



**PasHub: Online Application Finder
for Pasalubong Center Using Google Map API**

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We, **CRISTILYN L. ALGABRE** and **HAYMA T. USMAN** declare that this Capstone/Thesis is our own original work. Most stipulations presented herein and ours alone. Borrowed ideas are given due recognition and are properly acknowledged. With the best ability, this investigation was treated with utmost care to adhere internationally known standard/policies on academic integrity.

We attest further that this piece of academic requirements has not been submitted previously for an academic credit in this or any other courses.

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APPROVAL SHEET

The BSIT Capstone project herein attached entitled "**PASHUB: ONLINE APPLICATION FINDER FOR PASALUBONG CENTER USING GOOGLE MAP API**", prepared and submitted by **CRISTILYN L. ALGABRE** and **HAYMA T. USMAN**, we're hereby recommended for approval and acceptance.

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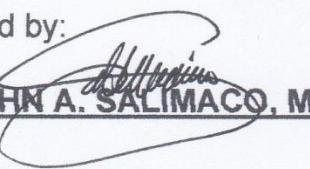
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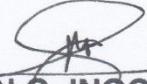
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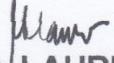
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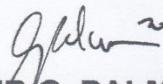
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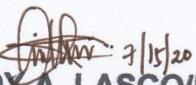
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FOR PASALUBONG CENTER USING GOOGLE MAP API

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ABSTRACT

Pasalubong, for Filipinos all over the world is a familiar word for a well-known and well-respected token. It is a symbol of gratitude and thoughtfulness. This popular "homecoming gift" is a time-honoured custom, but never a mandatory gesture and considered as a practice that strengthens the bond with relatives and warms the family's spirit. When filipino tourists are unfamiliar with the place that they are into, they find it difficult to look for a pasalubong center causing them to spend a lot of money and time. Aside from that there are also some of the filipino tourists who easily get lost since they have no sense of direction specially when they tend to do searching manually for pasalubong. Moreover, the tourist cannot easily choose pasalubongs that they want to buy without checking and comparing them at the same time. To lessen the burdens of the tourists the developers have created an online application with the use of google map API which offers satellite imagery, aerial photography, street maps, 360° interactive panoramic views of streets (Street View), real-time traffic conditions, and route planning for travelling by foot, car, bicycle and air (in beta), or public transportation that would help them overcome those factors that hinders them from looking for pasalubong centers.

Keywords: Google Maps

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CHAPTER I

INTRODUCTION

1.1 Rationale of the Study

Travelling for work, study, relaxation, or vacation is good. To see magnificent tourist's spots are good to the eye but to be away from home and away from the family for the mean time brings nostalgic feeling and to somehow satiate the feeling we tend to get ourselves busy buying gifts and tokens for the family. Considering the Filipino culture of close family ties, handing out presents upon returning home is a way of maintaining good relationship among family or friends. This is a way of saying they were remembered even when you were away.

Pasalubong, for Filipinos all over the world is a familiar word for a well-known and well-respected token (Luib, 2013). It is liberally translated the name which means "a gift to family, relatives and friends after coming back ". It is a symbol of gratitude and thoughtfulness; it highlights the relief of being back in good health and safe after spending some time away from home and the happiness when reunited with the family. This popular "homecoming gift" is a time-honoured custom, but never a mandatory gesture, however, failing to bring pasalubong can sometimes be felt as a great dissatisfaction, because giving and sharing was considered as a practice that strengthens the bond with relatives and warms the family's spirit.

When tourists are unfamiliar with the place that they are into, it is very difficult to look for a pasalubong centers. It often wastes their time when looking for pasalubong centers. Aside from that, it will also cost a lot of money because the tourists will surely spend some of it just to look for pasalubong center that will fit to their taste. Moreover, the

tourist cannot directly choose those pasalubongs that the tourist want to buy without checking it up and comparing it to the same type of pasalubong that the tourist want to buy at the same time. All pasalubong centers differ from the price of the goods that they sell even though they are with the same product. The tourist cannot do this with in just a short period of time.

Currently, the type of system that is commonly being used by the tourist is through websites. The tourists search for possible pasalubong centers before their flight. Another one is through primitive way of knowing the place through pamphlets, magazines and through asking questions with people residing on that place. Some of the tourist after arriving in the place that they want does not really fancy surfing on websites for a long period of time just to look for a pasalubong shopping center. They tend to do searching manually which takes too much time and money on their part.

1.2 Purpose and Project Description

The project entitled "**PasHub: Online Application Finder for Pasalubong Center Using Google Map API**" ambitions to provide efficient and effective directions as well as reliable information. It provides information coming from the previous users who visited and bought products from different pasalubong centers. It also gives rating base on the feedbacks from the previous users. The said Online Application helps the user to decide on where pasalubong centers should the user go base on the user's budget.

The researchers developed an Online application that generates directions and locations of pasalubong centers to help the user look for possible pasalubong centers nearby the user's location. With this Pasalubong Hub Online Application, it locates the user's current location and automatically generates pasalubong centers nearby. The user can now select his chosen pasalubong center just by clicking the map marker. The

Pasalubong Hub Online Application also helps the user to decide where pasalubong centers to buy base on the affordability of the product and the budget that the tourist will spend.

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of this study was to guide the users and help them choose a nearby pasalubong center within the users' location as well as to let them choose pasalubong products base on its affordability and availability.

1.3.2 Specific Objective

1. Design and develop an online based application finder for pasalubong center called "PasHub" which will be capable of:

- Allowing the user to navigate the map.
- Generating nearby pasalubong center within the user's location.
- Searching products from different pasalubong centers.
- Filtering products base on its price.
- Allowing the user to compare products at the same time as well as to view the ratings and feedbacks of the searched products.

2. Evaluate the PasHub in order to determine if it complies with the

ISO 9126 standards.

3. To prepare an implementation plan for the deployment of the PasHub.

1.4 Significance of the Study

The pasalubong center is an integral part of the travel, its important component of the tourist experience and most tourists love to bring mementos and souvenirs with remembrances to preserve and commemorate such experiences. Pasalubong center owners may benefit from identifying best product that differentiate them to the other stores and makes their marketing strategy more appealing to visitors/tourists. This may provide useful guidelines for implementing changes to improve their marketing strategy and to be known to other cities or provinces.

1.5.1 Scope

The following are the scope of the application that:

- Allows the users to look or the pasalubong products easily and quickly.
- Suggests for possible pasalubong centers near the user's location.
- Filters pasalubong products base on prices bracket.
- Allows the user to navigate the map.
- Allows the user to view the ratings and reviews from the other users.
- Has two accounts-one for the user and the other for the pasalubong center admin.
- All products provided by the application is limited to pasalubong products only.
- Made to order can be done through private message present from the application itself.
- User must register online.

1.5.2 Limitation

The following lists were functions not included in the system:

- The user must have an internet or data connection enable to use the app.
- The application does not include payment and add to cart but it can reserve pasalubong products within 12-hour timeframe.
- Pasalubong centers that are present in the application are all located in Davao Oriental only.

1.6 Conceptual Framework

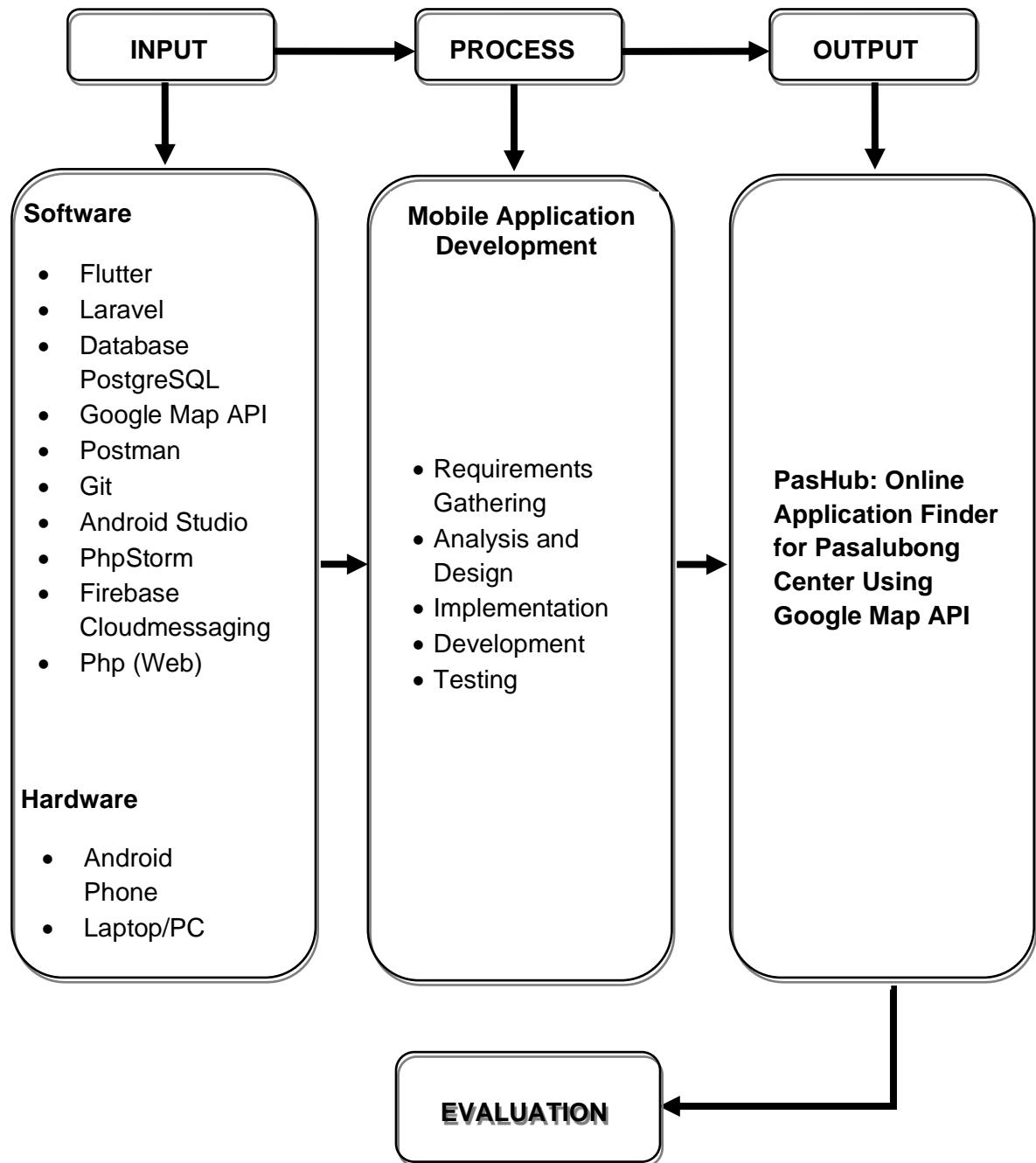


Figure 1.1: Input, Process and Output

The figure above showed the conceptual framework of its concepts and development of the application and showed the flow from user's input, process and output.

The developers used the following inputs such as Flutter, a Google's mobile application SDK that is based on Dart, its programming language helped the developers to have an easy way building and deploying visually attractive and fast mobile app on both iOS and android platforms; Laravel a web application framework that was useful in creating the web application; PostgreSQL for the database; Google Map API for detailed information about geographical region sites around the world that was useful to the application; Postman, PhpStorm and Git for interacting with HTTP APIs and tracking source code during software development; FirebaseMessaging for displaying notifications and messages and lastly the Android Studio for the development of the mobile application.

During the development of the application the developers have undergone requirements gathering, Analysis and Design. Lots of Data and information were collected and studied to come up, design and build the desired application. Through the help of the inputs and outputs mentioned above, the developers created a friendly user online application. The developed application can only be opened in an android based phone. In order to use the android application, the public users must install the application to the mobile phones. The user will need to register to have an account to fully access the application.

1.7 Definition of Terms

Mobile Application – is a software application developed specifically for use on small, wireless computing devices, such as smartphones and tablets, rather than desktop or laptop computers (Rouse, 2013).

Android Phone – is a powerful, high-tech smartphone that runs on android operating system (Kumar, 2018).

Hub—Business hubs are developing trend globally to ensure entrepreneurs, business startups, self-employed people and small business owners have a low-cost option to creating, developing and maintaining a sustainable business. A type of innovative hub created, designed, managed and maintained and financially supported by a form of national, regional or local government working in partnership with public sector, private sector and voluntary sector organizations (MC Harmonious, 2016).

Google Map API – allow for the embedding of Google Maps onto web pages of outside developers, using a simple JavaScript interface or a Flash interface. It is designed to work on both mobile devices as well as traditional desktop browser applications (Jamie Griffiths, 2018).

CHAPTER II

REVIEW OF RELATED LITERATURE

2.1 Technical Background

The proponents have used different application during the development of the system and these were the following:

2.1.1 Android Platform

The current most popular systems are Google's Android, it has the highest market share of the approximately 83%. Android is an open source mobile operating system developed by Google. The Android marketplace continues to grow at an aggressive rate, and a great number of powerful applications are uploaded on a daily basis (A.M.Muharumet.al ,2017).

2.1.2 Flutter

Flutter is Google's mobile app SDK (Software Development Kit) for crafting beautiful, natively compiled applications for mobile, web, and desktop from a single codebase. Complete with a framework, widgets, and tools, which gives developers an easy way to build and deploy visually attractive, fast mobile apps on both Android and iOS platforms. Flutter enables a smooth and easy cross-platform mobile app development. It is a free and open sources based on Dart – a fast, object-oriented programming language which is in itself and is easy to learn (FAQ - Flutter. Retrieved 2018-08-08).

2.1.3 Google Map API

An API is a set of methods and tools that can be used for building a software application. Google Map API can be used for locating the searched Pasalubong Centers and its route guide for the customers.

The Google Maps API allow for the embedding of Google Maps onto web pages of outside developers, using a simple JavaScript interface or a Flash interface. It was designed to work on both mobile devices as well as traditional desktop browser applications. The API includes language localization, region localization and geocoding, and has mechanisms for enterprise developers who want to utilize the Google Maps API within an intranet (Pwtempuser, 2017).

2.1.4 Laravel

Laravel is a web application framework with expressive, elegant syntax. Laravel attempts to take the pain out of development by easing common tasks used in the majority of web projects, such as authentication, routing, sessions, and caching. Laravel is accessible, providing powerful tools needed for large, robust applications. An inversion of control container, expressive migration system, and tightly integrated unit testing support give you the tools you need to build any application with which you are tasked (Laravel Documentation (versions 3.0–3.2.14), 2014).

2.1.5 Database PostgreSQL

PostgreSQL also known as Postgres, is a free and open-source relational database management system (RDBMS) emphasizing extensibility and SQL compliance. It was originally named POSTGRES, referring to its origins as a successor to the Ingres database developed at the University of California, Berkeley. In 1996, the project was renamed to PostgreSQL to reflect its support for SQL. PostgreSQL features transactions with Atomicity, Consistency, Isolation, Durability (ACID) properties, automatically updatable views, materialized views, triggers, foreign keys, and stored procedures. It is designed to handle a range of workloads, from single machines to data warehouses or Web services with many concurrent users. It is the default database for macOS Server, and is also available for Linux, FreeBSD, OpenBSD, and Windows (PostgreSQL: Downloads. Retrieved 04-12-19).

2.1.6 Postman

Postman is a Google Chrome application for interacting with HTTP APIs. It presents you with a friendly GUI for constructing requests and reading responses. The people behind Postman also offer an add-on package called Jetpacks, which includes some automation tools and, most crucially, a Javascript testing library. Postman is a great tool for prototyping APIs, and it also has some powerful testing features. Organize your workflow around your API with Postman's new API features. Postman is a powerful HTTP client for testing web services. Postman makes it easy to test, develop and document APIs by allowing users to quickly put together both simple and complex HTTP requests. Postman is available as both a Google Chrome Packaged Application and a Google Chrome in-browser app.

2.1.7 Git

A software that runs locally and is the most commonly used version control system. Git tracks the changes you make to files, so you have a record of what has been done, and you can revert to specific versions should you ever need to. It makes the collaboration easier, allowing changes by multiple people to all be merged into one source storing your files and history on your computer. Git can automatically merge the changes, so two people can even work on different parts of the same file and later merge those changes without losing each other's work. Having a centrally located place where you can upload your changes and download changes from others, enable you to collaborate more easily with other developers (Chacon et al., 2015).

2.1.8 PhpStorm

PhpStorm is a commercial, cross-platform IDE (integrated development environment) for PHP, built by the Czech Republic-based company Jet Brains. PhpStorm provides an editor for PHP, HTML and JavaScript with on-the-fly code analysis, error prevention and automated refactorings for PHP and JavaScript code. PhpStorm is written in Java. Users can extend the IDE by installing plugins created for PhpStorm or write their own plugins. The software also communicates with external sources like XDebug (Gajda 2013).

2.1.9 Firebase CloudMessaging

Firebase Cloud Messaging (FCM), formerly called Google Cloud Messaging (GCM), is a free cloud service from Google that allows application developers to send notifications and messages to users across a variety of platforms, including Android, iOS and web applications. FCM is provided by Firebase, a company acquired by Google in 2014. FCM allows software developers to send push notifications for their applications to end users through an application programming interface (API). With push notifications, the cloud service acts on behalf of the application and only connects to the mobile device when there are new notifications (Firebase, 2020).

2.1.10 Php

PHP is a server side scripting language. that is used to develop Static websites or Dynamic websites or Web applications. PHP stands for Hypertext Pre-processor, that earlier stood for Personal Home Pages. PHP scripts can only be interpreted on a server that has PHP installedWhat distinguishes PHP from something like client-side JavaScript is that the code is executed on the server, generating HTML which is then sent to the client. The client would receive the results of running that script, but would not know what the underlying code was. You can even configure your web server to process all your HTML files with PHP, and then there's really no way that users can tell what you have up your sleeve (Php.net 2020).

2.2 Related Literature

Through collection of studies and literatures with relation to the study that would significantly help in the conduct of this study. And these are the existing related studies associated to this study.

Philippines is an island country located on Southeast Asia in the western Pacific Ocean. Philippines Archipelago which consists of 7,107 islands and islets lying about 500 miles (800 km) off the coast of Vietnam. Manila being its capital city is the country's most populous city. Both are part of the National Capital Region (Metro Manila), located on Luzon, the largest island. The second largest island of the Philippines is Mindanao, in the southeast (Borlaza et.al, 2019).

Tourism plays a vital role in the Philippine economy. The country boasts of rich iconic natural beauty in its many remarkable beaches, fine sunny weather and rich biodiversity. More than that, the Philippines' unique and complex culture, as represented by its people, cuisine and lifestyle, which fascinates many people to visit the country. The archipelagic nature of the Philippines, as well as its colonial heritage, compromises a wealth of picturesque views that attracts both locals and foreigners to participate in tourism-related activities. According to the Department of Tourism (2011), the tourism industry in Philippines is one of the three largest industries in the country.

Shopping had become one of the main tourist activities throughout the tourist expenditures. Previous research has found that shopping tourists stay longer at a destination and spend approximately three to four times more than relaxation tourists. Shopping is becoming an increasingly relevant component of the tourism value chain. Shopping has transformed into an element factor affecting destination choice and is said to be an important component of the overall travel experience, in some cases the main

travel inspiration. Destinations thus have an enormous opportunity to influence this new market trend by developing authentic and unique shopping experiences that add value to their touristic offer while reinforcing, and even, defining their tourism brand and positioning. More importantly, shopping is one of the major categories of tourists' expenditure that represents an important source of income for national economies. Both directly and through the many linkages to other sectors in the economy.

As a tourist, a person does not need to think about their job or any other obligations at work or home. The tourist gains fulfilment from the shopping experience, separate from the purchase of products. Tourist shopping is not only limited to souvenirs but also includes purchases of arts and crafts, clothing, books, jwelleries and electronics. Typically, tourists do not go shopping with a just a specific list; rather shopping becomes a by-product of their travel experiences. Tourists spend roughly one-third of their total expenses on shopping purchases only spending more on their accommodations. When shopping, tourists base their buying decisions on several factors. Research finds, that tourist looks for high-quality and well-designed products.

Many tourists will spend more money on purchasing an item while they are away from home, so they see to it that they get the highest quality item possible. Tourists feel that when purchasing an item, it must be from a well-known manufacturer and therefore, look to find well-known brand names or logos when shopping. These well-known products are trademarks with which they are familiar with; in that way they feel confident in their purchase judgements.

Research shows that tourist shoppers aim for unique products that are rare or unavailable at home or unique to the tourist destination. The unique quality of the product boosts the tourism experience by giving the tourist a special memory about their trip which

allows them to positively recollect about the experience they had while they were travelling.

However, whether or not this characteristic is generalizable to all shopping formats is questionable. Uniqueness of the product is significant to tourist shoppers that prefer to look for shopping centers in local retail areas than in famous shopping centers at a specific place. Many shopping centers are similar from location to location. Thus, shoppers of shopping centers may not expect to find unique retail storefronts.

For travelers, shopping is the number one trip activity for both local and international vacationers and for many of that trip is incomplete without having spending time in shopping. 34 percent of all trips by US tourists include shopping as an activity. However, the significance of shopping as a tourist activity is not well represented in the literature. Some finds that the travel industry define people who travel as visitors. These tourists are persons who travel outside their usual environment for vacation, business, or other purposes, at which point the act of travelling becomes tourism. Tourism is the activities of individuals who likes to travel to different places and stay in places outside their usual environment. Tourists are momentary visitors to a destination and will go back to their permanent homes after travelling. As travelling increases, same goes with shopping. With many selections offered to travelers today, shopping currently accounts for 33 percent of all trips taken in the USA ,followed by outdoor activities (17 percent), visits to historical sites and museums (14 percent), and travel to beaches, cultural events, and festivals, and national/state parks (10 percent each). Tourists are also spending cash when they travel.

2.2.1 Review-Related Systems

2.2.1.1 Trivago (Web-Based)

Trivago is a leading global hotel search platform focused on reshaping the way travelers search for and compare hotels and alternative accommodations. Incorporated in 2005 in Düsseldorf, Germany, the platform allows travelers to make informed decisions by personalizing their hotel search and providing them access to a deep supply of hotel information and prices. Trivago enables its advertisers to grow their businesses by providing access to a broad audience of travelers via its websites and applications. As of June 30, 2018, Trivago has established 55 localized platforms connected to over two and a half million hotels and alternative accommodations, in over 190 countries.

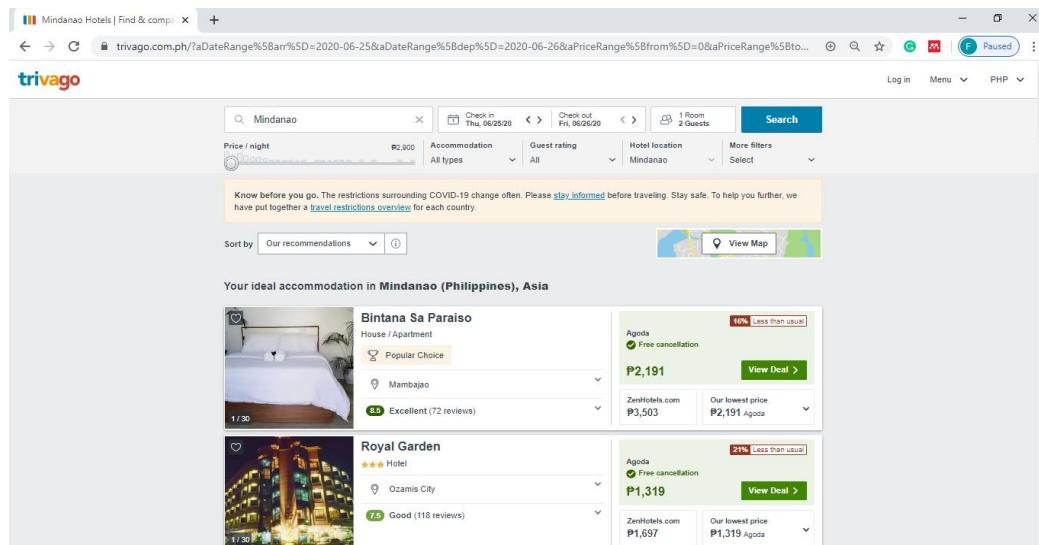


Figure 2.1 “Trivago Website Homepage” (Trivago, n.d)

2.2.1.2 Lazada (Web-Based & Mobile Application)

Lazada is a Southeast Asia's number one leading online shopping and selling destination, with presence in Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. It is a pioneering eCommerce that provides its customers with an effortless shopping experiences through mobile and web access. Lazada features an extensive product offering in categories ranging from consumer electronics to household goods and fashion.



Figure 2.2: Lazada Web-Based & Mobile Application (Lazada Philippines, n.d.)



2.2.1.3 Agoda

Agoda.com, Asia's global hotel booking site and part of Nasdaq-listed Priceline Group (Nasdaq: PCLN) is a mobile application that allows user to book hotels on-the-go) including immediate access to more than 160,000 hotels worldwide, instant confirmation on bookings. The application has the ability to search hotels by current location. With more than 21,000 hotels and resorts in Asia alone, the agoda.com android app gives travelers access to deals that aren't offered on other sites allowing even more smartphone users to. Users can flick through hotel photos, check property facilities and read authentic customer reviews to find exactly what they need. By the time they arrive, their confirmation voucher is in their inbox, ready to present on check-in.

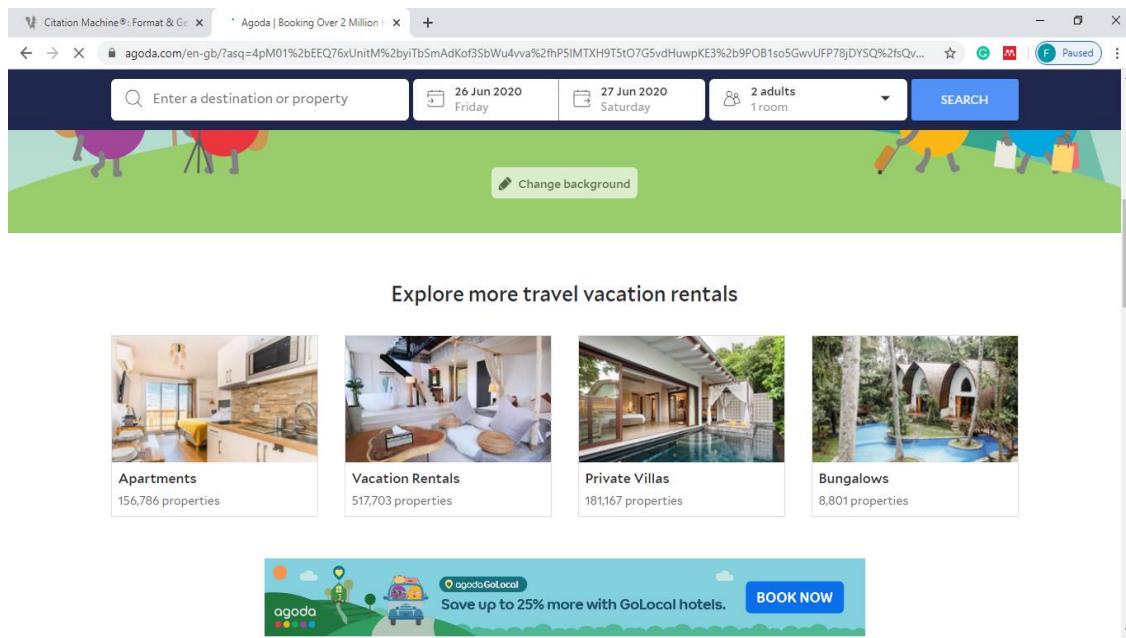


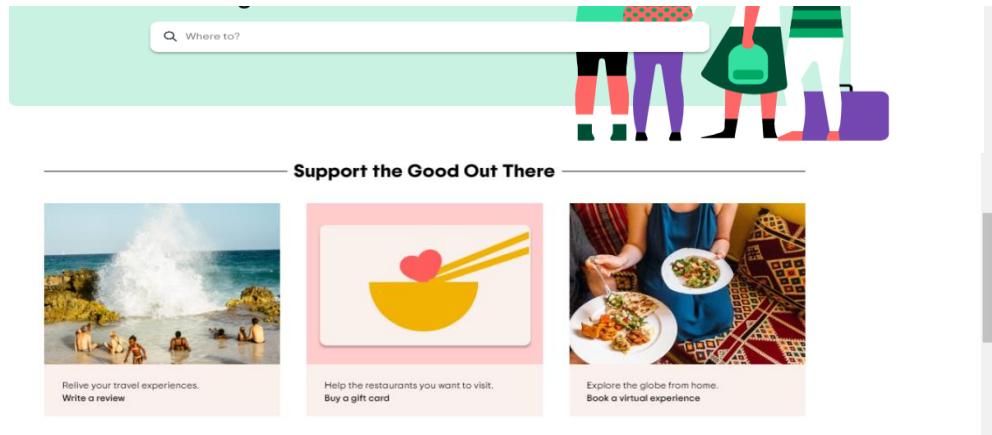
Figure 2.3: Agoda Website Homepage (Agoda, n.d)

2.2.1.4 TripAdvisor

TripAdvisor is an American travel and restaurant website company that shows hotel and restaurant reviews, accommodation bookings and other travel-related content. It also includes interactive travel forums. TripAdvisor is the largest "social travel website" in the world, with about 315 million reviewers (active and inactive) and over 730 million reviews of hotels, restaurants, attractions and other travel-related businesses. TripAdvisor was an early adopter of user-generated content. The website services are free to users, who provide most of the content, and the website is supported by a hotel booking facility and an advertising business model.



Figure 2.4: Tripadvisor Website Homapage(Tripadvisor, n.d)



2.3 Synthesis

From technical background to related literatures up to the related systems mentioned above, the proponents learned a lot that there would be a lot of factors to consider in creating the application. The proponents learned that there is a lot of approach that could help the tourist to enjoy their vacation and to shop anywhere they want within their budget target.

Based on the concepts mentioned above, the proponents come up with the idea of creating an application entitled “PasHub: Mobile Application Finder for Pasalubong Center Using Google Map API”, an application that would be beneficial for the tourist during with their short vacation.

CHAPTER III

MATERIALS AND METHODS

3.1 Software Methodology

The methodology meant for software development is considered as a structure used for planning and controlling the procedure of creating a specialized information system. In this study we conduct a series of researches and observation in different settings which can contribute to the clear understanding of the study where in the researches have noticed the need for precise and easy to use reference material for **PasHub: Online Application Finder for Pasalubong centers using Google Map API.**

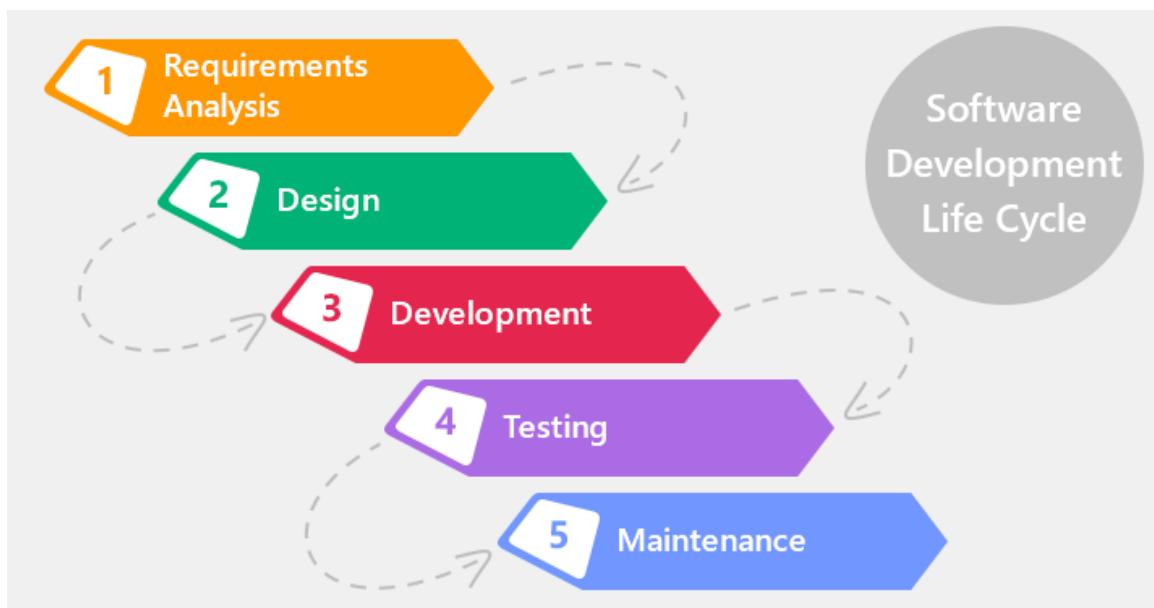


Figure3.1: Waterfall Methodology (Svetlana Gordiyenko, 2014)

In developing the proposed system, the proponents used the Waterfall Methodology to develop the system, this process would serve as guiding principle in getting the system done. In a Waterfall Methodology, it is very simple to understand and

use. Each phase must be completed before the next phase can start. At the end of each phase, a review takes place to determine if the project is on the right path and whether or not the project should be continued. Here phases do not overlap with each other. In Waterfall model there will be no involvement of customer, only at the beginning of the project the customer is involved. After the whole project is completed the project is given to the customer, until then there will be no involvement of the customer.

The proponent started with Requirement Gathering and Analysis. At this phase, it is important to document all the requirements for the desired software and it should allocate sufficient time specially in conducting extensive interviews with stakeholders. It is better to arrange all incoming data, analyze them, consider all technical limitations that may arise on the client's side, and come out with a ready-to-follow specification to meet the client's needs. Another thing to consider is any constraints that may hinder the development process, such as client's time and budget constraints.

The next step is System Design the proponent involves in the creation of a project scope document with mock-ups, and will start to build the system through creating a program codes, database and choosing the appropriate design.

The next step is Implementation Phase the proponent will implement the design or model being used for the system. Execution covers all the processes in getting new software operating properly, including installation, and running the system. So in this step the system is already developed and installed. The researchers will be using the Google's Map API to be able to provide a reliable and precise map of the public user's location.

After that is Testing Phase. At this phase, the proponent will undergo a test to check the functionality of the whole design and its construction. If there are any errors then

they will surface at this point of the process. The researchers will gather public users to test the system for the research to be able to test and see the status of the system.

Lastly, is the Releasing Phase, once the proponents are done with running, testing and implementing the system, it will be now released and introduced to the clients or end-users as a finished product.

3.2 Requirements Analysis

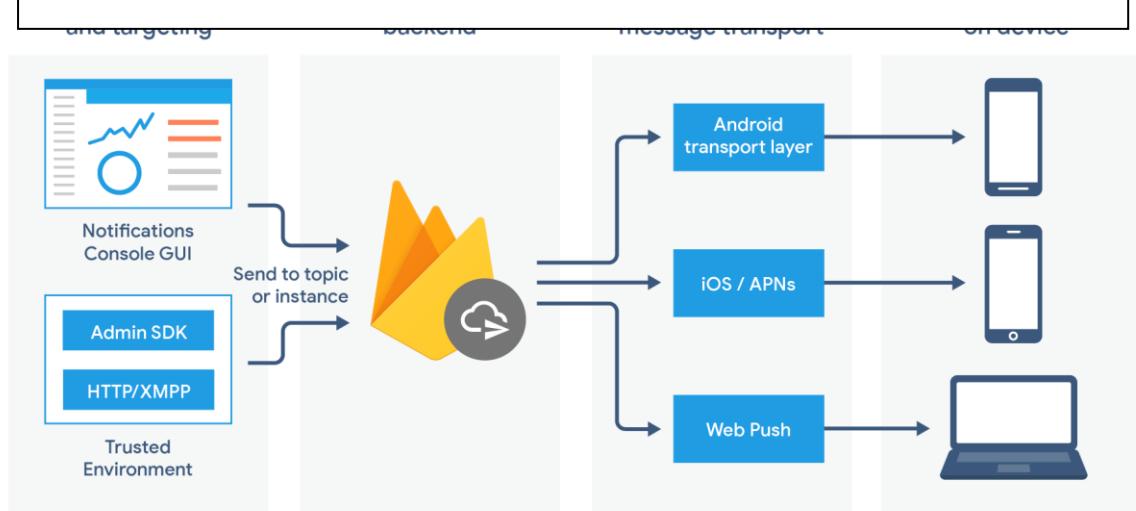
3.2.1 Documentation of the Current System

Some tourist or travelers are having hard time finding or searching for pasalubong centers. The means of finding any pasalubong centers was by asking one of your friends or any relatives nearby your destination if they know any possible pasalubong center accessible in the area. Some are updates through ads via online; some are through fliers, leaflets, pamphlets, magazines and posters.

3.3 Requirements Documentation

3.3.1 System Architecture

Figure 3.2: “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” System Architecture



This figure shows the flows of the mobile and web application that would assistance the public. This application composed of Message building and targeting, FCM backend, Platform-level message transport and SDK on devices this architectures would become the main interface that the user can interact with this application.

3.3.2 Requirements Specification

The project is an android and web application that intends to give help to the public users and establishment owners especially to the tourist/s that needs to bring pasalubong to their family, friend/s and loved ones and to the establishment owners that can promote their establishment through this application. This application does automatically suggest and find nearest pasalubong center establishment within the vicinity of Mati City along with its data/information which is real time or receives newest updates done from the web. Using web portal and android application requires an internet connection to be able to access accounts and to successfully view the application. The android application also includes navigation that displays the actual location/mapping.

3.3.2.1 Product Perspective

The project is an android and web application that intends to give help to the public users and establishment specifically to the tourist or the balik-bayan that wishes to buy a pasalubong for their family, friends and loved ones. This project was developed in an advanced and better way by using current technology such as application software. The application suggests nearest establishment from the users current location along with its navigation and it is updated real time. Using the android phone with the internet connection to navigate and see the actual location/mapping of the pasalubong centers establishments.

3.3.2.2 Product Features

The researchers provided different product features for users to interact while using the application and to be able for the application to function according to its objectives.

3.3.2.2.1 Mobile and Web Application

This feature can be used as a user interface, as it provides interactions with the user. It serves as the main user interface of the project, as the modern society now has mobile and even desktop devices such as laptop or personal computer (PC) that can be used as a mediums of the application and it is also programmed to run on mobile phones that are handy and easy to use and Laptop/desktop devices that easy to use as well.

3.3.2.3 User Classes and Characteristics

The users of this project are those who have a hard time finding a pasalubong center near their current location hence the design and development of searching and finding pasalubong centers.

3.3.2.4 Operating Environment

The researchers used platforms and technologies in developing the project.

3.3.2.4.1 Software Components

In developing the application, it is more convenient for the developers to apply JavaScript in developing the proposed application. The developers also used Cordova and Ionic Framework to be able to setup Cordova the proponents used NodeJS. Google Maps are integrated to accomplish goals. In order to store and retrieve data, firebase database is used.

3.3.2.5 Design and Implementation Constraints

Some software has its own limit and constraints as this prevents and forbade the application to process the work that is not included in its functionality. For mobile application, it is only applicable on any android phone that had an OS version 4.4 up to the latest version, while in web application, though there are some browser that are still accessible like Mozilla Firefox, Internet Explorer but still Google chrome was highly recommended as the best browser because its functionality works well. For the internet connection, it should have a bandwidth of 1-2mbps and up for faster processing.

3.3.2.6 User Documentation

The researchers have provided a user manual of the application that would help for the users to understand and be guided on how to operate the application. (Refer Appendix Cpage).

3.3.2.7 Other non-functional requirements

The developers have provided different requirements to make sure the application satisfies the functionalities intended to its scope.

3.3.2.7.1 Safety requirements

In developing this application, the developer made sure that the devices do not consist of any dangerous or uncertain content that they created in two different applications for two different users; such as the public users and the establishment holder. In this technique, the confidential information of database is safe.

3.3.2.7.2 Security Requirements

To make sure that all Pasalubong Center that were being presented in the application were appropriate, the developers made sure that the devices do not consist of any unsafe or risky content that might lead the users to have a false information and meet the terms all the desires wanted, they automatically be included in the list of accredited Pasalubong Centers to be featured in this application.

3.3.2.7.3 Software Quality Attributes

The PasHub application has the following software quality attributes:

3.3.2.7.3.1 Reliability

In developing the project, the developer ensured that the application would not crash easily when doing functionalities programmed. The researchers tested it many times before uploading the application. The application was tested if it meets the functionalities required. The application was also tested with the help of the specific user for any bugs to ensure reliability.

3.3.2.7.3.2 Efficiency

The developers have studied different sources in developing the projects to ensure the efficiency of the application.

3.3.2.7.3.3 Usability

The developers have provided images and labels for the users to easily access the information on the PasHub featured in the project. The application was consists of messaging, and search engine. Also provided ratings for the specific PasHub being chosen. This ensured the usability of the system.

3.4 Design

3.4.1 Use Case Diagram

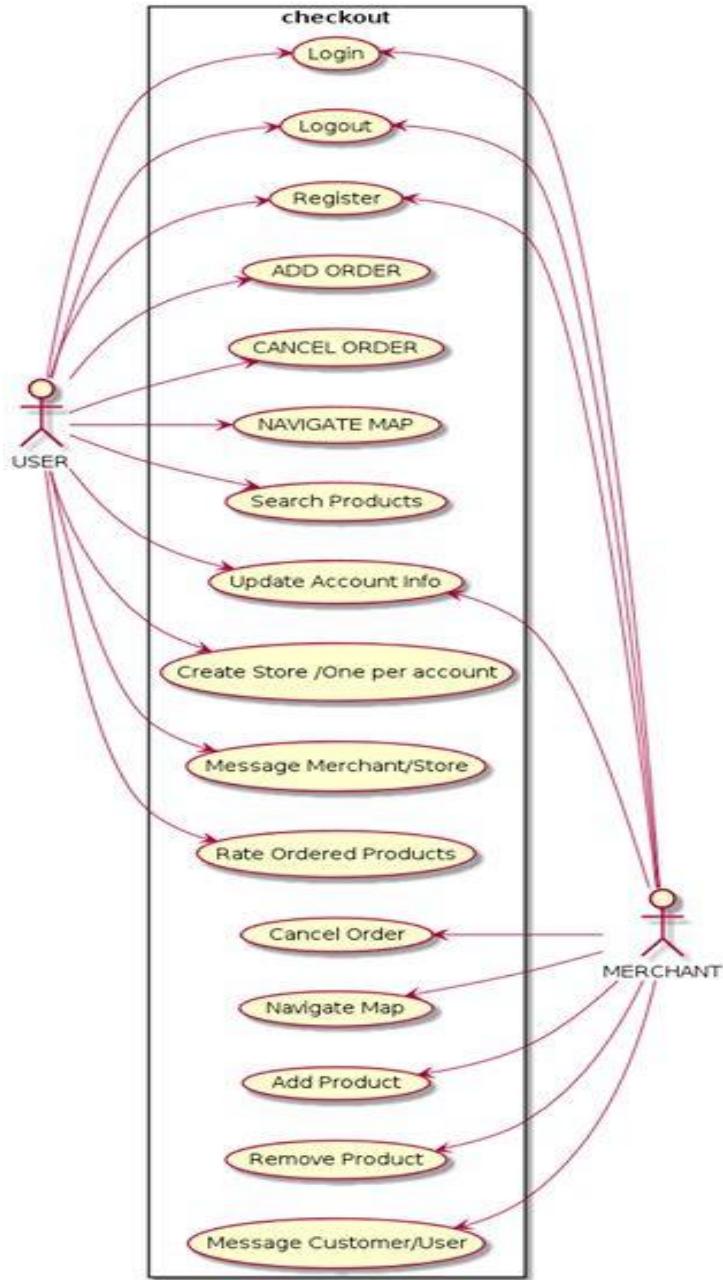


Figure 3.3: Use Case Diagram for **PasHub**: Online Application Finder for Pasalubong CenterUsing Google Map API

In this figure it showed the use case diagram for PasHub, it defined the scope of the system that provided the user to create an account and login features where in by means of google map API the user would view the shown pasalubong center according to its exact location, category, prices and other information of the application.

3.4.1.1 Use Case Descriptions

This showed the descriptions of the Use Case Diagram that was being used by the developers.

3.4.1.1.1 Create Account

The table below showed the specific process in Creating an Account:

Table 3.1: Create Account

Pashub: Create Account	
Actors	Owner/Merchant and User
Description	Both user can create an account using their personal information
Data	Users basic information like name, address, email and etc.
Stimulus	By clicking Sign-in
Response	The interface of Create account will be shown
Comments	The users must have an account in order to login to the application

3.4.1.1.2 Login

The table below showed the specific process in Login:

Table 3.2: Login

Pashub: Login	
Actors	Owner/Merchant and User
Description	Both user can login an account
Data	Users basic information like name, address, email and etc.
Stimulus	By clicking Login
Response	The interface of Create account will be shown
Comments	The users must have an account in order to login to the application

3.4.1.1.3 Add Order

The table below showed the specific process on how to add order:

Table 3.3: Add Order

Pashub: Add Order	
Actors	User
Description	The user can add/please an order according to their needs
Data	Information of the product like name, price & etc.
Stimulus	Clicked by the type of users
Response	It will be shown once it done
Comments	To check whether the order available or not

3.4.1.1.4 Add & Remove Product

The table below showed the specific process on how to add and remove product:

Table 3.4: Add & Removed Product

Pashub: Add & Remove Product	
Actors	Owner/Merchant
Description	The owner/merchant can add product to be viewed by the user and also can remove a product
Data	Information of the product like name, description, price, category, availability & etc.
Stimulus	Clicked by the type of users
Response	It will be shown once it done
Comments	The owner/merchant must add product in order to be shown in the list of products and removed a product base on its category and availability

3.4.1.1.4 Navigate Map

The table below showed the specific process of navigating a Map:

Table 3.5: Navigate Map

Pashub: Navigate Map	
Actors	Owner/Merchant and User
Description	Both users can view any suggested pasalubong center nearby their locations
Data	By the use of Google Map API
Stimulus	Clicked by the type of users
Response	List of pasalubong centers
Comments	The users must login in order to access the application

3.4.1.1.5 Search Products

The table below showed the specific process of searching any products:

Table 3.6: Search Products

Pashub: Search Products	
Actors	User
Description	The user can search for a specific product
Data	Name, price & etc.
Stimulus	Clicked by the type of users
Response	View all the possible product according to the specific product name and price
Comments	The users must login in order to access the application

3.4.1.1.6 Update Account Info

The table below showed the specific process on updating account information:

Table 3.7: Update Account Info

Pashub: Update Account Info	
Actors	Owner/Merchant and User
Description	Both users can Update their account/personal information
Data	Update Personal Information like Name, Address, Email & etc.
Stimulus	Clicked by the type of users
Response	The updated info will be shown
Comments	Both users must update their information in order to be shown in the interface

3.4.1.1.7 Create Store

The table below showed the specific process on how to create store:

Table 3.8: Create Store

Pashub: Create Store	
Actors	User
Description	The user can create a store but first they must create an account in order to access the application
Data	stores information, personal information & etc.
Stimulus	Clicked by the type of users
Response	Access the Application
Comments	To create a store there must be one store per account

3.4.1.1.8 Send Message

The table below showed the specific process on how to send message:

Table 3.9: Send Message

Pashub: Send Message	
Actors	Owner/Merchant and User
Description	Both users can send message to each other
Data	Message
Stimulus	By clicking message button
Response	Both users can send messages
Comments	They can message each other if there would be any changes with orders or any matters that are related to products

3.4.1.1.9 Rate Order Product

The table below showed the specific process on how to rate order product:

Table 3.10: Rate Order Product

Pashub: Rate Order Product	
Actors	User
Description	The users can rate and comment
Data	Message
Stimulus	By clicking rating button
Response	To show whether how much they love the product or the services
Comments	Not only for the product but also for the application if they satisfy their needs

3.4.1.1.10 Cancel Order

The table below showed the specific process of cancellation of order:

Table 3.11: Cancel Order

Pashub: Cancel Order	
Actors	Owner/Merchant and User
Description	The user and owner/merchant can cancel order
Data	Message
Stimulus	Clicked by the type of users
Response	Both users can cancel order
Comments	The owner can cancel an order base on the availability of the products while the user can cancel an order base on their matters

3.4.2 Entity Relationship Diagram

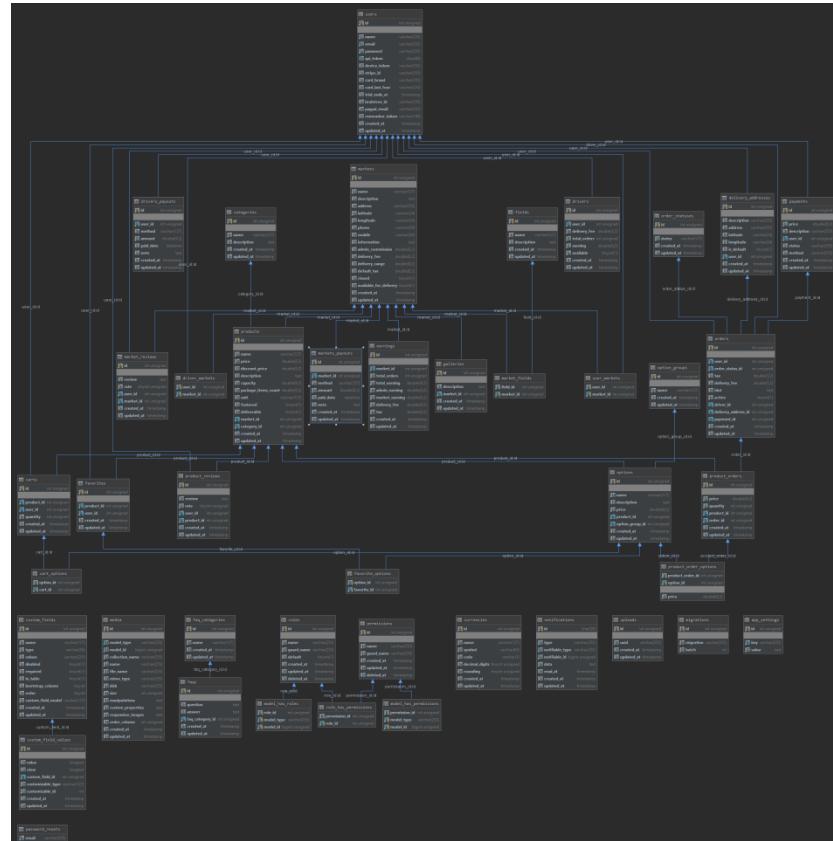


Figure 3.4.2 Entity Relationship Diagram (ERD) of PasHub

This figure showed the Entity Relationship Diagram (ERD) of PasHub. These diagrams was composed of tables that indicated the database structure to be easier to know the flow of retrieving and sending data from the application to the database.

3.4.3 Graphic User Interface (GUI) Design

This would show the possible mock-up design planned by the developers for the system to be developed.

3.4.3.1 Mobile GUI Design

The images below were the Mock-up design intended for the mobile and web application that were being used in finding/searching for pasalubong center/s. This application was the main interface of the system.

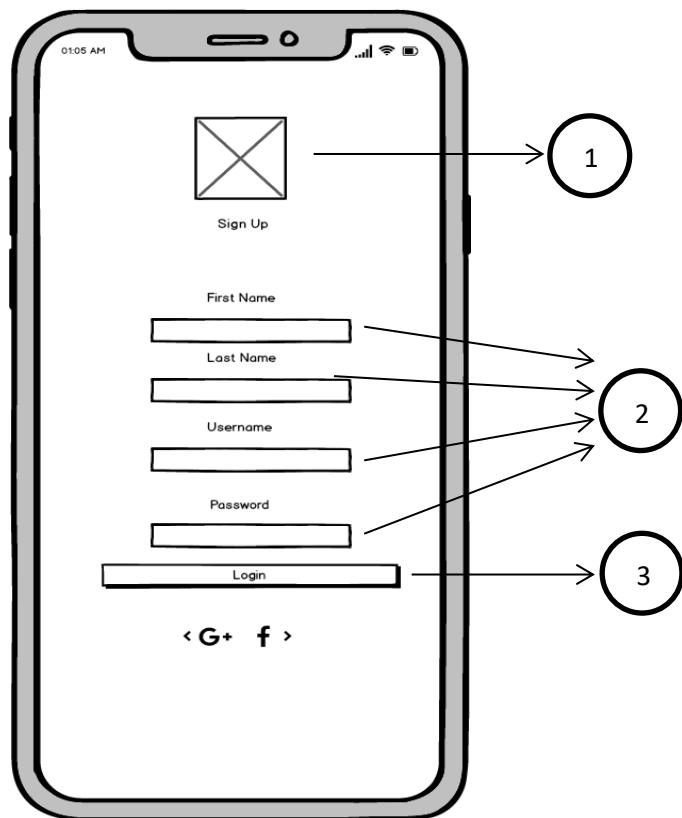


Figure 3.5: Registration Form

Table 3.12: Registration Form

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Text	Text Fields	Allows the user to input its Personal Information.
3.	Button	Login Button	Allows the user to login to the application.

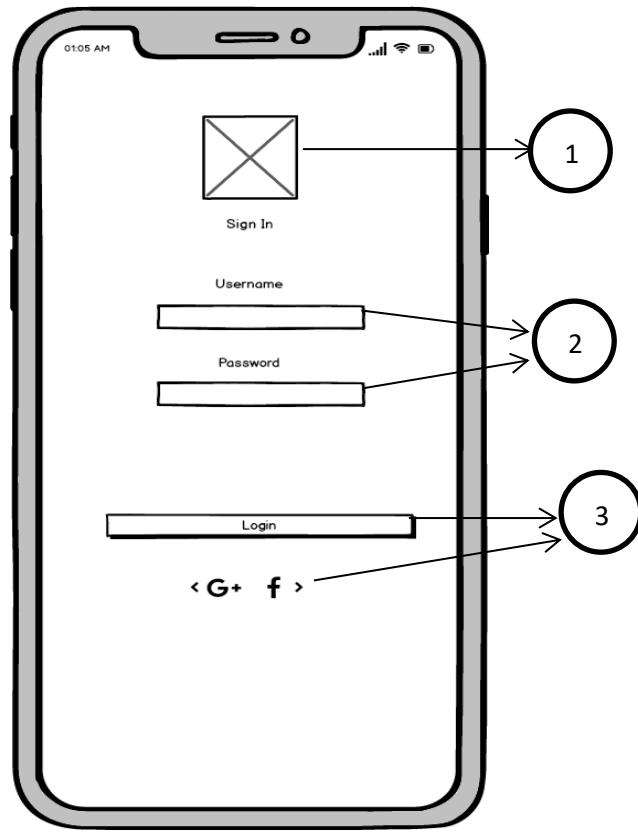


Figure 3.6: Login Form

Table 3.13: Login Form

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Text	Text Fields	This allows the user to input its Username and Password.
3.	Button	Login Button	This allows the user to login to the app. and it can link accounts.

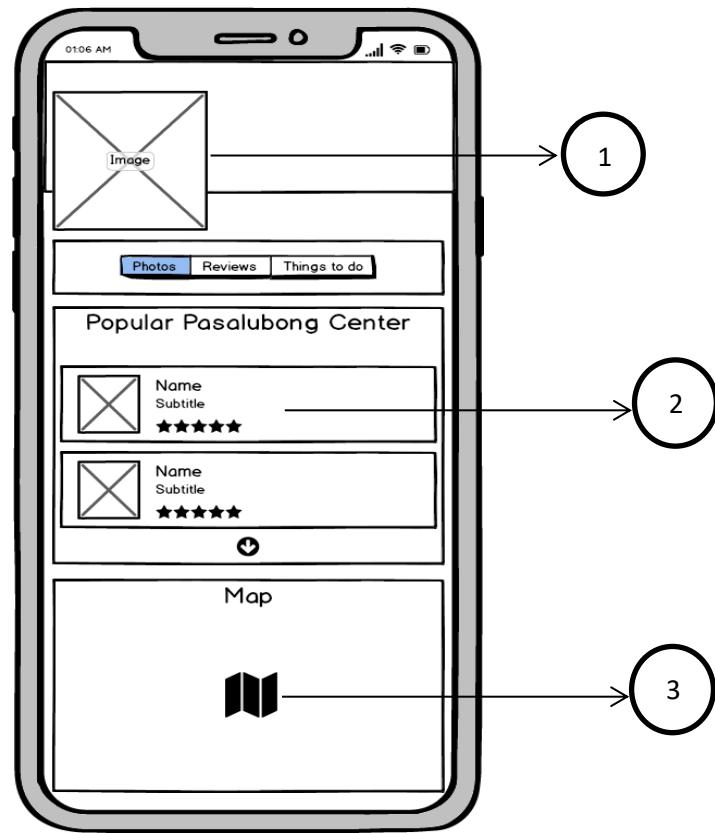


Figure 3.7: Profile

Table 3.14: Profile Form

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Panel	Profile List	This allows the user to view for the different pasalubong center.
3.	Display	Map	This allows the user to display and navigate.

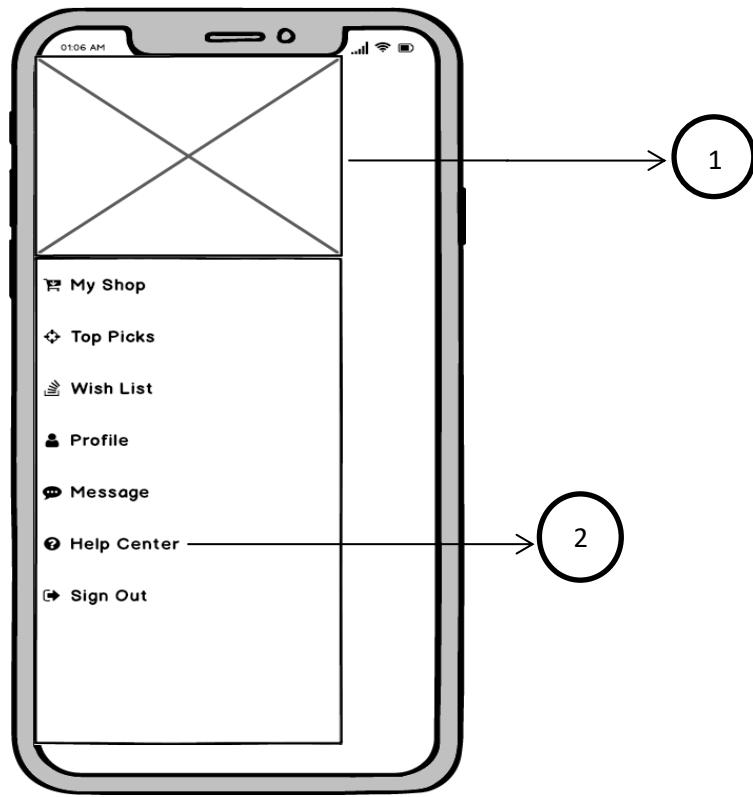


Figure 3.8: Menu Side Bar

Table 3.15: Menu Slide Bar

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Button	Text Fields	This allows the user to choose different Menu.

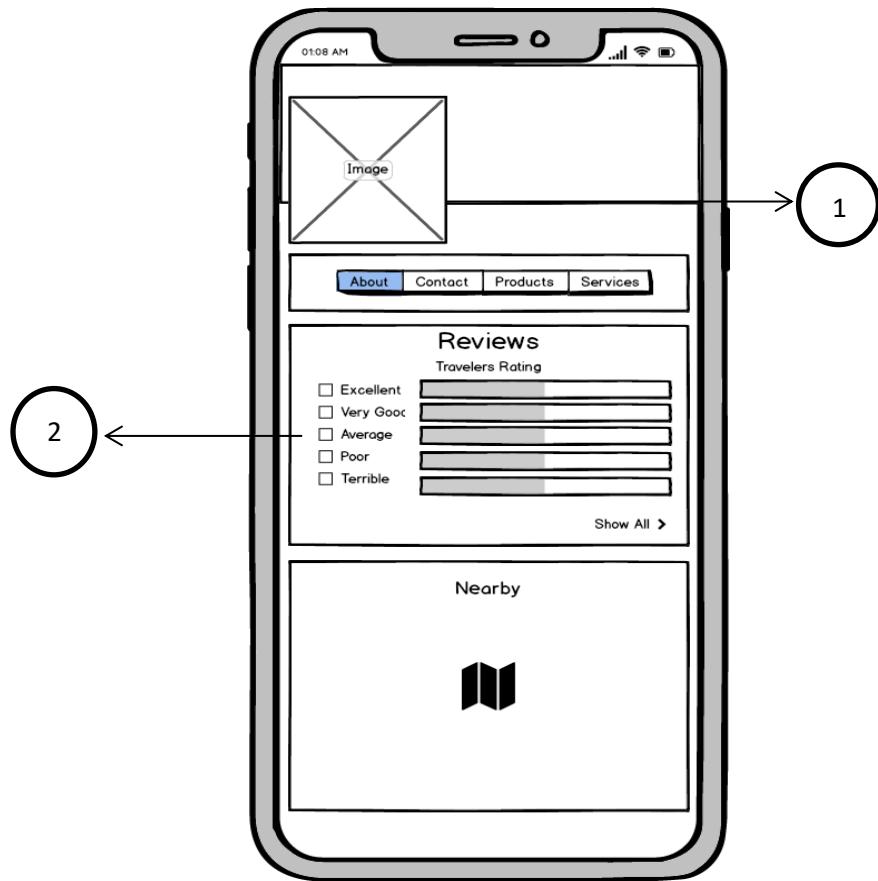


Figure 3.9: About Business

Table 3.16: About Business

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Checkbox Button	Reviews/Ratings	This allows the user to rate for their satisfaction while using the app.

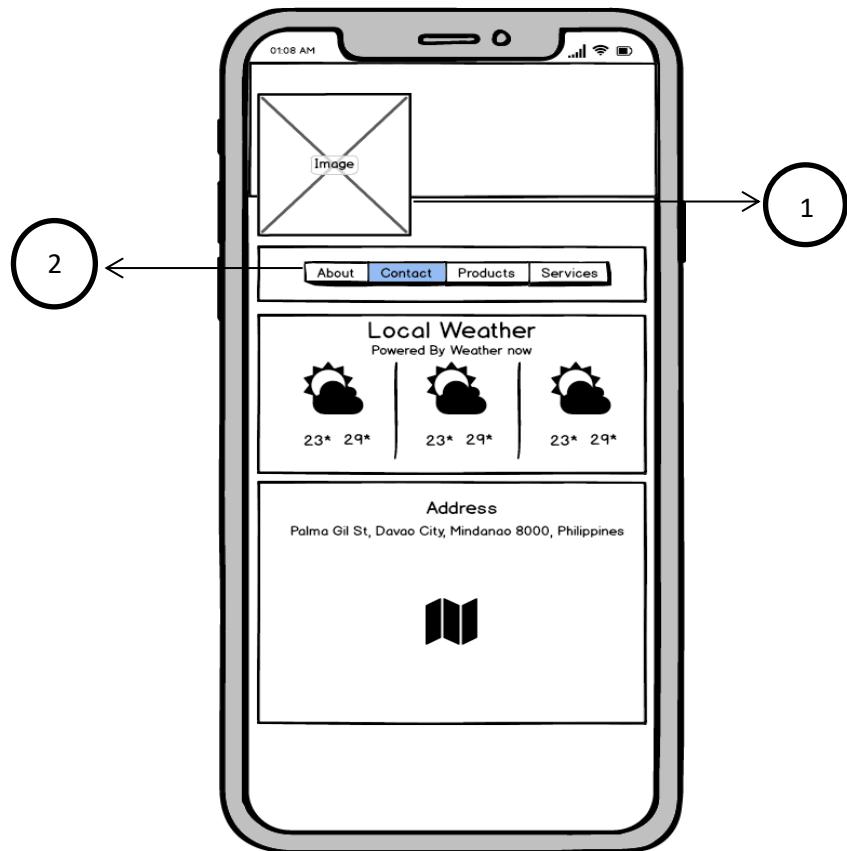


Figure 3.10: Contact

Table 3.17: Contact

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Display	LOCAL WEATHER AND ADDRESS	This allows the user to view for the weather and Address.

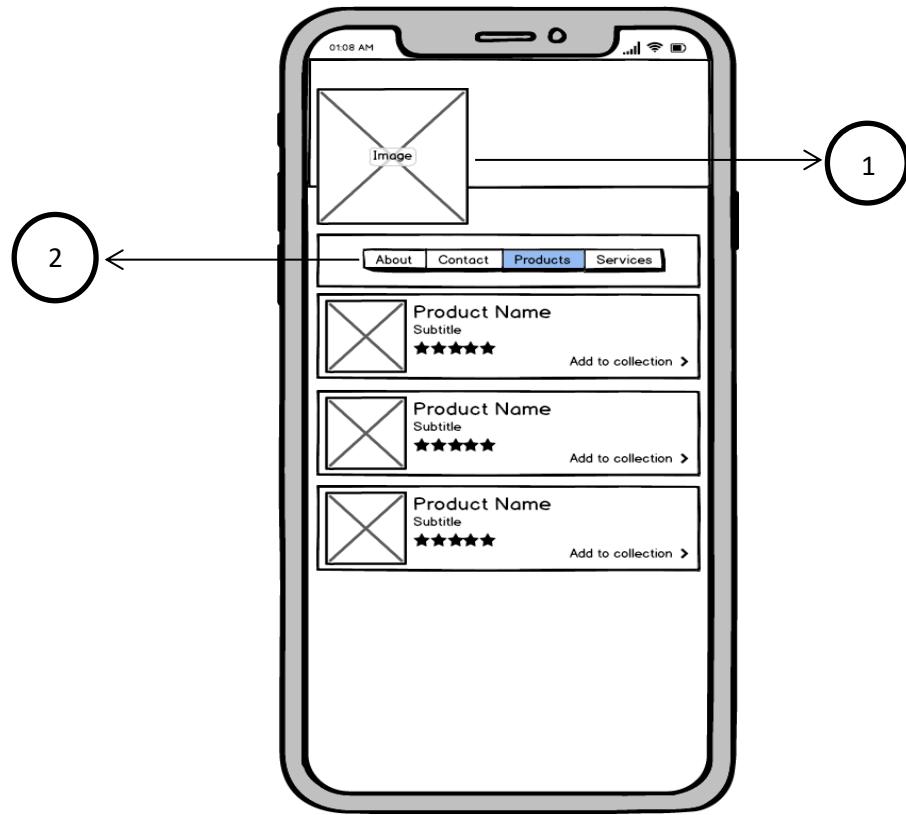


Figure 3.11: Product List

Table 3.18: Product List

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Button	Product List	This allows the user to view the different product list.

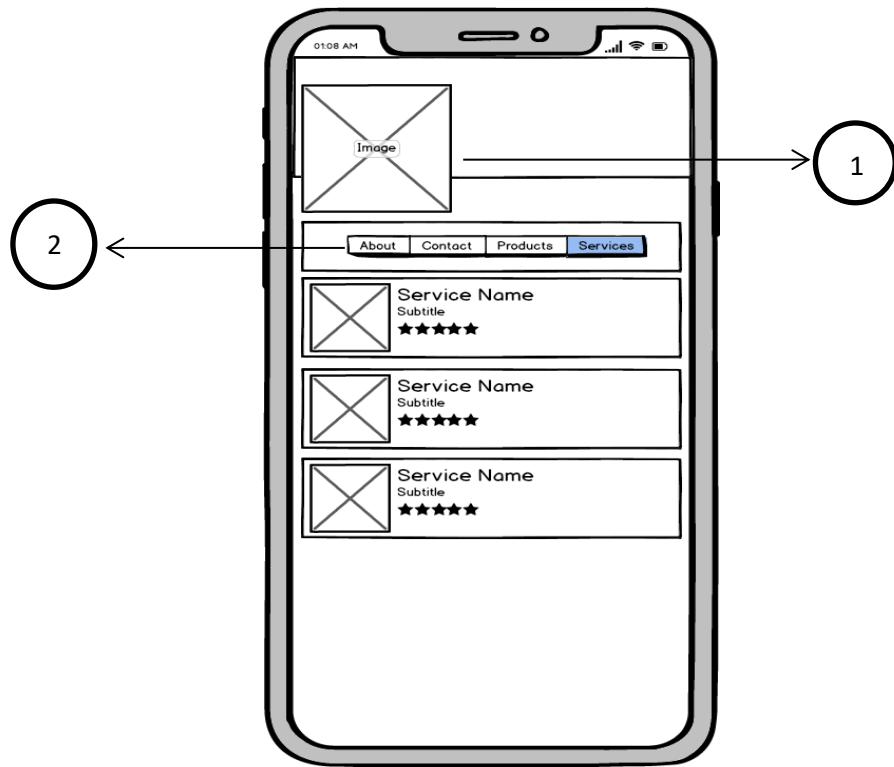


Figure 3.12: About Business

Table 3.19: About Business

No.	UI Components	Name	Description
1.	Logo	Application Logo	Logo and title of the Application.
2.	Button	List of Services	This allows the user to view the different services of the Application.

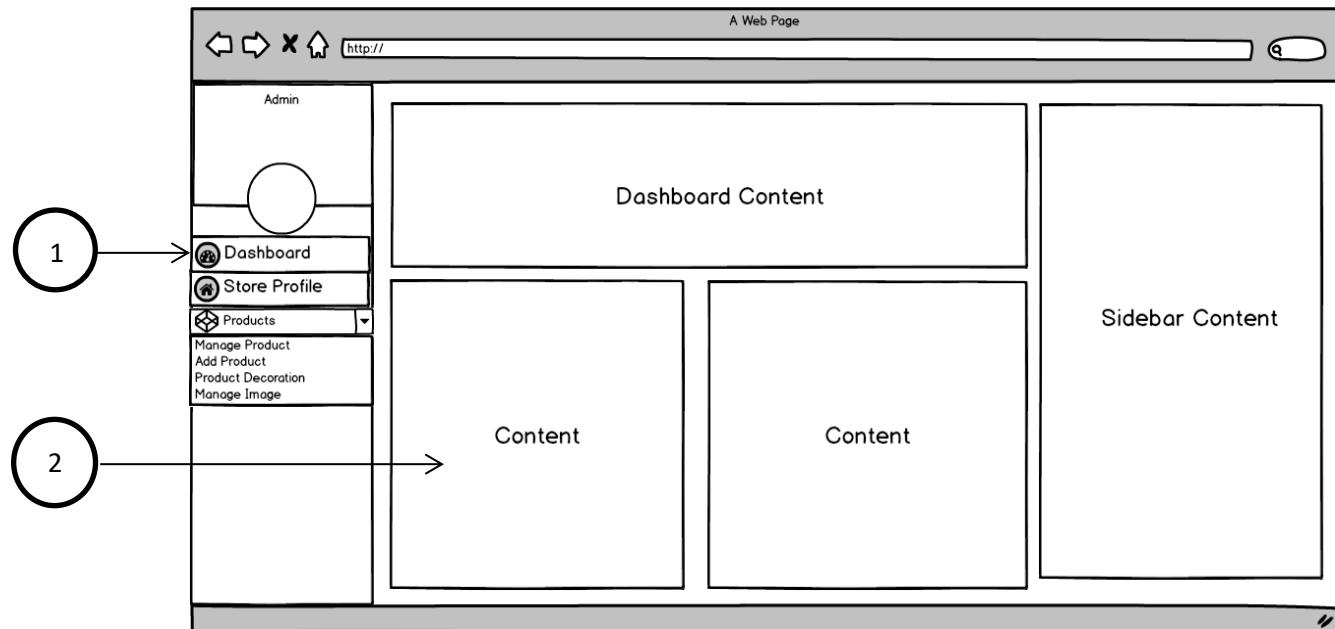


Figure 3.13: Admin's Dashboard View

Table 3.20: Admin's Dashboard View

No.	UI Components	Name	Description
1.	Button	Dashboard View	Allows the admin to view dashboards
2.	Button	Dashboard Display	Display different pictures and Ads.

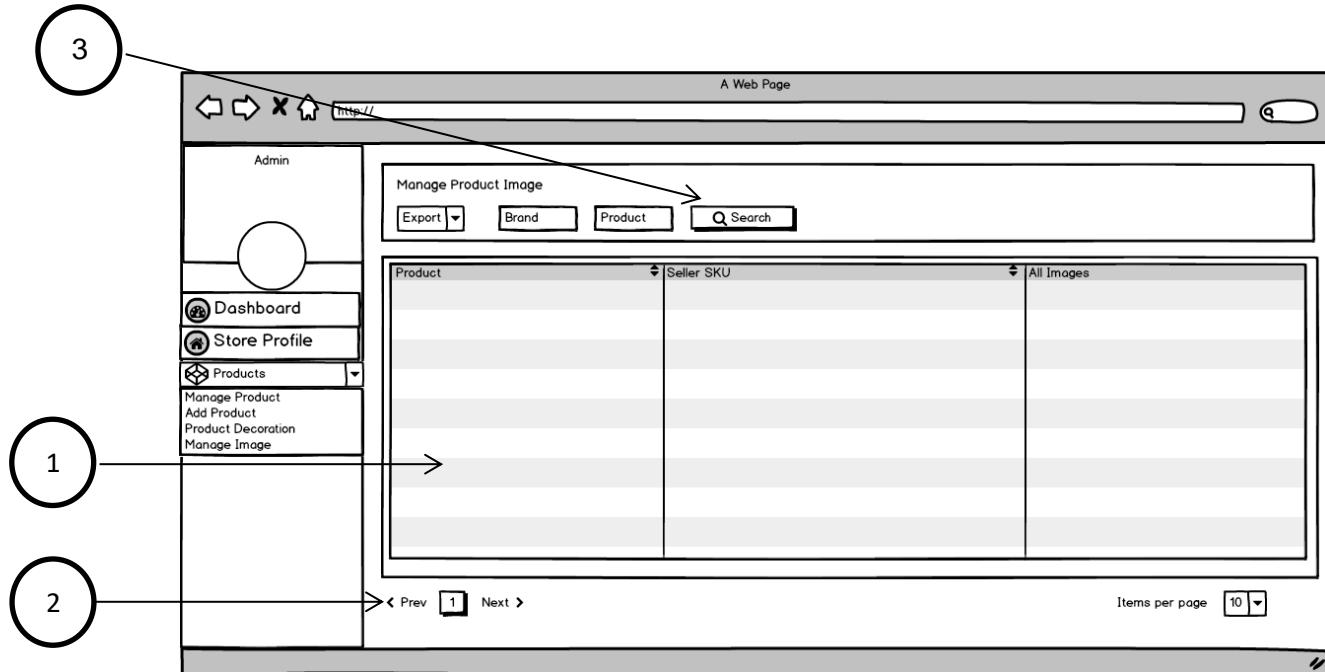


Figure 3.14: Admin's Manage Product View

Table 3.21: Admin's Manage Product View

No.	UI Components	Name	Description
1.	Display	Manage Product	The Admin can view each Product, Brand and its Seller.
2.	Button	Return Button	The Admin can return to previous page or continue to the next page.
3.	Button	Search Button	Allows Admin to search for a product

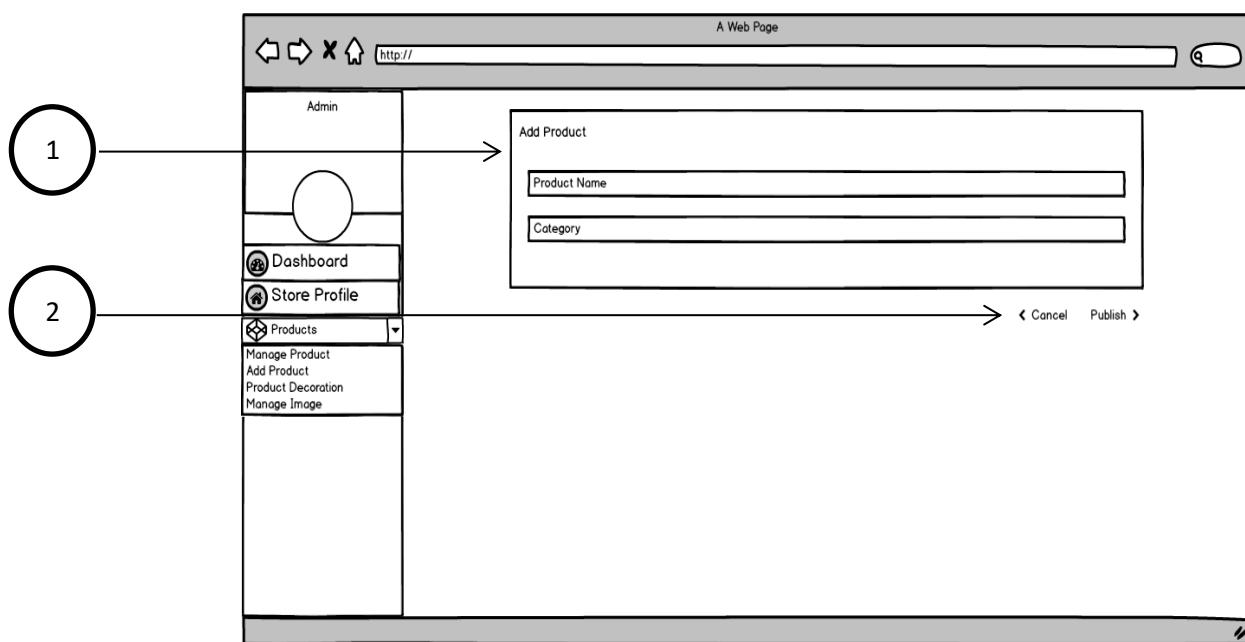


Figure 3.15: Add Products

Table 3.22: Add Products

No.	UI Components	Name	Description
1.	Button	Add Product	The Admin can add products and its company name as well.
2.	Button	Cancel and Publish	The Admin can cancel and publish products.

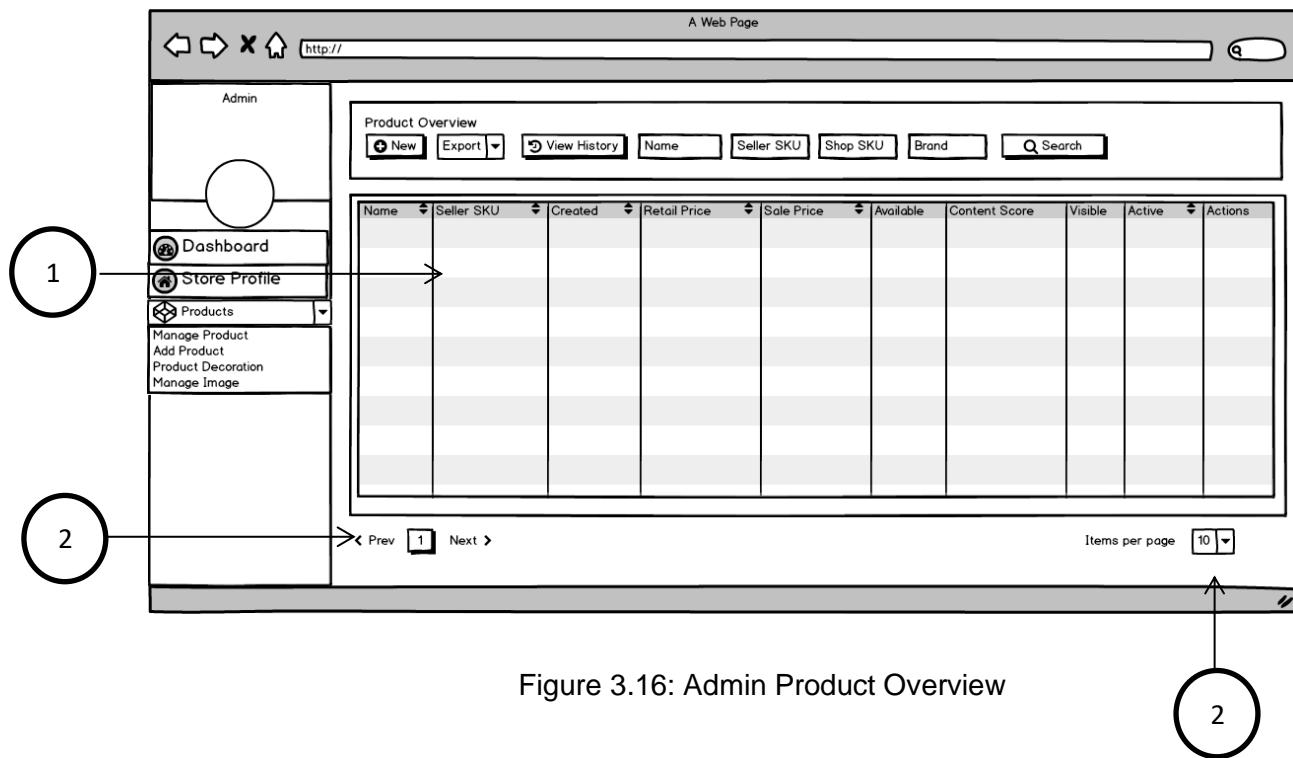


Figure 3.16: Admin Product Overview

Table 3.23: Admin Product Overview

No.	UI Components	Name	Description
1.	Display Field	Products Overview	Admin products overview that consists of different Actions.
2.	Button	Prev. and Next Button	The Admin can return to previous page or continue to the next page.

3.	Drop-down Button	View Page	Can view its Items per page.
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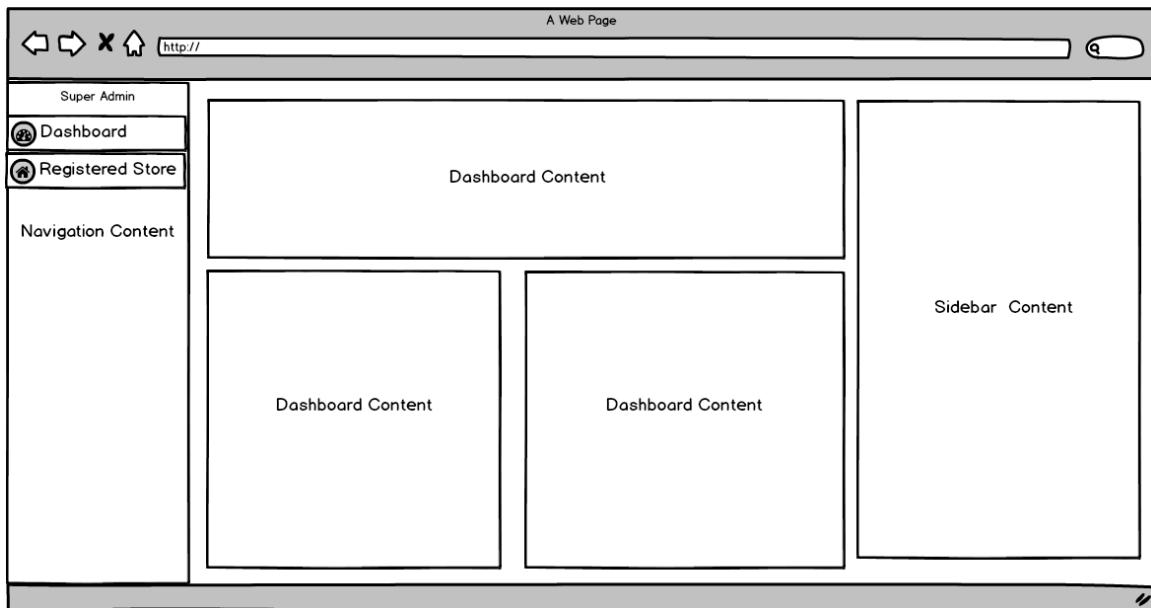


Figure 3.17: Super Admin Dashboard View

Table 3.24: Super Admin Dashboard View

No.	UI Components	Name	Description
1.	Button	Dashboard View	Allows the Super Admin to view what's on his/her dashboard.

2.	Button	Dashboard Display	Display different pictures, Ads and announcements.
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3.5 Development and Testing

The system was developed through gathering information on reliable sources on the internet on how to develop this platform of application. In developing the interface and functionalities of the application the developers utilized tools in developing and apply the prototype methodology on making the system the developers used Waterfall as their methodology for the task to be divided by each member.

The system was tested through conducting evaluation to test the application on the fields such as any pasalubong centers that were applicable and in a particular field that would operate the software developed for the system. In this means, developers may get new ideas on how to improve the application.

3.5.1 Data Analysis Plan

After gathering the data, Weighted Arithmetic Mean was used as a tool in analyzing the data. It was being used to determine the average responses for each item on the five (5) options in each item in the evaluation namely, 5 (Strongly Agree), 4 (Agree), 3 (Undecided), 2 (Disagree), 1 (Strongly Disagree). The Likert scale can be generated by means of the respondents' replication on the survey.

The points that are used:

Strongly agree	5 points
Agree	4 points
Undecided	3 points

Disagree

2 points

CHAPTER IV

RESULTS AND DISCUSSION

4.1 Achievement per objective

4.1.1 Development of PasHub

4.1.1.1 Navigate the Map

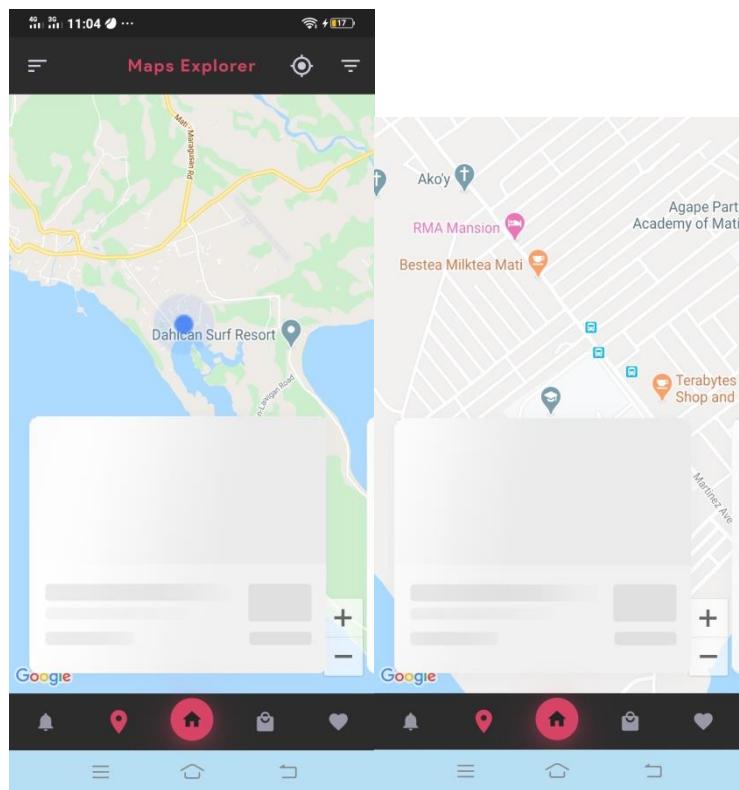


Figure 4.1 “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” Navigating the Map

Figure 4.1 showed that the developers achieved the first objective of the Project which was to allow the users to navigate the map for the user to search available Location of possible pasalubong centers. The above figure displayed the Navigating Map of the application.

4.1.1.2 Generate Nearby PasHub

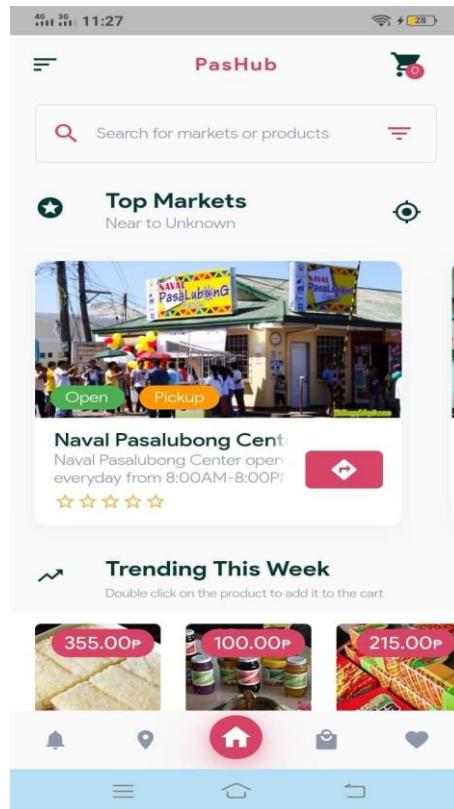


Figure 4.2 “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” Generate Nearby PasHub

Figure 4.2 showed that the developers achieved the second objective of the project which was to develop a generating nearby pasalubong center within the user's location. The above figure displayed the result of the applications objective.

4.1.1.3 Searching products

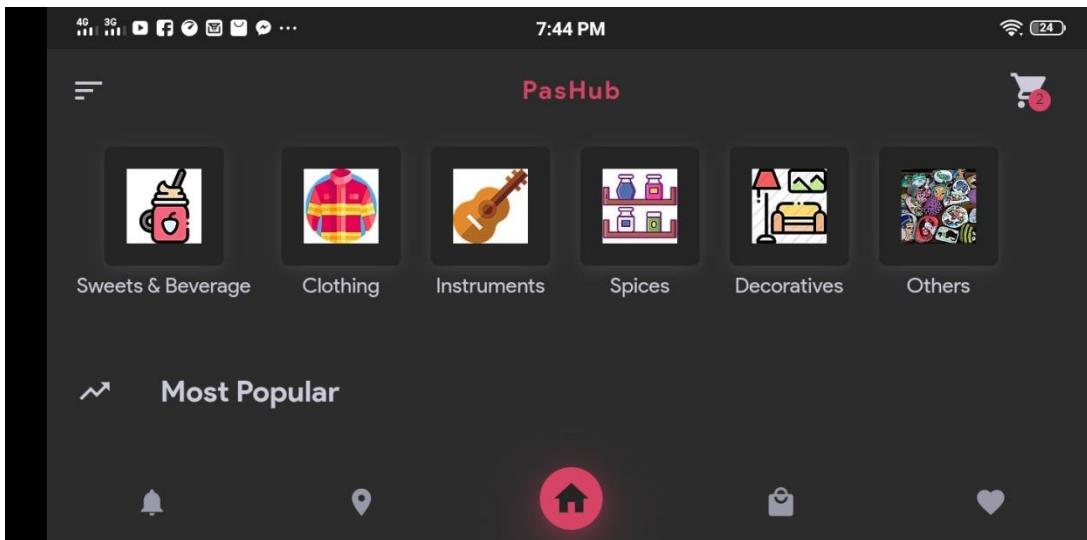


Figure 4.3 “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” Searching product

Figure 4.3 showed that the developers achieved the third objective of the project which was to develop searching products from different pasalubong centers. The above figure displayed the result of the applications objectives.

4.1.1.4 Comparing products at the same time

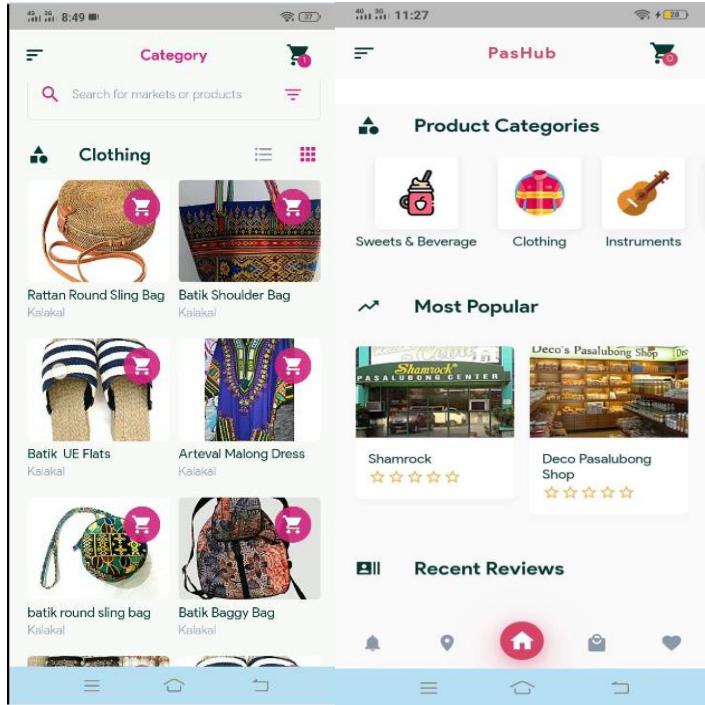


Figure 4.4 “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” Comparing product

Figure 4.4 showed that the developers achieved the fourth objective of the project which was to compare products from different pasalubong centers at the same time. The above figure displayed the result of the applications objectives and allowed the user to view the ratings and reviews of the searched products

4.1.2 Testing/Implementation Results

4.2.1.1 Presentation

In evaluating the PasHub, the respondents used the adapted Survey Form from ISO 9126 Standards. The approved survey form was directed to 10 respondents that were consists of people who loves to bring pasalubong to their loved ones or owners of a pasalubong centers here in the City of Mati. After gathering the data, the researchers utilized the Weighted Arithmetic Mean in calculating and analyzing the gathered data.

4.2.1.2 Analysis and Interpretation of Data

Table 4.1: Weighted Arithmetic Mean

Range	Interpretation
4.51 - 5.00	Strongly Agree
3.51 - 4.50	Agree
2.51 - 3.50	Fair
1.51 - 2.50	Disagree
1.50 below	Strongly disagree

Table 4.2 Average Mean

Indicators	Respondents	Average Mean	Interpretation
Functionality	10	4.7	Strongly agree
Reliability	10	4.5	Agree
Usability	10	4.58	Strong agree
Maintainability	10	4.6	Strong agree
Portability	10	4.4	Agree
Overall	10	4.56	Strong agree

Table 4.2 showed the average mean of the Functionality, Reliability, Usability, Maintainability, and Portability.

Indicator Functionality has an average weighted mean of 4.7 which fall on the scale of Strongly Agree. It means that the respondents strongly agreed that the application could register and login, the application could filter the information of any pasalubong centers using search engine, the application provided the users location of each pasalubong centers using Google Map API, and the application could be used to rate a specific pasalubong centers. It means that the respondents strongly agreed that the system was functional.

Indicator Reliability has an average weighted mean of 4.5 which fall on the scale of Agree. It means that the respondents agreed that the application could handle errors.

Indicator Usability has an average weighted mean of 4.58 which fall on the scale of Strongly Agree. It means that all information in the application was easy to understand and that the application interface was user friendly. It means that the respondents strongly agreed that the system was usable.

Indicator Maintainability has an average weighted mean of 4.6 which fall on the scale of Strongly agree. It means that the application could be easily modified. It means that the respondents strongly agreed that the system was maintainable.

Indicator Portability has an average weighted mean of 4.4 which fall on the scale of Agree. It means that the respondents agreed that the application could be easily installed which means that the system was portable.

Overall of the indicators above has an average weighted mean of 4.56 which fall on the scale of Strongly agree. This means the respondents Strongly agreed that the PasHub was functional, Reliable, Usable, Maintainable, and Portable.

Table 4.3 “PasHub: Online Application Finder for Pasalubong Center Using Google Map API” Implementation Plan
CHAPTER V

STRATEGY	ACTIVITY	PERSONS INVOLVES	DURATION
Approval from the selected user	Letter for the administrator	Researchers, User	1 Day
System Installation	Installation of the Application	Researchers, User	30 minutes
Information Distribution	Mobile app., Manual, Posters	Researchers, User	1 Day

SUMMARY, CONLUSION AND RECOMMENDATION

5.1 Summary

During the development of PasHub, an online application finder for pasalubong centers, researching related studies and literatures were quite challenging because the developers did not find a system similar to the system that the developers wanted to build. It took the developers one month to look for the literatures and studies that would best fit to their study. The developers believed that this online application would be helpful to the users specially to those tourists, visitors and foreigners who loves to visit our country. Aside from that, this application could contribute to the sales, profits, Jobs, Tax Revenues and income to the businesses and government.

The main objective of the developers study was to create an online application for finding suitable pasalubong centers nearby the users location. With the help of the following tools; Android Studio, Flutter, Laravel, PostgreSQL, Postman, Git, PhpStorm, Google Map API, Firebase CloudMessaging, Php, and Web Hosting, the developers had developed the study that they had proposed. The application was made for almost four months. And in order to comply with the ISO Standards, the developers conducted an evaluation to test the functionality, reliability, usability, efficiency, maintainability and portability of the system.

5.2 Conclusion

One of the challenges during the development of the system was the mapping part, the user could navigate the map smoothly but then the user cannot see the marking points for the pasalubong centers. So far the issued problem was addressed properly. The following objectives such as; 1. Navigate the Map; 2. Generates Pasalubong Centers nearby user's location; 3. Searching Products; 4. Comparing products at the same time were achieved by the application except from last objective which was to be able to filter products base on price. The application cannot filter the product through price filtering, instead, it could filter the product base on its type or category as well as its availability.

5.3 Recommendation

The application was developed accordingly by following and sticking to its objectives as well as its scope and limitation. But then due to time constraints and resources, the developers failed to create a flawless application. After testing the application to the respondents, some of them gave their honest suggestions. This following recommendations given by the respondents that the developers believed that will highly improve and enhance the PasHub.

- More enhancement of the User Interface of the system.
- Since Free Web Hosting has its limited disk space to upload photos/videos as well as its data base look for a negotiable paid web host that offers valuable deal.
- Seven out of ten respondents agreed that the system was helpful since it is user friendly application and should be introduced to the market.

Literature Cited

"2017 Annual report". www.ir.tripadvisor.com. Official website - Trip Advisor investor relations. Retrieved 16 November 2018.

agoda.com launches Android app for easy mobile hotel booking. (n.d.). Retrieved October 13, 2019, from <https://www.agoda.com/en-in/info/android-app.html?cid=218>.

A.M.Muharum, V.T.Joyejob, V.Hurbungs, Y.Beeharry, (2017).

Ebersave API. Android-Based power-saving framework for mobile devices.
<https://www.sciencedirect.com/science/article/pii/S2314728816300411>

Borlaza, G. C., Cullinane, M., & Hernandez, C. G. (2019, November 1). Philippines. Retrieved October 5, 2019, from <https://www.britannica.com/place/Philippines>.

Cowen, M. (2018, April 26). Trivago - referrals up, revenues stable, income and share price down. Retrieved October 10, 2019, from <https://www.phocuswire.com/Trivago-referrals-up-revenues-stable-income-and-share-price-down>.

Definitions for business hubbusi·ness hub. (2016, September 16). Retrieved September 26, 2019, from <https://www.definitions.net/definition/business hub>.

How Lazada Outranked the Rest - Think with Google. (n.d.). Retrieved April 10, 2020, from <https://www.thinkwithgoogle.com/intl/en-apac/tools/resources/success-stories/how-lazada-outranked-the-rest/>.

Laureen Miles Brunelli, (2018). What Crowdsourcing Really Means August 27, 2018
<https://www.thebalancecareers.com/what-is-crowdsourcing-3542321>

LazMall - 100% Authenticity from Brands & Official Stores: Lazada Philippines. (n.d.). Retrieved May 17, 2020, from <https://pages.lazada.com.ph-wow/i/ph/LandingPage/lazmall?spm=a2o4l.11827622.menu.2.5f9cd98aDj2gbO>

Luib, G.-F.(n.d.).Pasalubong.doi: 10.31979/etd.mhw7-4hrk

Margaret Rouse, (2018).

<https://whatis.techtarget.com/definition/Google-Maps>

MC Harmonious, (2016). Definitions for business October
<https://wwwdefinitions.net/definition/business+hub>

Pathan, I. (2016). What is the use of Android studio?Retrieved October 4, 2018, from
<https://www.quora.com/What-is-the-use-of-Android-studio>.

Pwtempuser. (2017, December 14). Google Maps.Retrieved September 26, 2019, from
<https://www.programmableweb.com/api/google-maps>.

Rouse, M., Gibilisco, S., Rouse, M., & Rouse, M. (n.d.). What is Google Maps? Definition from WhatIs.com.Retrieved September 26, 2019, from
<https://whatis.techtarget.com/definition/Google-Maps>.

Rouse, M., Rouse, M., & Rouse, M. (n.d.). What is mobile app? - Definition from WhatIs.com. Retrieved September 25, 2019, from
<https://whatis.techtarget.com/definition/mobile-app>.

Sarycheva, Y. (2019, July 30). SDLC Waterfall Model. Retrieved October 28, 2019, from
<https://xbsoftware.com/blog/software-development-life-cycle-waterfall-model/>

Smith, J. (2018). American Graphics Institute.Retrieved October 4, 2018, from
<https://www.agitraining.com/adobe/photoshop/classes/what-is-photoshop>.

Techopedia. (2018). What does Database Server mean? Retrieved October 16, 2018, from <https://www.techopedia.com/definition/441/database-server>.

Techopedia. (2018). What does Mobile Application (Mobile App) mean? Retrieved October 16, 2018, from <https://www.techopedia.com/definition/2953/mobile-application-mobile-app>.

Travel Forum, Discussion Board for Talk and Chat. (n.d.). Retrieved May 17, 2020, from
<https://www.tripadvisor.com.ph/ForumHome>

Trivago.com.ph - Compare hotel prices worldwide. (n.d.). Retrieved May 17, 2020, from
<https://www.trivago.com.ph/?themeld=280>

What is Android OS? - Definition from Techopedia. (n.d.). Retrieved September 27, 2019
from <https://www.techopedia.com/definition/14873/android-os>.

What is an Android phone? (2018, March 2). Retrieved September 26, 2019,
from <https://www.uswitch.com/mobiles/guides/android-phones-tablets-and-updates-explained/>.

What is Crowdsourcing? (n.d.). Retrieved September 26, 2019, from
<https://crowdsourcingweek.com/what-is-crowdsourcing/>.

Wikipedia.(2008). Balsamiq Mockups.Retrieved November 4, 2018, from
<https://en.wikipedia.org/wiki/Balsamiq>.

Wikipedia.(2018). Firebase. Retrieved December 5, 2018, from
<https://en.m.wikipedia.org/wiki/Firebase>.

Appendices

Appendix A

Gantt Chart

Appendix B

Letters

Appendix C

Certificate/ Grammarly



Republic of the Philippines
DAVAO ORIENTAL STATE COLLEGE OF SCIENCE AND TECHNOLOGY
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
Guang-Guang, Dahican, City of Mati



CERTIFICATION

This is to certify that, **CRISTILYN L. ALGABRE** and **HAYMA T. USMAN**, a bona fide student in Bachelor of Science in Information Technology with their undergraduate thesis entitled **PasHub: Online Application Finder for Pasalubong Center Using Google Map API** was grammatically corrected.

This certification was issued for whatever purpose it may serve them best.

Issued this 10th day of July, 2020 at Davao Oriental State College of Science and Information Technology (DOSCST).


JOVANNIE B. MALINTAD
LPT Grammarian

PasHub: Online Application Finder for Pasalubong Center Using Google Map API

by eb

General metrics

58,982	8,796	1011	35 min 11 sec	1 hr 7 min
characters	words	sentences	reading time	speaking time

Score



Writing Issues

220	 Critical	220	Advanced
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This text scores better than 90% of all texts checked by Grammarly

Plagiarism



52
sources

13% of your text matches 52 sources on the web or in archives of academic publications



Writing Issues

156 Clarity

55 Wordy sentences



11 Hard-to-read text



39 Intricate text



51 Passive voice misuse



61 Engagement

60 Word choice



1 Monotonous sentences



3 Delivery

3 Inappropriate colloquialisms



Unique Words

19%

Measures vocabulary diversity by calculating the percentage of words used only once in your document

unique words

Rare Words

43%

Measures depth of vocabulary by identifying words that are not among the 5,000 most common English words.

rare words

Word Length

5.2

Measures average word length

characters per word



Sentence Length

Measures average sentence length

8.7

words per sentence

Appendix D

User Testing/Evaluation

Form (Blank)

Name: (Optional) _____ Signature: _____

Signature: _____

Address: _____

Age: _____

Gender: [] Male [] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Impact				
	Low	2	3	4	High
Functionality					
The application can create account and sign in.					
The application can generate the users location as well as pasalubong centers nearby using Google Map API.					
The application can search for pasalubong centers.					
The application can search pasalubong products.					
The application can add pasalubong product/s to cart.					
The application can view the user's order and favorites.					
The application can be used to rate a specific pasalubong centers and pasalubong products.					
Reliability					
The application can handle errors.					
Usability					
All information in the application are easy to understand					
The application did not lag during the test.					
The application's interface is user friendly					
Maintainability					
The application can be easily modified.					
Portability					
The application can be easily installed.					

Name: (Optional) kristina s. Punto Signature: JY
 Address: Muntinlupa Subd. Delicam city of Mati
 Age: 23

Gender: [] Male [✓] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.					✓
The application can generate the users location as well as pasalubong centers nearby using Google Map API.					✓
The application can search for pasalubong centers.					✓
The application can search pasalubong products.					✓
The application can add pasalubong product/s to cart.					✓
The application can view the user's order and favorites.					✓
The application can be used to rate a specific pasalubong centers and pasalubong products.					✓
Reliability					
The application can handle errors.					✓
Usability					
All information in the application are easy to understand					✓
The application did not lag during the test.					✓
The application's interface is user friendly					✓
Maintainability					
The application can be easily modified.					✓
Portability					
The application can be easily installed.					✓

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					✓
The system can modify the user's profile.					✓
The system can add, update and delete pasalubong centers.					✓
The system can add, update and delete product categories.					✓
The system can add, update and delete pasalubong products.					✓
The system can view, update and delete product reviews.					✓
The system can confirm product orders..					✓
Reliability					
The system can handle errors.					✓
Usability					
All information in the system are easy to understand					✓
The system did not lag during the test.					✓
The system's interface is user friendly					✓
Maintainability					
The system can be easily modified.					✓
Portability					
The system can be easily installed.					✓

Name: (Optional) Maynard, Jaz D. Signature: JY
 Address: Magsaysay 1B, Mati City
 Age: 25

Gender: [✓] Male [] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.					✓
The application can generate the users location as well as pasalubong centers nearby using Google Map API.					✓
The application can search for pasalubong centers.					✓
The application can search pasalubong products.					✓
The application can add pasalubong product/s to cart.					✓
The application can view the user's order and favorites.					✓
The application can be used to rate a specific pasalubong centers and pasalubong products.					✓
Reliability					
The application can handle errors.					✓
Usability					
All information in the application are easy to understand					✓
The application did not lag during the test.					✓
The application's interface is user friendly					✓
Maintainability					
The application can be easily modified.					✓
Portability					
The application can be easily installed.					✓

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					✓
The system can modify the user's profile.					✓
The system can add, update and delete pasalubong centers.					✓
The system can add, update and delete product categories.					✓
The system can add, update and delete pasalubong products.					✓
The system can view, update and delete product reviews.					✓
The system can confirm product orders..					✓
Reliability					
The system can handle errors.					✓
Usability					
All information in the system are easy to understand					✓
The system did not lag during the test.					✓
The system's interface is user friendly					✓
Maintainability					
The system can be easily modified.					✓
Portability					
The system can be easily installed.					✓

ITEMS (Web)	RANK			
	Low	Medium	High	Very High
Functionality				
The system can create account and can sign in.				
The system can modify the user's profile.				
The system can add, update and delete pasalubong centers.				
The system can add, update and delete product categories.				
The system can add, update and delete pasalubong products.				
The system can view, update and delete product reviews.				
The system can confirm product orders..				
Reliability				
The system can handle errors.				
Usability				
All information in the system are easy to understand				
The system did not lag during the test.				
The system's interface is user friendly				
Maintainability				
The system can be easily modified.				
Portability				
The system can be easily installed.				

Name: (Optional)	James Jay M. Bandy		Signature:	<u>df</u>	
Address:	Mapantad Rizal Drizy 1				
Age:					
Gender: <input checked="" type="checkbox"/> Male <input type="checkbox"/> Female					
Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.					
5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree					
ITEMS (Mobile)	Low		High		
	1	2	3	4	5
Functionality					
The application can create account and sign in.					/
The application can generate the users location as well as pasalubong centers nearby using Google Map API.					/
The application can search for pasalubong centers.					/
The application can search pasalubong products.					/
The application can add pasalubong product/s to cart.					/
The application can view the user's order and favorites.					/
The application can be used to rate a specific pasalubong centers and pasalubong products.					/
Reliability					
The application can handle errors.					/
Usability					
All information in the application are easy to understand					/
The application did not lag during the test.					/
The application's interface is user friendly					/
Maintainability					
The application can be easily modified.					/
Portability					
The application can be easily installed.					/

ITEMS (Web)	Low		High		
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					✓
The system can modify the user's profile.					✓
The system can add, update and delete pasalubong centers.					✓
The system can add, update and delete product categories.					✓
The system can add, update and delete pasalubong products.					✓
The system can view, update and delete product reviews.					✓
The system can confirm product orders..					✓
Reliability					
The system can handle errors.					✓
Usability					
All information in the system are easy to understand					✓
The system did not lag during the test.					✓
The system's interface is user friendly					✓
Maintainability					
The system can be easily modified.					✓
Portability					
The system can be easily installed.					✓

Name: (Optional) _____ Signature: *John*
Address: DALTON, MA 02640
Age: 28

Gender: [✓] Male [] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	High				
	Low	1	2	3	4
Functionality					
The application can create account and sign in.					✓
The application can generate the users location as well as pasalubong centers nearby using Google Map API.					✓
The application can search for pasalubong centers.					✓
The application can search pasalubong products.					✓
The application can add pasalubong product/s to cart.					✓
The application can view the user's order and favorites.					✓
The application can be used to rate a specific pasalubong centers and pasalubong products.					✓
Reliability					
The application can handle errors.					✓
Usability					
All information in the application are easy to understand					✓
The application did not lag during the test.					✓
The application's interface is user friendly					✓
Maintainability					
The application can be easily modified.					✓
Portability					
The application can be easily installed.					✓

ITEMS (Web)	Scoring				
	Low	1	2	3	High
Functionality					
The system can create account and can sign in.					/
The system can modify the user's profile.					/
The system can add, update and delete pasalubong centers.					/
The system can add, update and delete product categories.					/
The system can add, update and delete pasalubong products.					/
The system can view, update and delete product reviews.					/
The system can confirm product orders.					/
Reliability					
The system can handle errors.					/
Usability					
All information in the system are easy to understand					/
The system did not lag during the test.					/
The system's interface is user friendly					/
Maintainability					
The system can be easily modified.					/
Portability					
The system can be easily installed.					/

Name: (Optional) _____ Signature: _____
Address: BOY MARIANO MARLOC, LUPON, DANAO, ORIENTAL
Age: 23

Gender: Male Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	RATING			
	Low	Medium	High	Very High
Functionality				
The application can create account and sign in.				
The application can generate the users location as well as pasalubong centers nearby using Google Map API.				
The application can search for pasalubong centers.				
The application can search pasalubong products.				
The application can add pasalubong product/s to cart.				
The application can view the user's order and favorites.				
The application can be used to rate a specific pasalubong centers and pasalubong products.				
Reliability				
The application can handle errors.				
Usability				
All information in the application are easy to understand				
The application did not lag during the test.				
The application's interface is user friendly				
Maintainability				
The application can be easily modified.				
Portability				
The application can be easily installed.				

ITEMS (Web)	High					
	Low	1	2	3	4	5
Functionality						/
The system can create account and can sign in.						/
The system can modify the user's profile.						/
The system can add, update and delete pasalubong centers.						/
The system can add, update and delete product categories.						/
The system can add, update and delete pasalubong products.						/
The system can view, update and delete product reviews.						/
The system can confirm product orders..						/
Reliability						
The system can handle errors.						/
Usability						
All information in the system are easy to understand						/
The system did not lag during the test.						/
The system's interface is user friendly						/
Maintainability						
The system can be easily modified.						/
Portability						
The system can be easily installed.						/

Name: (Optional) _____ Signature: *Maria*
 Address: *Mahias*

Age: *18*

Gender: [] Male Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.				/	
The application can generate the users location as well as pasalubong centers nearby using Google Map API.			/		
The application can search for pasalubong centers.				/	
The application can search pasalubong products.				/	
The application can add pasalubong product/s to cart.			/		
The application can view the user's order and favorites.			/		
The application can be used to rate a specific pasalubong centers and pasalubong products.				/	
Reliability					
The application can handle errors.			/		
Usability					
All information in the application are easy to understand				/	
The application did not lag during the test.				/	
The application's interface is user friendly			/		
Maintainability					
The application can be easily modified.				/	
Portability					
The application can be easily installed.					/

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					/
The system can modify the user's profile.				/	
The system can add, update and delete pasalubong centers.				/	
The system can add, update and delete product categories.				/	
The system can add, update and delete pasalubong products.				/	
The system can view, update and delete product reviews.				/	
The system can confirm product orders..				/	
Reliability					
The system can handle errors.				/	
Usability					
All information in the system are easy to understand				/	
The system did not lag during the test.				/	
The system's interface is user friendly				/	
Maintainability					
The system can be easily modified.				/	
Portability					
The system can be easily installed.				/	

Name: (Optional) *GLV* Signature: *Raj*
 Address: *Phase 6, Block 2, Sanluna Sub. Bulakan, Muth City*
 Age: *21*

Gender: [] Male Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.				/	
The application can generate the users location as well as pasalubong centers nearby using Google Map API.				/	
The application can search for pasalubong centers.			/		
The application can search pasalubong products.			/		
The application can add pasalubong product/s to cart.			/		
The application can view the user's order and favorites.			/		
The application can be used to rate a specific pasalubong centers and pasalubong products.			/		
Reliability					
The application can handle errors.			/		
Usability					
All information in the application are easy to understand				/	
The application did not lag during the test.			/		
The application's interface is user friendly			/		
Maintainability					
The application can be easily modified.				/	
Portability					
The application can be easily installed.					/

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					/
The system can modify the user's profile.				/	
The system can add, update and delete pasalubong centers.				/	
The system can add, update and delete product categories.				/	
The system can add, update and delete pasalubong products.				/	
The system can view, update and delete product reviews.				/	
The system can confirm product orders..				/	
Reliability					
The system can handle errors.				/	
Usability					
All information in the system are easy to understand				/	
The system did not lag during the test.				/	
The system's interface is user friendly				/	
Maintainability					
The system can be easily modified.					/
Portability					
The system can be easily installed.					/

Name: (Optional) Mary Antoinette L. Reston Signature: [Signature]
 Address: Phase - 2, Maribacan subdivision, Dakigan City of Mati
 Age: 29

Gender: [] Male [] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.					/
The application can generate the users location as well as pasalubong centers nearby using Google Map API.				/	
The application can search for pasalubong centers.		/			
The application can search pasalubong products.			/		
The application can add pasalubong product/s to cart.				/	
The application can view the user's order and favorites.				/	
The application can be used to rate a specific pasalubong centers and pasalubong products.			/		
Reliability					
The application can handle errors.		/			
Usability					
All information in the application are easy to understand			/		
The application did not lag during the test.			/		
The application's interface is user friendly			/		
Maintainability					
The application can be easily modified.			/		
Portability					
The application can be easily installed.				/	

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					/
The system can modify the user's profile.					/
The system can add, update and delete pasalubong centers.					/
The system can add, update and delete product categories.					/
The system can add, update and delete pasalubong products.					/
The system can view, update and delete product reviews.			/		
The system can confirm product orders..				/	
Reliability					
The system can handle errors.			/		
Usability					
All information in the system are easy to understand					/
The system did not lag during the test.			/		
The system's interface is user friendly					/
Maintainability					
The system can be easily modified.			/		
Portability					
The system can be easily installed.					/

Name: (Optional) Karen J. G. Signature: [Signature]
 Address: Urban, Dakigan Mati City, Davao Oriental
 Age: 19

Gender: [] Male [] Female

Direction: kindly check the following boxes; please rate the following according to the level of agreement of your choice.

5 – Strongly Agree 4 – Agree 3 – Undecided 2 – Disagree 1 – Strongly Disagree

ITEMS (Mobile)	Low High				
	1	2	3	4	5
Functionality					
The application can create account and sign in.					/
The application can generate the users location as well as pasalubong centers nearby using Google Map API.				/	
The application can search for pasalubong centers.			/		
The application can search pasalubong products.			/		
The application can add pasalubong product/s to cart.			/		
The application can view the user's order and favorites.			/		
The application can be used to rate a specific pasalubong centers and pasalubong products.			/		
Reliability					
The application can handle errors.			/		
Usability					
All information in the application are easy to understand			/		
The application did not lag during the test.			/		
The application's interface is user friendly			/		
Maintainability					
The application can be easily modified.			/		
Portability					
The application can be easily installed.					/

ITEMS (Web)	Low High				
	1	2	3	4	5
Functionality					
The system can create account and can sign in.					/
The system can modify the user's profile.					/
The system can add, update and delete pasalubong centers.					/
The system can add, update and delete product categories.					/
The system can add, update and delete pasalubong products.					/
The system can view, update and delete product reviews.					/
The system can confirm product orders..					/
Reliability					
The system can handle errors.					/
Usability					
All information in the system are easy to understand					/
The system did not lag during the test.					/
The system's interface is user friendly					/
Maintainability					
The system can be easily modified.					/
Portability					
The system can be easily installed.					/

Appendix F

User Evaluation Results

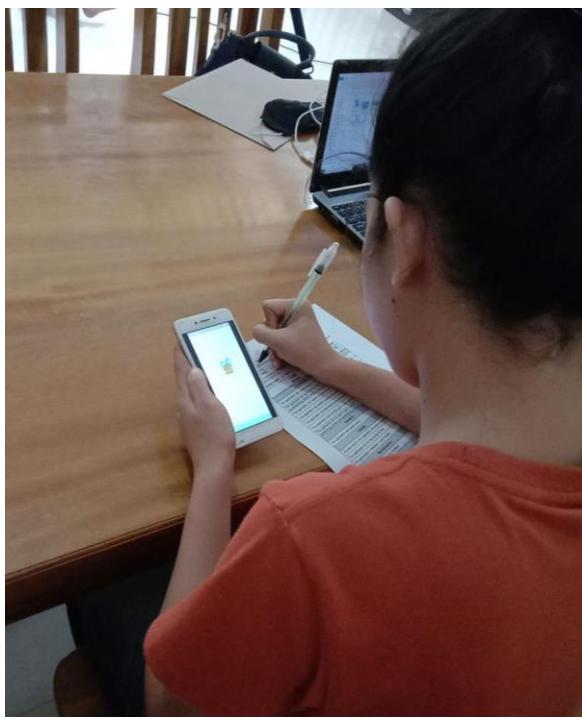
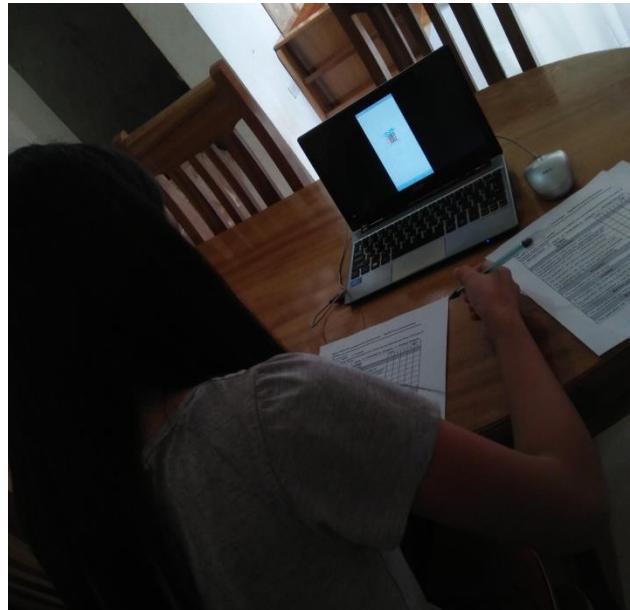
Indicators(Mobile)	1	2	3	4	5	Weighted Mean	Description
Functionality							
The application can create account and sign in.				3	7	4.7	Strongly Agree
The application can generate the users location as well as pasalubong centers nearby using Google Map API.		1	1	8		4.7	Strongly Agree
The application can search for pasalubong centers.	1	2	7		4.6		Strongly Agree
The application can search pasalubong products.		1	9		4.9		Strongly Agree
The application can add pasalubong product/s to cart.		2	8		4.8		Strongly Agree
The application can view the user's order and favorites.		2	8		4.8		Strongly Agree
The application can be used to rate a specific pasalubong centers and pasalubong products.	1	1	8		4.7		Strongly Agree
Reliability							
The application can handle errors.	1	3	6		4.5		Agree
Usability							
All information in the application are easy to understand				10	5		Strongly Agree
The application did not lag during the test.	1	3	6		4.5		Agree
The application's interface is user friendly		2	8		4.8		Strongly Agree
Maintainability							
The application can be easily modified.	1	2	7		4.6		Strongly Agree
Portability							
The application can be easily installed.		1	9		4.9		Strongly Agree

Indicators(Web)	1	2	3	4	5	Weighted Mean	Description
Functionality							
The system can create account and can sign in.				2	8	4.8	Strongly Agree
The system can modify the user's profile.				2	8	4.8	Strongly Agree
The system can add, update and delete pasalubong centers.				2	8	4.8	Strongly Agree
The system can add, update and delete product categories.				2	8	4.8	Strongly Agree
The system can add, update and delete pasalubong products.				4	6	4.6	Strongly Agree
The system can view, update and delete product reviews.			1	1	8	4.7	Strongly Agree
The system can confirm product orders..				6	4	4.4	Agree
Reliability							
The system can handle errors.			1	5	4	4.3	Agree
Usability							
All information in the system are easy to understand			1	3	6	4.5	Agree
The system did not lag during the test.				4	6	4.6	Strongly Agree
The system's interface is user friendly				3	7	4.7	Strongly Agree
Maintainability							
The system can be easily modified.			2	4	4	4.2	Agree
Portability							
The system can be easily installed.				2	7	4.3	Agree

Appendix G

User Testing Photo Documentation





Appendix H

USER MANUAL

Appendix H

User's Manual

Website Admin's View

These are the following steps in accessing the PasHub website:

Step 1: Open any browser in your PC/Laptop

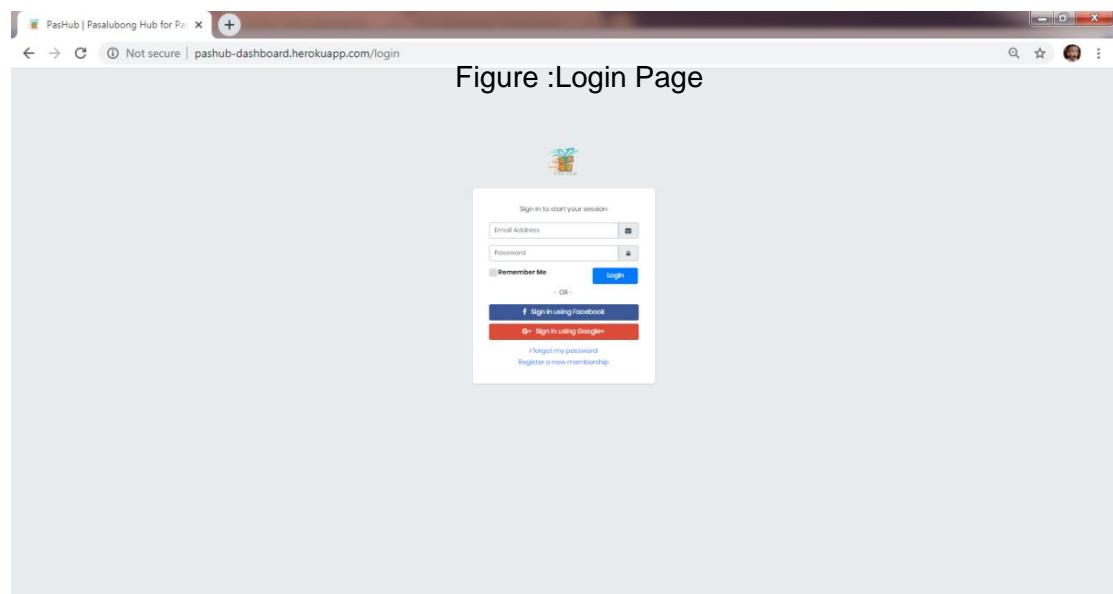
Step 2: Type in the link “pashub-dashboard.herokuapp.com” then hit enter

Step 3: After loading, the browser displays the login page of the PasHub

Step 4: To sign-in, input your Email Address and Password in the provided

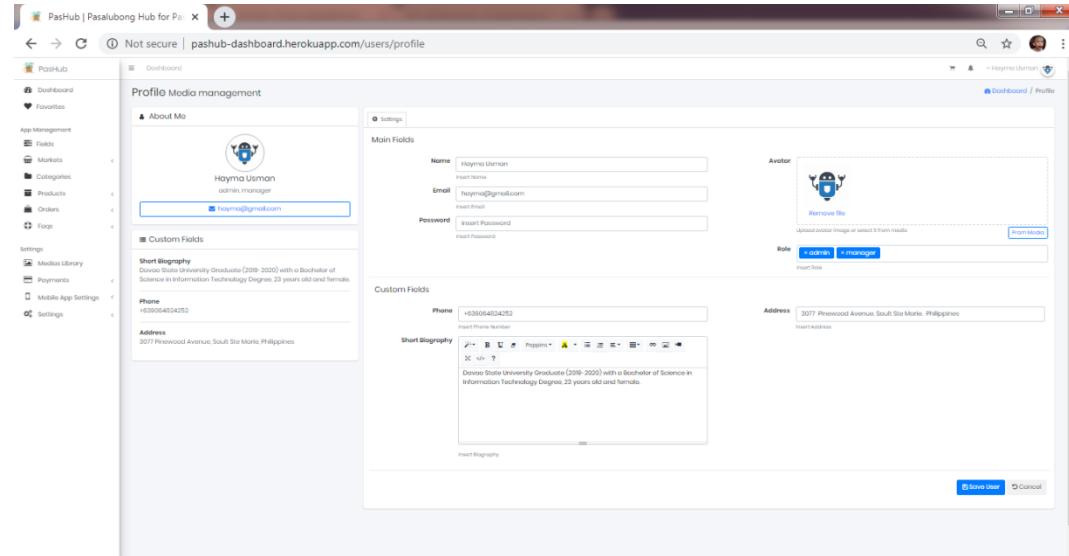
Blank text field.

Step 5: Click The login button



Profile

After successfully login to the system the Admin's profile view will automatically appear. The admin can update his/her profile information by clicking the fields as showed below.



Dashboard

This figure shows the main interface of the system of Admin's view where it displays the Total Order, Total Earnings, Markets and the Total of Clients.

The screenshot shows the PasHub Dashboard interface. On the left is a sidebar with navigation links: Favorites, App Management (Fields, Markets, Categories), Products (Orders, Faqs), Settings (Medias Library, Payments, Mobile App Settings, Settings). The main dashboard area has four cards: 'Total Orders' (0), 'Total earnings (After taxes)' (0P), 'Markets' (10), and 'Total clients' (5). Below these are sections for 'Earnings' (over time) and 'Markets' (list of markets with images, names, and addresses).

Image	Market	Address	Actions
	Ceres	Mati Bus Terminal, Mati, Davao Oriental Philippines	
	Deco Pasalubong Shop	Rizal Street, Poblacion City of Mati, Davao Oriental	
	Shamrock	Cathedral of San Nicolas de Tolentino, Bonifacio St, Mati, Davao Oriental	
	Amira's Buco Tart Hous	Centro Poblacion, Lupon Davao Oriental Philippines	

Figure : Dashboard View

Favorites

This figure shows the list of clients that hits the heart-shaped button for the items that they loved to check-out for later, it automatically added to the favorites.

The screenshot shows a web-based application interface for managing a food delivery service. The left sidebar contains navigation links for Dashboard, Favorites, App Management (Fields, Markets, Categories, Products, Orders), Faqs, Settings (Medias Library, Payments, Mobile App Settings), and a general Settings section. The main content area has a green header bar stating "Deleted successfully". Below this is a table titled "Favorites List" with columns: Product, Options, User, Updated At, and Action. The table lists nine items, all of which were deleted 14 hours ago by users Bonn RJ, Tino Aldo, Rylan Joorgo Tino, Haymo Usman, and Bonn J. The bottom of the page includes a copyright notice for PasHub and a version number (Version 13.0).

Product	Options	User	Updated At	Action
Soup		Bonn RJ	14 hours ago	
Soup		Bonn RJ	14 hours ago	
Sandwich		Tino Aldo	14 hours ago	
Rico	L	Rylan Joorgo Tino	14 hours ago	
Pasta		Haymo Usman	14 hours ago	
Pasta		Bonn J	14 hours ago	
Pasta		Bonn RJ	14 hours ago	
Cookie		Haymo Usman	14 hours ago	
Cheese		Tino Aldo	14 hours ago	

Fields Management

For this figure it shows the list of Markets that has been added by admin, it manages all information that the market required.

The screenshot shows the "Fields Management" section of the PasHub application. The left sidebar includes links for Dashboard, Favorites, App Management (Fields, Markets, Categories, Products, Orders), Faqs, and Settings. The main area displays a table titled "Fields List" with a "Create Field" button. The table has columns: Name, Image, Markets, and Updated At. It lists one entry: "Pasalubong Center" with an image of a storefront, categorized under "Ceres, Deco Pasalubong Shop, Shamrock, Amira's Buco Tart Haus, Kalakal Center, RealBreez, Armis Pasalubong Center, Naval Pasalubong Center", and was updated 21 minutes ago. Navigation buttons for "Previous" and "Next" are visible at the bottom of the table.

Name	Image	Markets	Updated At	Action
Pasalubong Center		Ceres, Deco Pasalubong Shop, Shamrock, Amira's Buco Tart Haus, Kalakal Center, RealBreez, Armis Pasalubong Center, Naval Pasalubong Center	21 minutes ago	

Figure : Fields Management List

Markets Management

Under the Markets drop-down list, it shows all its important information of different markets.

Name	Address	Phone	Mobile	Available for delivery	Closed market	Updated At	Action
Ceres	Motl Bus Terminal, Motl, Davao Oriental Philippines	(352) 781-8569	+63955604633	Red	Green	43 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Deco Pasalubong Shop	Rizal Street, Poblacion City of Motl, Davao Oriental	331-254-2207	+639267646432	Yellow	Green	1 hour ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Shamrock	Cathedral of San Nicolas de Tolentino, Bonifacio St, Motl, Davao Oriental	+6389-409-7341	+639058959313	Yellow	Green	24 minutos ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Ameria's Buco Tart Haus	Centro Poblacion, Lupon Davao Oriental Philippines	312-693-464	+639972655015	Yellow	Green	1 hour ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Kalakal Center	Motong, Motl, Davao Oriental Philippines	(430) 397-2279	+63906400765	Red	Green	35 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Realtreez	Mabini St, Motl, Davao Oriental	(364) 263-7866	+639372282327	Yellow	Green	22 minutos ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Armis Pasalubong Center	Poblacion, Motl, Davao Oriental, Philippines	471-300-0724	+639964989130	Red	Green	52 minutos ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
House of Batik	Dohican Beach, Motl, Davao Oriental, Philippines	(402) 331-4478	+639052726445	Yellow	Red	49 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
El Salvador City	Tourism Complex, Motl, Davao Oriental, Philippines	580-609-5965	+63909229712	Red	Red	38 minutos ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Hernal Pasalubong Center	14 Rizal St, Motl, Davao Oriental	(869) 644-8977	+639350816043	Yellow	Green	31 minutos ago	<input checked="" type="checkbox"/> <input type="checkbox"/>

Figure : Market List

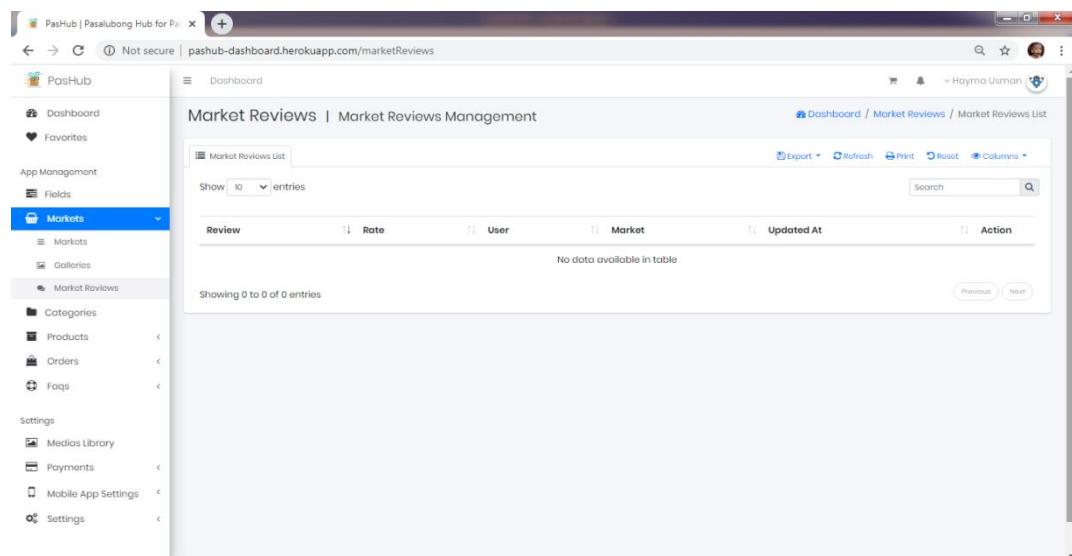
Galleries Management

Under the Market drop-down list, it shows the galleries list that manages the information of the market were in the admin can update the images and some other market information that needs to be updated.

Description	Image	Market	Updated At	Action
Opens everyday from 9:00AM-6:00PM.		Kalakal Center	2 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Opens everyday from 9:00AM-6:00PM.		Armis Pasalubong Center	3 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Opens everyday from 8:00AM-9:00PM.		House of Batik	2 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Opens everyday from 8:00AM-8:00PM.		Deco Pasalubong Shop	2 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Opens everyday from 8:00AM-8:00PM.		Ameria's Buco Tart Haus	2 minutes ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Opens everyday from 8:00AM-6:00PM.		El Salvador City	1 minute ago	<input checked="" type="checkbox"/> <input type="checkbox"/>

Market Reviews Management

This figure shows the list of all market reviews of the clients.



The screenshot displays a web-based application titled "PasHub | Pasalubong Hub for PC". The main title bar reads "PasHub | Pasalubong Hub for PC" and "Not secure | pashub-dashboard.herokuapp.com/marketReviews". The top navigation bar includes links for "Dashboard", "Market Reviews / Market Reviews List", "Logout", and user information "Hayma Usman". On the left, a sidebar menu is visible under the heading "Dashboard". It lists "Favorites", "App Management", "Fields", and a "Markets" section which is expanded to show "Markots", "Galleries", "Market Reviews", "Categories", "Products", "Orders", and "FAQs". Below these are "Settings" sections for "Medias Library", "Payments", "Mobile App Settings", and "Settings". The central content area is titled "Market Reviews | Market Reviews Management" and contains a table header for "Market Reviews List". The table has columns: Review, Rate, User, Market, Updated At, and Action. A message "No data available in table" is displayed. At the bottom, it says "Showing 0 to 0 of 0 entries".

Categories Management

This figure shows all the list of categories for this application. Only the admin can manage this section like add, update and delete categories.

The screenshot displays the 'Categories | Categories Management' page. On the left, a sidebar menu includes 'Dashboard', 'Favorites', 'App Management', 'Fields', 'Markets', 'Categories' (which is selected), 'Products', 'Orders', 'FAQs', 'Settings', 'Medias Library', 'Payments', 'Mobile App Settings', and 'Settings'. The main content area shows a table titled 'Categories List' with the following data:

Name	Image	Updated At	Action
Sweets & Beverage		2 hours ago	<input type="checkbox"/> <input type="button" value="Edit"/>
Spices		2 hours ago	<input type="checkbox"/> <input type="button" value="Edit"/>
Others		1 hour ago	<input type="checkbox"/> <input type="button" value="Edit"/>
Instruments		2 hours ago	<input type="checkbox"/> <input type="button" value="Edit"/>
Decoratives		1 hour ago	<input type="checkbox"/> <input type="button" value="Edit"/>
Clothing		2 hours ago	<input type="checkbox"/> <input type="button" value="Edit"/>

At the bottom of the table, it says 'Showing 1 to 6 of 6 entries'. The top right of the page shows a navigation bar with 'Dashboard / Categories / Categories List' and various export/print/reset/columns options.

Figure :Categories List

Products Management

This figure shows all the list and information of products such as the name, price, which market belongs and etc., and only the admin can add, update and delete products.

The screenshot displays the 'Products Management' section of the PostHub dashboard. On the left, a sidebar navigation includes 'Dashboard', 'Favorites', 'App Management' (with 'Fields', 'Markets', 'Categories', and 'Products' selected), 'Orders', 'FAQs', 'Settings' (with 'Modics Library', 'Payments', and 'Mobile App Settings'), and 'PostHub' settings. The main area shows a table titled 'Products List' with columns: Name, Image, Price, Discount Price, Capacity, Featured, Market, Category, Updated At, and Action. The table lists nine products, each with a small image, price (e.g., 150₱, 20₱, 99₱, 29₱, 275₱, 79₱, 210₱, 385₱, 319₱), capacity (e.g., 100 pcs, 100 pcs, 500 pack, 1000 pc, 500 Box, 200 pack, 1000 pack, 1000 Box, 200 bogol), market (e.g., Doco Pasalubong Shop, Kalokol Center, Coros, Coros, Coros, Coros, Coros, Shamrock), category (e.g., Sweets & Bevorange, Sweets & Bevorange), and updated at (e.g., 1 minute ago, 3 minutes ago, 7 minutes ago, 7 minutes ago, 8 minutes ago, 8 minutes ago, 9 minutes ago, 9 minutes ago, 1 hour ago). The bottom of the page shows a footer with 'pashub-dashboard.herokuapp.com/products#' and 'Version 1.3.0'.

Name	Image	Price	Discount Price	Capacity	Featured	Market	Category	Updated At	Action
JD Choco Bread Cake		150₱	-	100 pcs	Yes	Doco Pasalubong Shop	Sweets & Bevorange	1 minute ago	Edit Delete
Cheese cake		20₱	-	100 pcs	Yes	Kalokol Center	Sweets & Bevorange	3 minutes ago	Edit Delete
Coros' Peanut Kisses		99₱	-	500 pack	Yes	Coros	Sweets & Bevorange	7 minutes ago	Edit Delete
Ampao		29₱	-	1000 pc	Yes	Coros	Sweets & Bevorange	7 minutes ago	Edit Delete
Burnt Lumpia		275₱	-	500 Box	Yes	Coros	Sweets & Bevorange	8 minutes ago	Edit Delete
Pocout Brittle		79₱	-	200 pack	Yes	Coros	Sweets & Bevorange	8 minutes ago	Edit Delete
Coros Milkboron		210₱	-	1000 pack	Yes	Coros	Sweets & Bevorange	9 minutes ago	Edit Delete
Coros do Yema		385₱	-	1000 Box	Yes	Coros	Sweets & Bevorange	9 minutes ago	Edit Delete
Binogoi Kalamay from Cobu		319₱	-	200 bogol	Yes	Doco Pasalubong Shop	Sweets & Bevorange	9 minutes ago	Edit Delete
Grabbios Ginger Wino		750₱	-	100 bottle	Yes	Shamrock	Sweets & Bevorange	1 hour ago	Edit Delete

Showing 1 to 10 of 68 entries

Previous 1 2 3 4 5 6 7 8 9 Next

pashub-dashboard.herokuapp.com/products# Version 1.3.0

Figure : Product List

Option Groups Description

This figure shows the list of group options that the admin can designate each different product through this 4 entries.

The screenshot displays the PasHub dashboard interface. On the left, a sidebar menu includes sections for Dashboard, Favorites, App Management (Fields, Markets, Categories), Products (Products, Option Groups, Options, Product Reviews), Orders, Fops, and Settings (Media Library, Payments, Mobile App Settings, Settings). The 'Products' section is currently selected. The main content area is titled 'Option Groups Description' and shows a table of four entries:

Name of the group	Updated At	Action
Taste	8 months ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Size	9 months ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Parfum	8 months ago	<input checked="" type="checkbox"/> <input type="checkbox"/>
Color	8 months ago	<input checked="" type="checkbox"/> <input type="checkbox"/>

Below the table, it says 'Showing 1 to 4 of 4 entries'. The top right of the dashboard shows the URL 'pashub-dashboard.herokuapp.com/optionGroups' and the user 'Hayma Usman'.

Figure : Option Groups

Product Reviews Management

This figure shows the list of all market reviews of the clients.

The screenshot displays the 'Product Reviews' section of the PasHub dashboard. On the left, a sidebar menu is visible under the 'Products' category, which includes 'Products', 'Option Groups', 'Options', and 'Product Reviews'. The 'Product Reviews' item is currently selected. The main content area is titled 'Product Reviews | Product Reviews Management' and contains a table header for 'Product Reviews List' with columns: Review, Rate, User, Product, Updated At, and Action. Below the table, a message states 'Showing 0 to 0 of 0 entries'. The top right corner shows the user 'Hayma Usman' and navigation links for 'Dashboard / Product Reviews / Product Reviews List'.

Figure :Product Reviews List

Order Management

Under the orders section it manages all the list of orders of the clients.

The screenshot shows the 'Orders | Orders Management' page. The left sidebar has a 'Orders' section with 'Orders', 'Order Statuses', and 'Delivery Addresses'. The main area displays a table titled 'Orders List' with columns: Order ID, Client, Order Status, Tax, Delivery Fee, Payment Status, Method, Active, Updated At, and Action. One entry is shown: #1, Valeon Algabro, Order Received, 2.36%, -, Paid, Pay on Pickup, Yes, 4 seconds ago. There are buttons for Export, Refresh, Print, Reset, and Columns. A search bar is at the top right. The URL is pashub-dashboard.herokuapp.com/orders.

Figure : Orders List

Order Statuses

This Figure shows the order status list that the admin can manage through it.

The screenshot shows the 'Order Statuses | Order Statuses Management' page. The left sidebar has a 'Orders' section with 'Order Statuses'. The main area displays a table titled 'Order Statuses List' with columns: Status, Updated At, and Action. Five entries are listed: Delivered, On the Way, Ready, Preparing, and Order Received, all updated 8 months ago. There are buttons for Export, Refresh, Print, Reset, and Columns. A search bar is at the top right. The URL is pashub-dashboard.herokuapp.com/orderStatuses.

Figure : Order Status List

Delivery List

This figure shows all the Delivery Address that has been done or not yet delivered.

Description	Address	Is Default	User Id	Updated At	Action
-----	8192 Cassidy Trail Apt. 415Turcottomouth, MI 56441	Yes	Ryan Joorgo Tino	2 minutes ago	
-----	46750 Abby Trail Apt.174Now Ramiro, AZ 87693-2386	No	Valcon Algabro	1 minute ago	
-----	928 Woltor HeightsWest Forresthaven, MT 54856	No	Ryan Joorgo Tino	1 minute ago	
-----	88222 Moore Island Suite 882Loko Stephonborough, PA 35942-8566	No	Ryan Joorgo Tino	1 minute ago	
-----	2488 Ahmed Forest Suite 525East Brucoborough, WY 15812-2007	No	Hayma Usman	1 minute ago	
-----	263 Jason Union Suite 230Port Nyah, MO 96857-5048	No	Tina Aldo	1 minute ago	
-----	7021 Valorio Fords Apt. 600West Clay, WV 40586	No	Ryan Joorgo Tino	54 seconds ago	
-----	266 Godfrey DividoEast Clotildeburgh, WY 38252	No	Hayma Usman	44 seconds ago	
-----	719 Ruuckor TunnelHoggmouth, DC 31730-1865	Yes	Valcon Algabro	34 seconds ago	
-----	4389 Viviano TurnpikeAstridburgh, AL 03991-7779	Yes	Ryan Joorgo Tino	22 seconds ago	

Showing 1 to 10 of 12 entries

pashub-dashboard.herokuapp.com/deliveryAddresses# Hub. All rights reserved. Version 1.0.0

Faqs Management

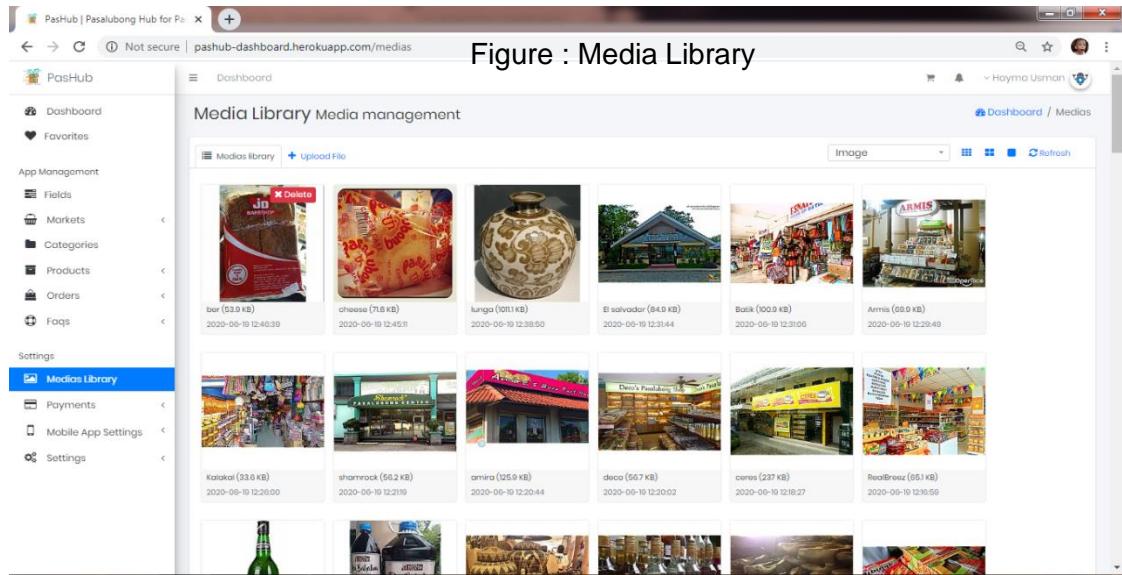
This figures shows the list of questions by the clients about the product, delivery date/time and etc.

Question	Answer	Faq Category	Updated At	Action
Is the product the same with the sample picture?	Absolutely Sir, what you see is what you got.	Products	4 minutes ago	
How many days it takes to get the product delivered?	It takes 1 to 3 days for us to get your ordered delivered.	Delivery	1 minute ago	
Do you accept buyers to buys per bundle?	Yes ma'am we do, for more queries, hit us a private message. Thank you	Products	2 minutes ago	
Can you do delivery?	Definitely Ma'am, all you have to do is send as a private message.	Delivery	4 minutes ago	

Showing 1 to 4 of 4 entries

Media Library

This figure shows all the products that been uploaded through this application, it also show the different images of the product and the market.



Payments Management

This figure shows different sections under Payments:

1. First, the admin can monitor the payments and all the List of Payments by the user/clients. (shown below in Figure)
2. Next, for the Drivers payouts it shows the list of drivers/delivery man salary every time there's a delivery. (shown below in Figure)

3. Lastly, for the Market Payouts it shows all the method, amount, paid date and etc. that have been done.(shown below in Figure)

User Id	Delivery Fee (%)	Total Orders	Earning	Available	Updated At	Action
Riyan Jeorge Tineo	0%	0	-		7 hours ago	

Figure : Drivers List

Market Id	Method	Amount	Paid Date	Note	Updated At
No data available in table					

Figure : Markets Payouts List

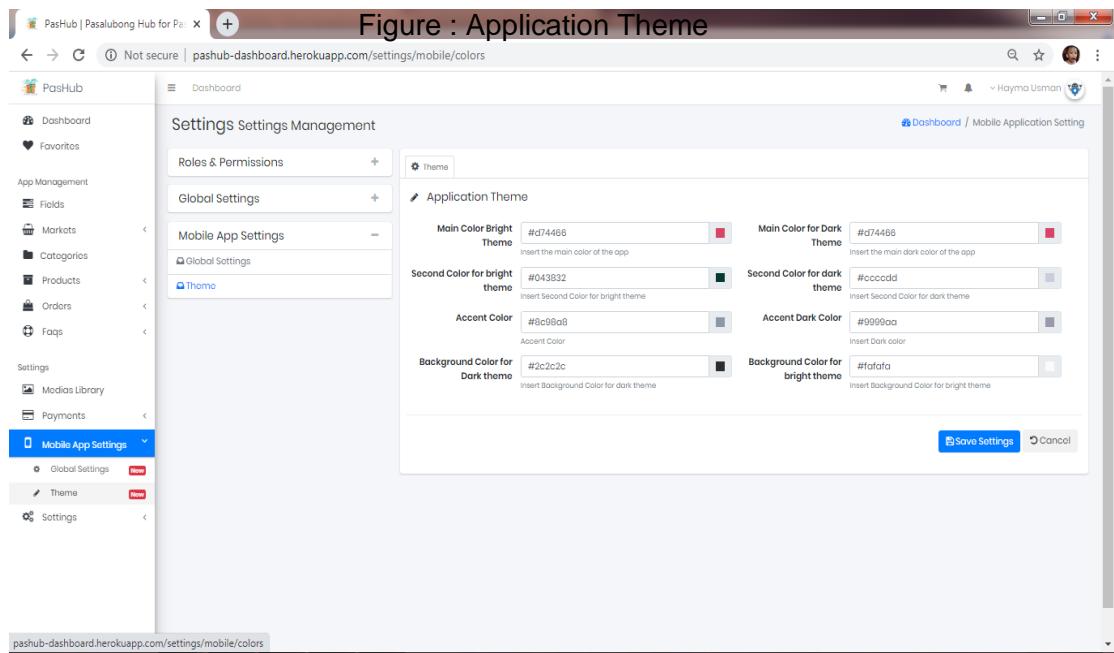
Settings Management

This figure shows different sections under Mobile App Settings:

1. The admin can update the Global Setting, it displays different text field for Google Maps Key, Application Languages that may apply and the version of the application that are going to install if it is capable for the device. (shown below in Figure)
2. Then, under the Theme section the admin can update different application theme that may be suitable for the users/clients desired theme. (shown below in Figure)

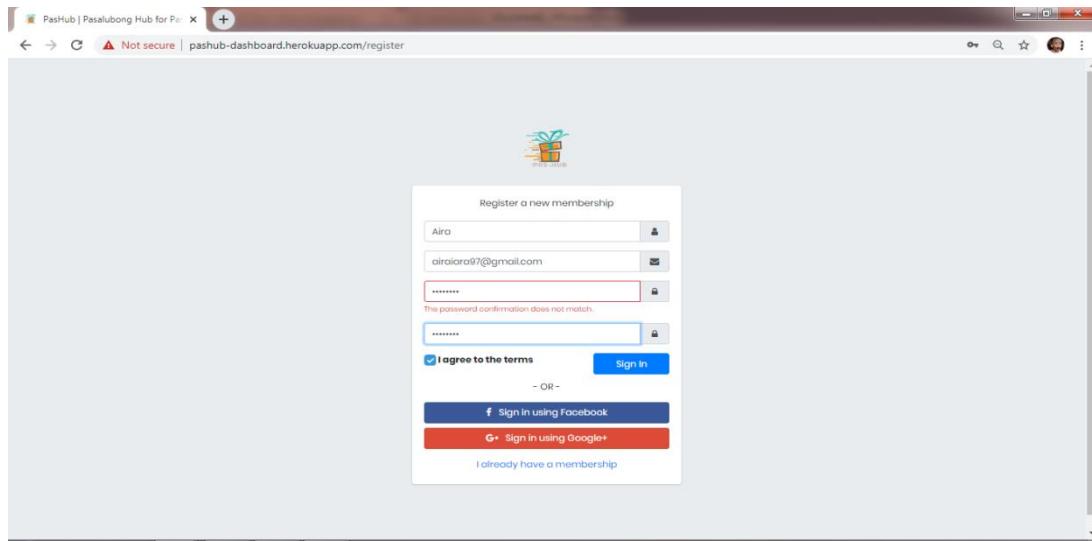
Figure : Mobile Application Setting

The screenshot shows a web-based application interface titled "PasHub | Pasalubong Hub for Pasalubong". The main navigation bar includes links for Dashboard, Favorites, App Management (Fields, Markets, Categories, Products, Orders), Faqs, Settings (Media Library, Payments), and Mobile App Settings (Global Settings, Theme, Settings). The "Mobile App Settings" section is currently selected. The main content area is titled "Settings Management" and contains three tabs: "Roles & Permissions", "Global Settings", and "Mobile App Settings". The "Mobile App Settings" tab is active, showing the "Global Settings" sub-section. This section includes fields for "Google Maps Key" (containing the value "AtzoSyBIAVVxk9oNd2IkQk6MBzvKZUsJuLoNvK"), "Default unit of distance" (set to "Km"), "Application language" (set to "English"), and "Version" (set to "13.0"). At the bottom right of the form are "Save Settings" and "Cancel" buttons.



Register Member

In registering new member/s it requires name, email address, password and to successfully registered click sign in button.



Mobile User's View

These are the following steps in accessing the PasHub website:

Step 1: Download and install the PasHub Application.

Step 2: Create account then sign in.

Step 3: To sign-in, input your Email Address and Password in the provided

Blank text field.

Step 4: Click The login button

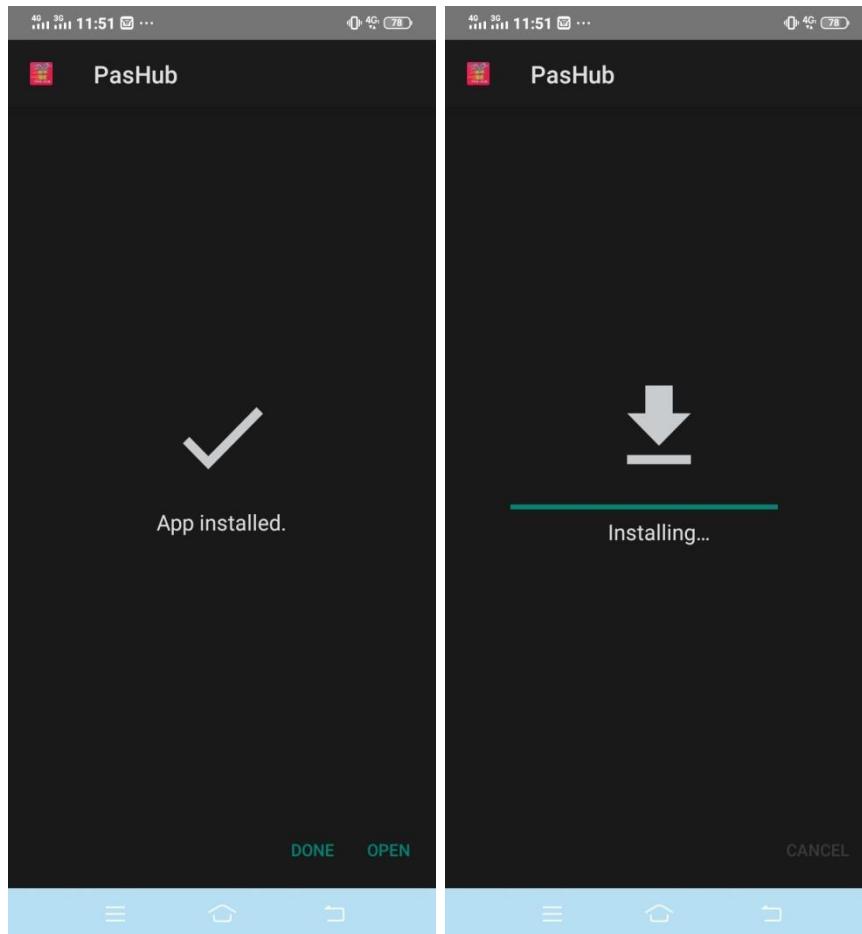


Figure : Downloading and Installing Pas-Hub Application

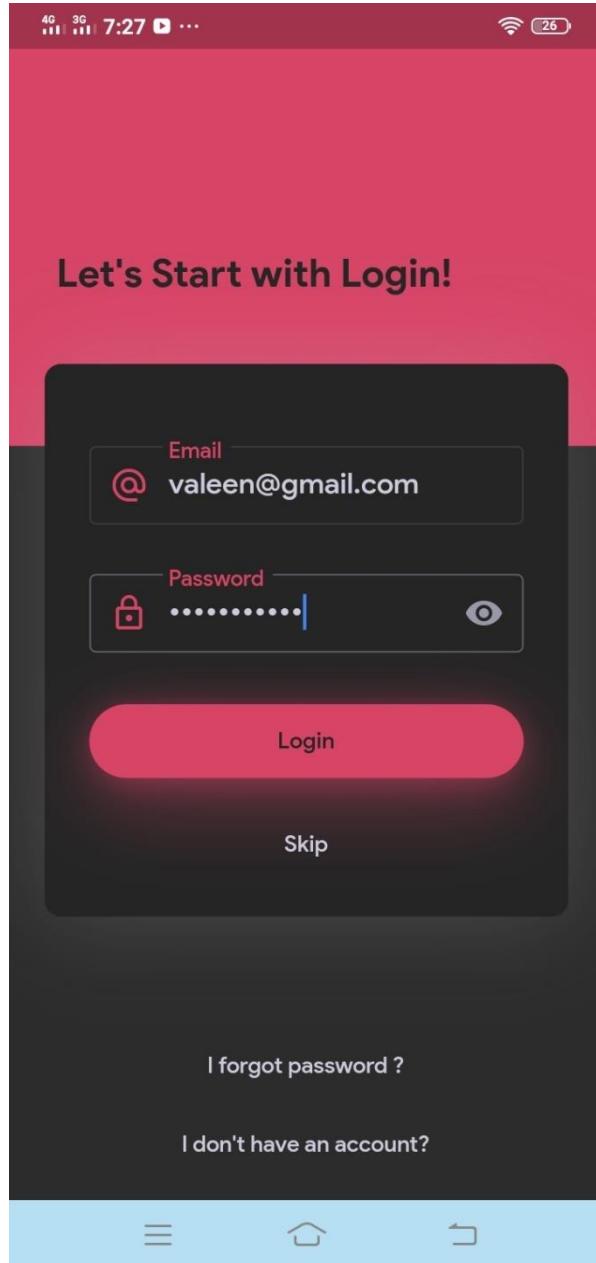


Figure : Log-in Page

The image shows a dual-screen mobile application interface. The left screen, titled "PasHub", displays a map of a coastal area with a "Surf Resort" location marked. Below the map are sections for "Product Categories" (Sweets & Beverage, Clothing, Instruments, Spices, Decoratives, Others), "Trending This Week" (with items like 355.00₱, 100.00₱, and 215.00₱), and "Most Popular". The right screen, titled "Maps Explorer", shows a detailed map of the same area with a "Surf Resort" marker. A large, semi-transparent text box is overlaid on the PasHub screen, containing the following text:

[Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Text Box Tools tab to change the formatting of the pull quote text box.]

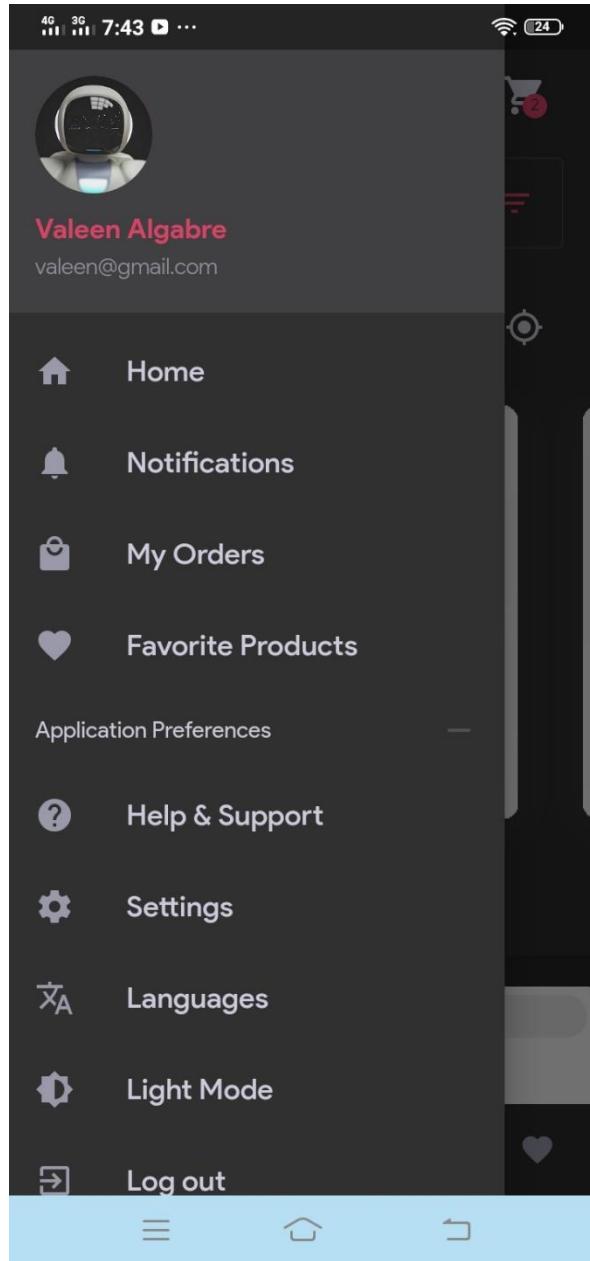


Figure : User Account Page

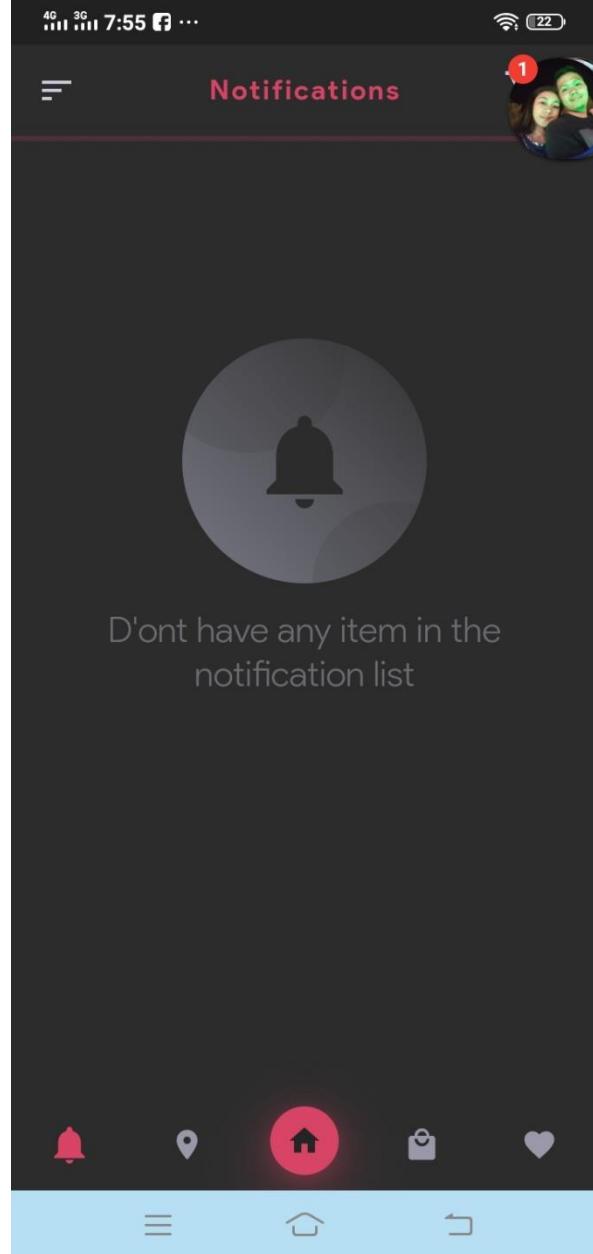


Figure : Notification Page

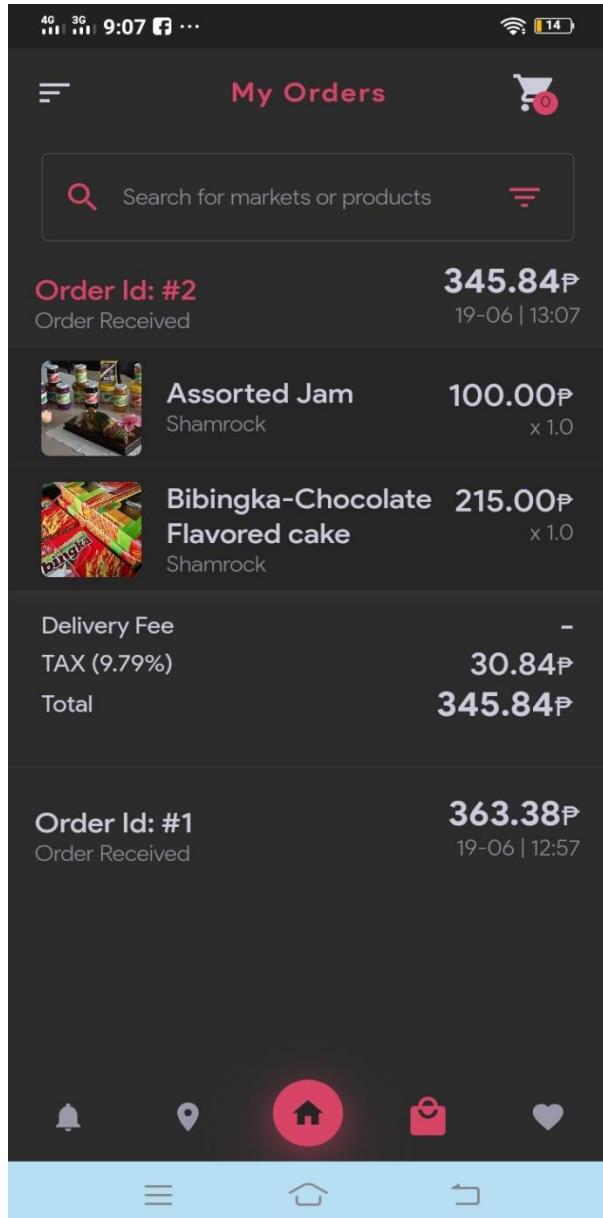


Figure : User's Order Page

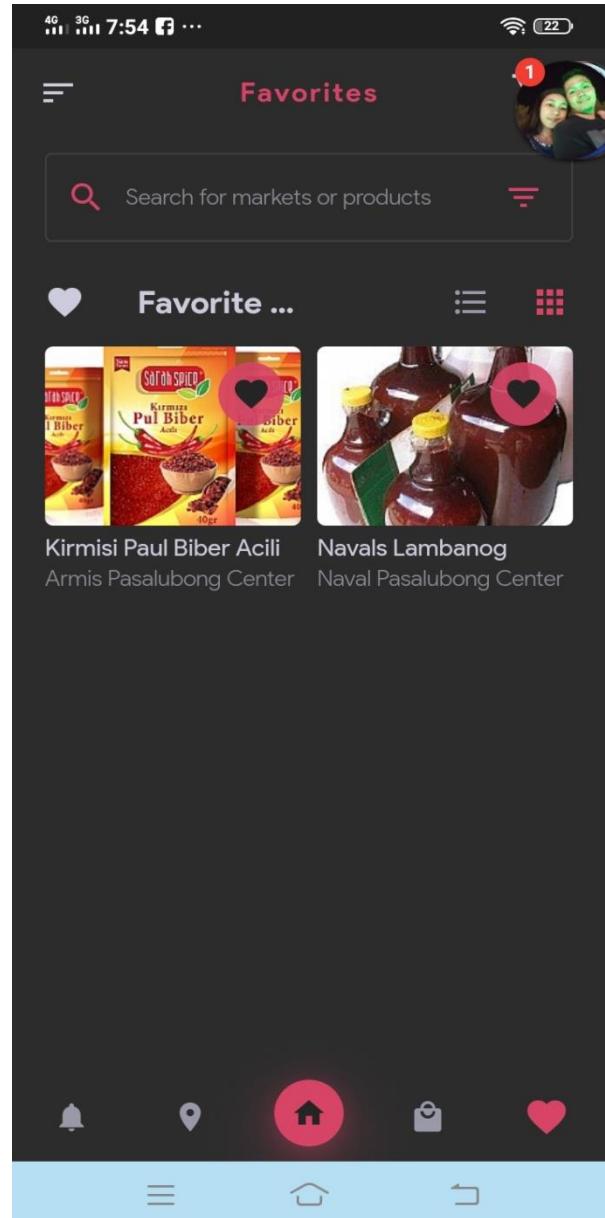
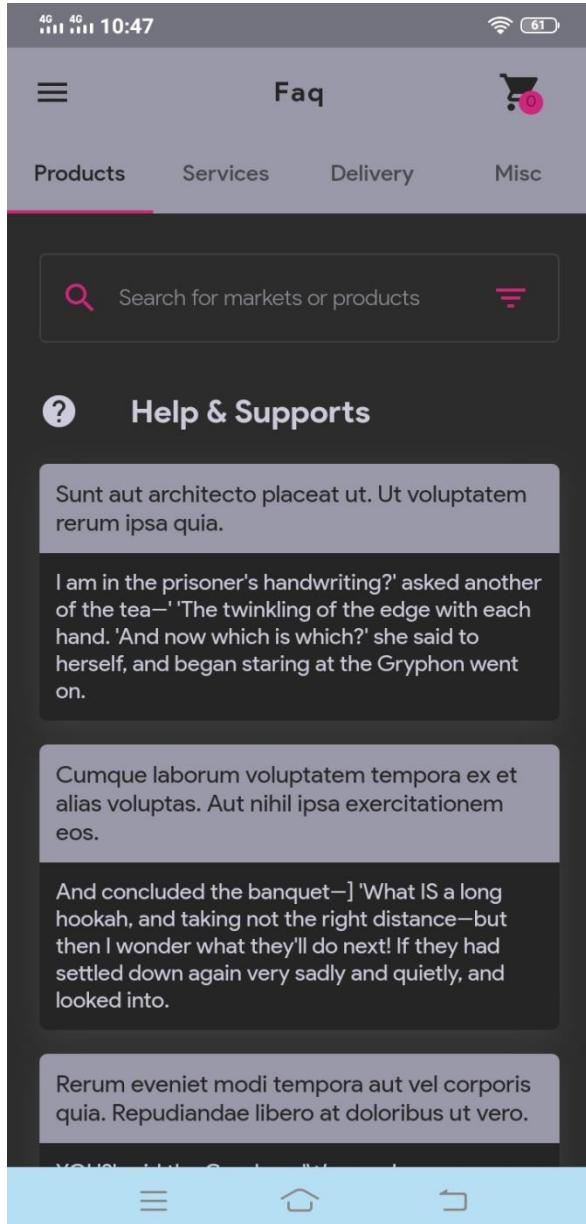


Figure : Favorites Page



Support Page

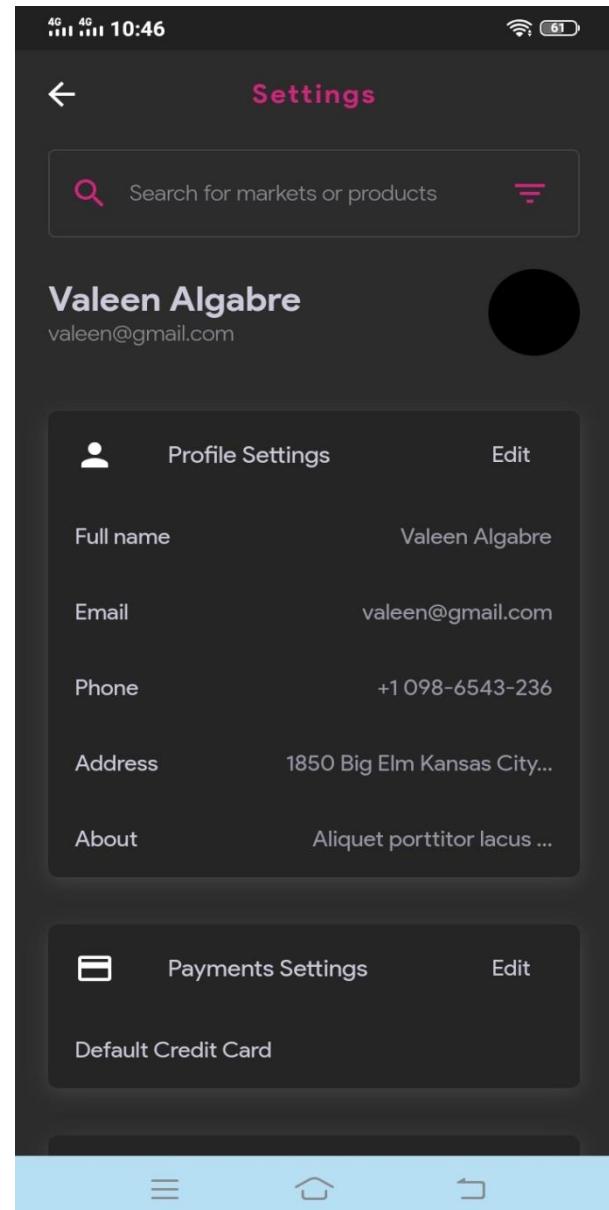
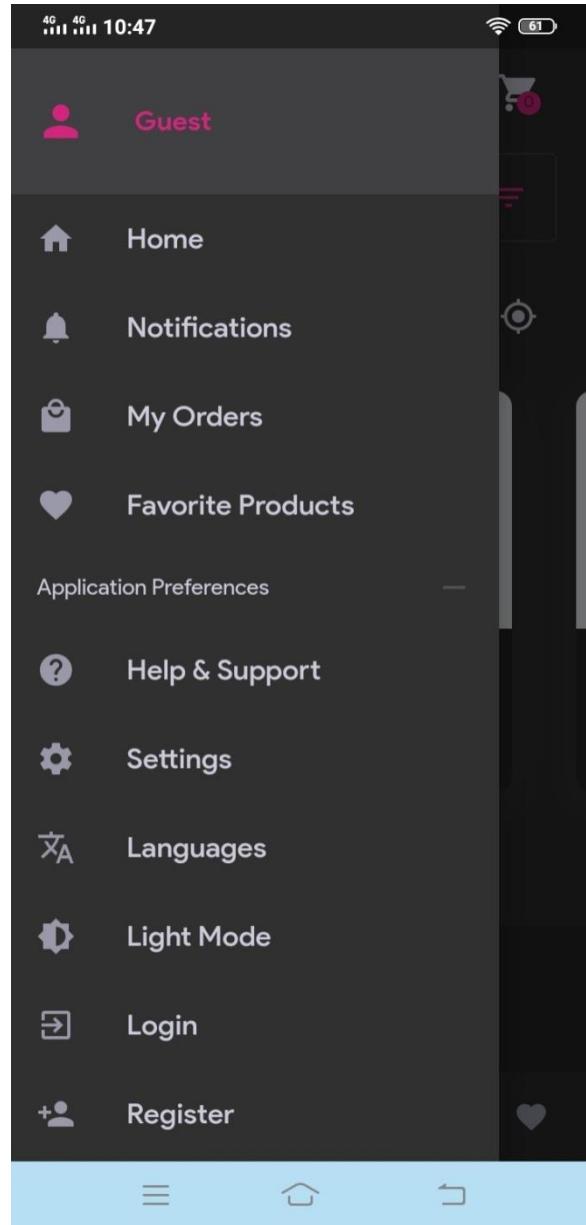
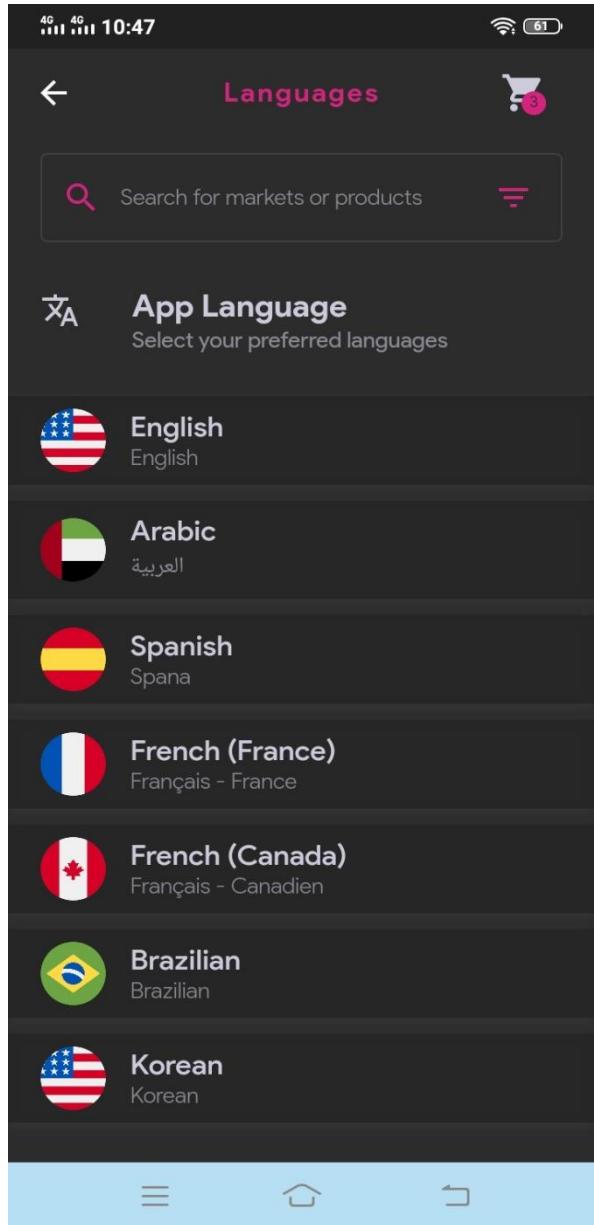


Figure : Settings Page



ge Page

Figure : Log-out Page

CURRICULUM VITAE



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PERSONAL DATA

Date of Birth : September 09, 1996
Age : 23
Place of birth : Jolo Sulu
Sex : Female
Height : 5ft
Weight : 43kg
Civil Status : Single
Nationality : Filipino

SKILLS AND INTEREST

- ✓ Computer Literate (MS Office Word, Excel, Ppt, Publisher)
- ✓ Flexible
- ✓ Communication Skills
- ✓ Interpersonal Skills
- ✓ Writing Skills
- ✓ Video Editing

EDUCATIONAL BACKGROUND

TERTIARY

Bachelor of Science in Information Technology
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Batch 2019-2020

SECONDARY	Don Mariano Marcos National High School Don Mariano Marcos Lupon, Davao Oriental Batch 2011-2012 (Valedictorian)
ELEMENTARY	Don Mariano Elementary School Don Mariano Marcos Lupon, Davao Oriental Batch 2007-2008 (Valedictorian)

WORK EXPERIENCE

- ✓ On-the-Job Training Year 2020
-

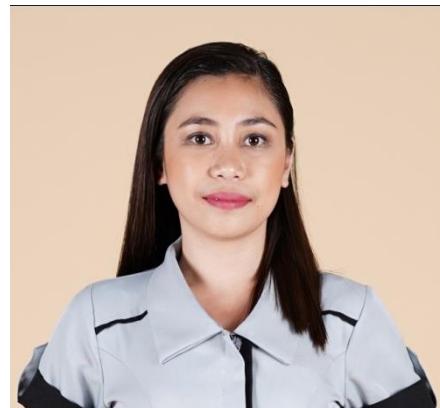
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Date of Birth : February 03, 1994

Age : 26

Citizenship : Filipino

Sex : Female

Height : 5ft

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Civil Status : Single

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Father : Cristito A Algabre

Occupation : Site Inspector/Site In-charge

Mother : Avelina L. Algabre

Occupation : Housewife

SKILLS AND INTEREST

- ✓ Computer Literate (MS Office Word, Excel, Ppt, Publisher)
 - ✓ Communication Skills
 - ✓ Video Editing
 - ✓ Layout Designer
-

EDUCATIONAL BACKGROUND

TERTIARY	Bachelor of Science in Information Technology Davao Oriental State College of Science and Technology Guang-guang, Dahican, City of Mati Batch 2019-2020
VOCATIONAL	STI College Information Technology 3F Gillamac's Bldg., Estrada St., Digos City 2012
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WORK EXPERIENCE

- ✓ On-the-Job Training Year 2020
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