



## DEVELOPMENT OF ANDROID APPLICATION FOR HERBAL MEDICINE ONLINE ORDER

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### ABSTRACT

This paper is aimed to develop android application for an herbal medicine online order to improve this herbal medicine industry service and use the advantage of the rapid progress of the communication and technology especially source-sharing. This app allows users to browse the herbal medicine according to their disease and order it with just a few clicks. The users need to sign into the application to process the shipment. If the users don't have an account then they need to sign up first. After the sign in process is done, the users need to complete the order process by choosing the payment method then confirm it. The android application would be created firstly by made a website in WixSite and connecting with Ecwid and would be connecting using AppyPie. The user can order herbal medicine from android mobile devices so it is more effective to save costs and time.

**Keywords:** android application, android devices, herbal medicine.

### 1. INTRODUCTION

Herbal medicine is a medicine made from national ingredients traditionally. This drug is a prescription-based ancestor or has existed since time immemorial. These drugs are still many made or used to treat various diseases. The existence of herbal medicine is still quite high. This herbal medicine is still widely used because it has more advantages rather than drugs from a medical or chemical medicine. Herbal medicine is also made from natural ingredients which are safe for use; unlike chemical medicine which have a risk to the health. According to the research, herbal medicines are beneficial to health and now intensified its use because it is easier to reach by the people, both price, and availability. Apart from that, people would consume any medicine that recommended by others in order to gain a good health, yet they did not aware about the contents of the medicine whether it is safe to use or not. There are a lot of products in the market that contains dangerous ingredients which may cause harm to human body [1]. Herbal medicine is one of the great ways to gain a good health.

In recent years, more attention has been paid on natural products, and the importance of the herbal medicine's research and development; the medical products has been realized by the international society. The herbal medicine industry plays a critical role in ensuring a country's continuous development as its function is to provide the healthcare needs to communities and individuals and impacts the life of every person. Moreover, as one of the largest and fast-growing industries, together with several other service industries, e.g., transportation, financial services, and data processing, accounts for more than half of all projected job growth over the coming decade [2]. However, most governments in developed economies are cutting down the public healthcare spending; the healthcare costs are rising as a result of, e.g., the advancement in medical technologies, the change of healthcare cost structures [3]; the incidents, such as deaths and injuries in hospitals, and other

healthcare service quality problems are often reported [4]. All of these pressures force herbal medicine industries to develop (or redesign) their services such that the expected healthcare can be delivered with the available resources. Meanwhile, with the rapid progress of the communication and information technology and their extensive application in traditional industries, the modernization and internationalization of these industries have been accelerated. Modern information technology has become the opportunity to the development of herbal medicine online order. Taking the advantage of source sharing, and the easy acceptance of the information, the information technology has been widely used in the whole herbal medicine industry [5].

Android as a popular open source operating system is being used to develop Applications. Android OS is installed in a generous amount of smartphones [6]. With the booming of internet and e-commerce, more and more enterprises are publishing their product information on the web. By visiting the web through Internet, users can view the product and if the users are satisfied with the products and prices, they may order them online on the spot [7]. Because this application has never existed before, the researchers decide to make this application for smart phone-based Android Operating System. The focus of this paper is to develop a new herbal medicine online order by implementing code and combine it into one Android application. The idea is using the Android device to process the input and match the right herbal medicine for each disease. To determine the right herbal medicine for each disease, this application can match automatically according to the data input from the user.

This application is an application to order herbal medicine for each user disease. To run this application, it has to be connected to the Wi-Fi or mobile data. When the application is opened, the users can input the disease. After that, the cure information for each disease will appear. The users can read information about the cure and they also can click the BUY button if they want to buy the



product. Then the users have to confirm the order to check the amount of the product that they want to buy and they also can see the total payment for the product. After the confirmation, the users need to login first but if the users don't have an account they have to register. When the register process is finished, the users need to log in one more time. After the login is succeeded, they can see their account contains the name, address, and shipment status. When the shipment is delivered, they have to pay that by cash on delivery or another payment method is by credit card the difference between this applications than the other is located on the design which is user-friendly.

This paper is organized as follows. On Section, I, the Android application and the proposed system are introduced. The application layout and system overview are covered in Section II. The application development is covered on then Section III. The result of this development android application is given in Section IV. Finally, the conclusion of this paper is given in Section V.

## 2. APPLICATION LAYOUT AND SYSTEM OVERVIEW

Development to obtain and consume herbal medicine can be implemented into today's smartphone. Android as one of the most used Operating Systems can help developing an application in getting herbal medicines. This application is designed by *WixSite* because it can develop for all android devices and extensive testing tools and frameworks. Before the user start, they must have an account to sign into this application and the users can use it; register the e-mail and user password first. After that, the user inputs the name of their disease e.g. fever, headache, influenza, cough, and other symptoms. The app will process the data input and match it what kind of herbal medicine is right to be consumed by the user in the form of a short description of herbal medicine. Once the user has read and understood the description of herbal medicine in accordance with the disease, the user can order that medicine offered by this app. The user can enter the amount of the herbal medicine to be ordered and the user can confirm that order.

This application will automatically accumulate what price should be paid. The screen in this app then headed to the log in screen. When the login is successful, the user accounts' screen will appear. If the user does not have an account, the screen will display the registration screen. Once registration is complete, the screen will go back to the login and it displays the user's account which contains their name, address, and the status of orders which will be in the delivered.

Before the user can access the application, they need to connect to the Wi-Fi or use the mobile data. After that the application can be accessed as shown in Figure-1. Once the users open this application, they can enter the disease they are having then this application will show the right herbal medicine for its disease. The users can read the description about the medicine. Not only showing the ingredient to cure the disease, this application will also offer the product of the medicine by showing the picture of it and also the price of the product. There is BUY

button below the medicine description which the users can click to make sure that they want to order the product. After the users click the BUY button, they can adjust the amount of the product they want to order starting from the minimum of the order which is 1 to the maximum order which is 10. Then, the users can check the price below the amount which is determined automatically by the application. The users have to pay their shipment by cash on delivery. When the order process is already confirmed, the users need to fill the email and password in order to sign into the application. By the time the sign in process is succeeding then the order of the medicine process is finished. For the unregistered users, they can make their new account by clicking the Sign Up button. To register to this application, the users need to fill Name, Email, Password and Address. After completing all of them, the users can click the Sign Up button to finish the register process. When the users are successfully registered then the order of the medicine process is finished.

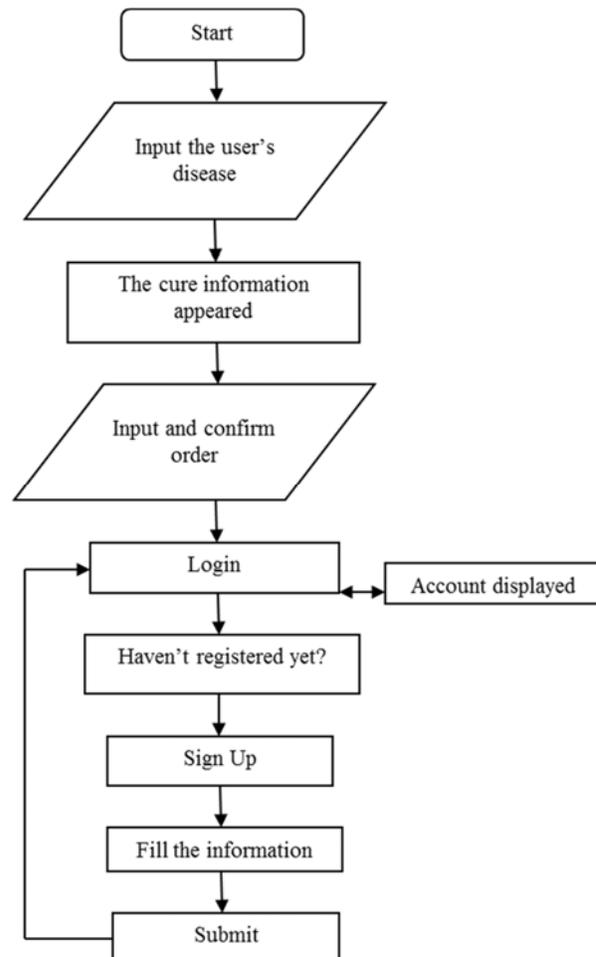


Figure-1. Flowchart of the application.

When the order of the medicine is finished, the user can check their user profile. There are Name, Address, and Shipment Status. The shipment status consists of No Orders, In Transit and Delivered. No order



means that the users don't order any medicine; In Transit means the shipment is on the way and Delivered means

that the users already received the shipment.



Figure-2. Example of application.

### 3. APPLICATION DEVELOPMENT PROCESS

To create this application, it begins with making a website. This website is decided to be an online order type. In this part, the researchers play a role as an admin or a seller who can sell product and the users can buy it. After making a website, to input the products, its description, its price, sign in and sign up the process, add to cart, check out also the payment is by using acid which is an application that can store the whole online order process. Then, once it is done, acid can be connected to the website so the users can process the order.

The website then is converted to the android application by using WixSite. WebView from the widgets of the WixSite is the layout for herbal medicine online order application. Codes in the main activity are applied and run into the mobile phone. The permission to use the internet and connect to the link is also applied in the android manifest. Once those processes are finished, the users can access the application.

### 4. THE RESULT

The result of this project is the application of Herbal Medicine Online Order can be run in the android mobile phone with the minimum 4.2. Jelly Bean Android Operating System. The users can browse the products and buy it for just a few click. The flexible payment system for this app is also effective and efficient for the users.

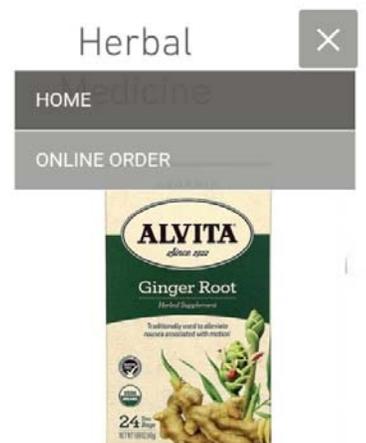


Figure-3. The menu.

Not only the users can order the products from a mobile phone but they also can order it from the website by using their own laptop or personal computer. Both steps from the mobile phone and website are very easy to access. After it gets the apps, it can run by touching the picture of herbal medicine. The application calls Herbal Medicine.

While opening the application, it shows the menu. The above one is Home of the Application and the bottom one is for order the herbal medicine by the online system. On the Home menu, it shows the herbal medicine which is ready stock and ready to be ordered. On the Online Order menu, it can ship the package while it is herbal medicine to the user by their phone.



**Figure-4.** The herbal medicine which ready to be shipped.

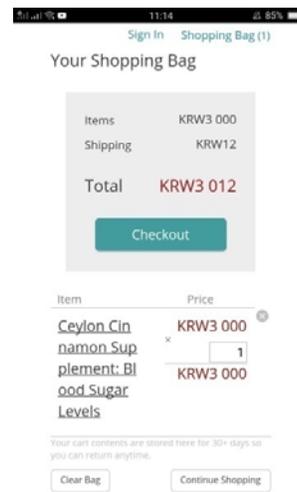
When it taps the Online Order menu like the previous figure, it displays the herbal medicine which ready to be shipped. On this application, there is cinnamon for blood disease, ginger for asthma, and garlic for cough disease. The user can choose which one the herbal medicine will be delivered from this application. Also, there is some price for each medicine according to its ingredients and property.

After choosing the right herbal medicine for a cure, it shows some description of herbal medicine choices. On the Figure-5 it shows Ceylon Cinnamon Supplement: Blood Sugar Levels for a blood disease. On the bottom side, there is some information about the stock of the herbal medicine and the price of the herbal medicine.



**Figure-5.** Add to bag menu.

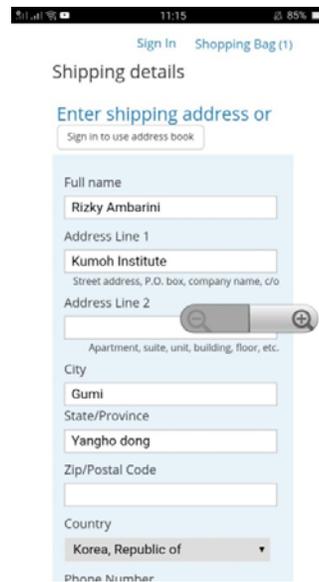
If it scrolls down, there is a menu for carting the package. Also, there is a quantity box for how much the amount of herbal medicine is shipped. If the user is ready for shipping, click the bottom Add to Bag and it will go to the next display.



**Figure-6.** The information of bag shopping.

After clicking the Add To Bag menu like the previous figure, on this figure shows the price of the package and how much do the user pay. The Items section shows the price of herbal medicine wants to be ordered. The Shipping section shows the postage and it has to be paid by the user. It is according to the how far the user location and the weight of the herbal medicine. When the user agrees, it can tap the Checkout menu.

On the section bottom one, there is some information for making sure the user and shipping. If the user wants to buy another herbal medicine, it can tap Continue Shipping menu, but if the user wants to cancel the shipping and wants to change the other herbal medicine, it can tap Clear Bag menu.



**Figure-7.** Fill the information of the user.



On this section, it shows the form for the user's information for addressing of shipping. There are Full name menu for the name of the user, Address Line 1 for the address of the user, Address Line 2 for the another address (optional) of the user, City menu for the city based on the user is located, State/Province menu, Zip/Postal Code for the advanced information of the user's address.

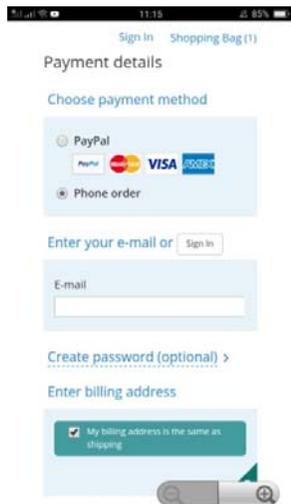


Figure-8. The payment system.

When the information of the user is ready to be fill up, the application goes to the Payment details menu. The user can choose which ways for paying the package; by credit card, phone order, or e-mail. For example, the user wants to pay the package by phone order method.

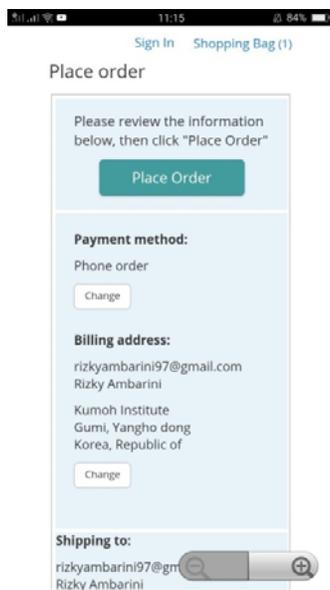


Figure-9. The payment system.

The user chooses the Phone order method for paying the package. The bottom section shows the reviews of information of the user's address, for who and where to

go. It can change the description of the Billing address when its information is wrong. The Payment method menu can be changed if the user wants to change the method of paying package.



Figure-10. The payment system.

On this section, there is some information for making sure the user is it true of the information's user or not. And there is some price is displayed to remind the user how much the price to be paid by the user. If it is clear, the user can press the tab Place Order menu.



Figure-11. The shipping information.

When the user is finished to check out the information and the amount of price which has to be paid



for the shipping, the application shows the statement Your order has been placed, it means the shipping is ready and will go to the user's address.

## CONCLUSIONS

This paper introduces the development of an android application for the herbal medicine online order. The idea is to implement an online order inside the android application and it needs to use a Wi-Fi or mobile data connection. This application is using a simple code and Java Language. From the description and the process of making this application of this research, the authors can give some conclusions. Designing and creating this Herbal Medicine Online Order Android Application is compiled using the Java programming language with Android SDK. The system created an application based on the Android platform that can be run and accessed through mobile devices based on Android. The result shows the product with its description and its price, add to cart, checkout, and payment by credit card or cash on delivery, sign in and sign up the process, the user's profile and status delivery. This application is expected to facilitate users in making herbal medicine order process can save their costs and time. Development can be done by adding some kind of herbal medicine again so that there are more references for users of herbal medicine.

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