAN, PhD

University Research Director

Vice Chancellor for Academic Affairs