

Appendix A. Traditional way of farmers

The country of Vanuatu, which consists of 13 major and minor islands, is situated in the southwest Pacific Ocean, northeast of New Caledonia, east of Australia, and west of Fiji. The 400-mile-long islands are organized in an ill-defined Y shape. Vanuatu is frequently one of the greatest holiday destinations for scuba divers wishing to experience the magnificent coral reefs of the South Pacific. Vanuatu's economy is based on agriculture, which employs 80% of the labor population and comprises small farms and the production of cash commodities like coconuts and other products.



Figure 1. Local Markets

Farmers may market their crops in a number of ways. Customers have the option of buying it straight from them, or they may sell it to the neighboring cafes, markets, and shops. A "middle man," or someone who serves as a middleman to deliver farmers' commodities to markets, merchants, and restaurants, is used by larger farms to sell their products. They choose for this strategy since they have a lot of things to distribute, don't have the time to handle everything themselves, and are more accustomed to it this strategy is also known as the conventional approach for farmers to advertise their goods.



Figure 2. Farmer local products

Appendix B. Survey Questions

General questions

1. What is your name?
2. What is the gender you identify with?
 - a. Female
 - b. Male
3. What is your age?
4. Where are you currently now?

Interview questions

No	Questions	Type of Interview
1.	How long have you been in the agriculture sector?	Telephone Interview
2.	What are the challenges you face in your farm?	Telephone Interview
3.	What are the challenges your having with traditional way of marketing your products?	Telephone Interview
4.	Would you be interested in finding out more about e-commerce and digital marketing?	Telephone Interview
5.	What is your opinion for implementing ICT in our Agriculture Sector?	Telephone Interview
6.	Whats your opinion for having an online platform for farmers to market their goods?	Telephone Interview
7.	If you sell products online is it profitable?	Telephone Interview
8.	Name the advantages for having an online platform to markets your goods	Telephone Interview

Figure 3. Survey questions

A variety of materials, including books, journals, and articles relevant to Android mobile programming as well as periodicals related to Vanuatu agriculture, were used to learn about the crops and sellers in Vanuatu. Furthermore, speaking with local Vanuatu residents will provide more detailed information. A simple example of the data collection model is provided in the following table:

Interview	Study Literature	Observation
<ul style="list-style-type: none"> • Conducted interview with target audience, namely farmers and consumers. • Interview consists of 10 or less than 10 questions, all questions were about, the traditional way of selling farmer products and goods, the struggle they face, the high cost of demand for the middleman and how would it be by having an online platform for farmers to use. 	<ul style="list-style-type: none"> • The researcher reads journal mainly about Vanuatu agriculture, e commerce in agriculture, benefits of an online platform for farmers and the development of mobile applications 	<ul style="list-style-type: none"> • The researcher observes the traditional way of how farmers are selling their goods and products. • The struggle they face, high cost demand. • The Researcher done all of the observation through social media since he is not currently at his country.

Figure 4. Data collection Model

Appendix C. UX Survey Questions

No	Questions	Type of Interview
1.	I understand what Gomarket does	Telephone Interview
2.	I know how to use Gomarket	Telephone Interview
3.	How would you rate the user-friendliness of Gomarket interface?	Telephone Interview
4.	How does Gomarket compare to Traditional way?	Telephone Interview
5.	If you were to review Gomarket , what score would you give out of 10?	Telephone Interview
6.	Overall, how easy to use do you find Gomarket?	Telephone Interview
7.	What do you find best about Gomarket?	Telephone Interview
8.	How easy is it to navigate the app?	Telephone Interview
9.	What do you like best about Gomarket?	Telephone Interview
10.	Did you encounter any problems while using the interface? if yes, tell us about them	Telephone Interview

Figure 5. UX survey questions

a formula of System Usability Scale calculation is provided. System Usability Scale (SUS) and its calculation method were created by John Brooke in 1986. System Usability Scale (SUS) enables researchers to assess a wide range of goods and services, including hardware, software, mobile devices, websites, and apps (Brooke, 1986). Participants are prompted to select one of five responses (1 to 5) Strongly Agree to Strongly Disagree for each of the following ten statements when a SUS is being used.

1. I think that I would like to use this system frequently.
2. I found the system unnecessarily.
3. I thought the system was easy to use.
4. I think that I would need the support of a technical person to be able to use this system.
5. I found various functions in this system that were well integrated.
6. I thought there was too much inconsistency in this system.
7. I would imagine that most user would learn to use this system quickly.
8. I found this system very difficult to use.
9. I felt very confident using this system.
10. I need to learn a lot of things before using this system.

Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

Figure 6. Likert Scale score

After giving the scores in range of 1 to 5 for each statement, the scores obtained then calculated by using these conditions:

- Subtract 1 from the total for each of the questions with an odd number.
- Subtract the value of each of the questions with an even number from 5.
- Add up the new values you've discovered to get the final score. Add 2.5 to this number.

After calculating until its total score of SUS, the determination of the usability value category is carried out by looking at the assessment categories that have also been made by Brooke as follows.

Score	Grade	Rating
> 80.3	A	Excellent
68 – 80.3	B	Good
68	C	Okay
51 – 68	D	Poor
< 51	E	Awful

Figure 7. System Usability Scale Score

Score from 5 respondents:

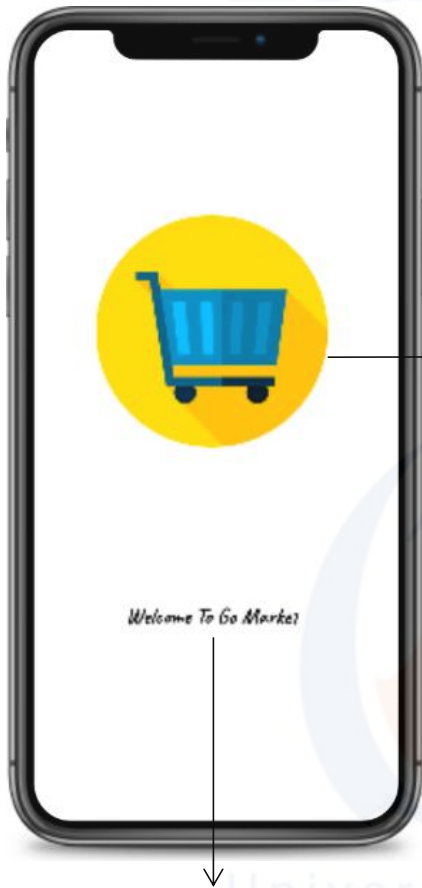
Statement	Respondent 1	Respondent 2	Respondent 3	Respondent 4	Respondent 5
1	5	4	5	4	5
2	1	1	2	2	1
3	4	5	5	3	5
4	1	2	1	1	2
5	4	4	4	5	4
6	2	2	1	1	1
7	4	5	4	5	4
8	2	2	2	1	1
9	4	3	4	4	4
10	3	3	2	1	2

Figure 8. Respondent Score

The final score from the SUS calculation shows the number 83.5 which is above average category, in Grade A, and has an adjective rating of excellent.

Appendix D. Main features Source Code

Splash Screen UI

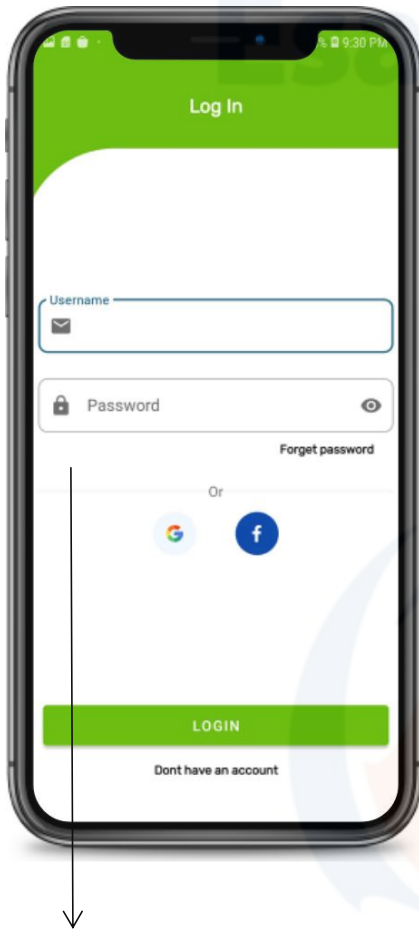


```
<ImageView
    android:id="@+id/SplashScreenImage"
    android:layout_width="300dp"
    android:layout_height="200dp"
    android:src="@drawable/icon"

    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintHorizontal_bias="0.495"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.369" />
```

```
<TextView
    style="@style/text_title_big_caveat"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Welcome To GoMarket"
    android:textColor="@color/black"
    android:textSize="@dimen/_15ssp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintLeft_toLeftOf="parent"
    app:layout_constraintRight_toRightOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.75" />
```

Login UI



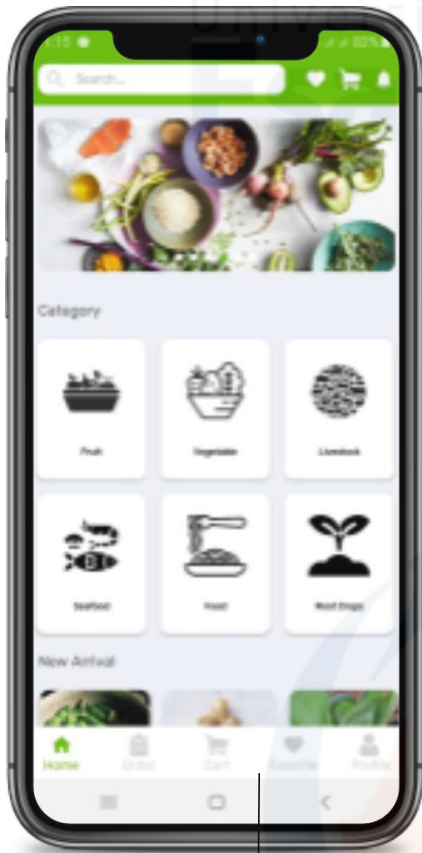
```
<com.google.android.material.textfield.TextInputEditText
```

```
    android:id="@+id/etUsername"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="@string/email"  
    android:inputType="text"  
    android:paddingStart="12dp"  
    android:paddingEnd="12dp" />
```

```
<com.google.android.material.textfield.TextInputEditText
```

```
    android:id="@+id/etPassword"  
    android:layout_width="match_parent"  
    android:layout_height="wrap_content"  
    android:hint="@string/password"  
    android:inputType="textPassword"  
    app:layout_constraintBottom_toBottomOf="parent"  
    app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toTopOf="parent"  
    app:layout_constraintVertical_bias="0.398" />
```


Homepage UI



```
<androidx.recyclerview.widget.RecyclerView
    android:id="@+id/rvCategory"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="8dp"
    android:layout_marginEnd="8dp"

    android:layout_marginTop="@dimen/_10sdp"
    android:orientation="horizontal"
    tools:itemCount="6"

    app:layoutManager="androidx.recyclerview.widget.
    GridLayoutManager"

    app:spanCount="2"

    app:layout_constraintStart_toStartOf="parent"

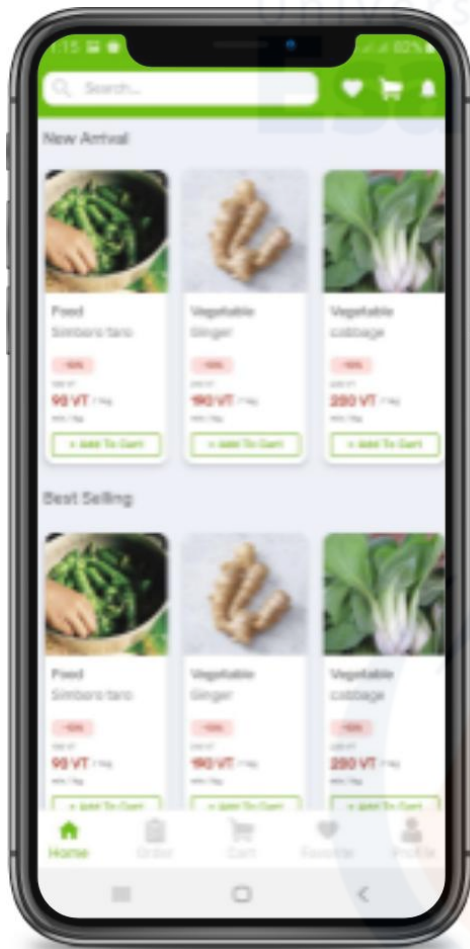
    app:layout_constraintTop_toBottomOf="@id/tvCate
    gory"

    app:layout_constraintEnd_toEndOf="parent"

    tools:listitem="@layout/card_category"
/>
```

```
<com.google.android.material.bottomnavigation.BottomNavigationView
    android:id="@+id/bottomNav"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="@color/white"
    app:labelVisibilityMode="labeled"
    app:itemTextColor="@color/bottom_nav_selector"
    app:itemIconTint="@color/bottom_nav_selector"
    app:menu="@menu/bottom_nav"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintStart_toStartOf="parent"
```

Home Page UI (New arrival)

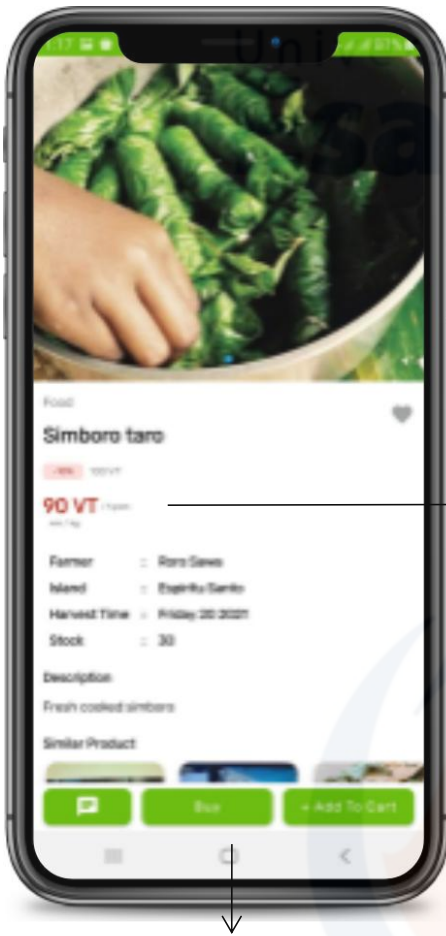


```
<androidx.constraintlayout.widget.ConstraintLayout
    android:id="@+id/layoutBestSelling"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"

    app:layout_constraintStart_toStartOf="parent"

    app:layout_constraintTop_toBottomOf="@id/tvNew
Arrival">
```

Product Detail UI



```
<androidx.recyclerview.widget.RecyclerView
    android:id="@+id/rvImageProducts"
    android:layout_width="match_parent"
    android:layout_height="@dimen/_250sdp"
/>
```

```
<TextView
    android:id="@+id/tvDiscountPrice"
    style="@style/text_title_big"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"

    android:layout_marginTop="@dimen/_3sdp"
    android:ellipsize="end"
    android:maxLines="2"
    android:text="@string/_40vt"
    android:textColor="@color/carnation" />
```

```
<androidx.recyclerview.widget.RecyclerView
    android:id="@+id/rvSimilarProduct"
    android:layout_width="0dp"
    android:layout_height="wrap_content"
    android:layout_marginStart="16dp"
    android:layout_marginBottom="@dimen/_16sdp"
    android:background="@color/white"
    android:orientation="horizontal"
    app:layoutManager="androidx.recyclerview.widget.LinearLayoutManager"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@id/tvSimilar"
```

Directory Structure

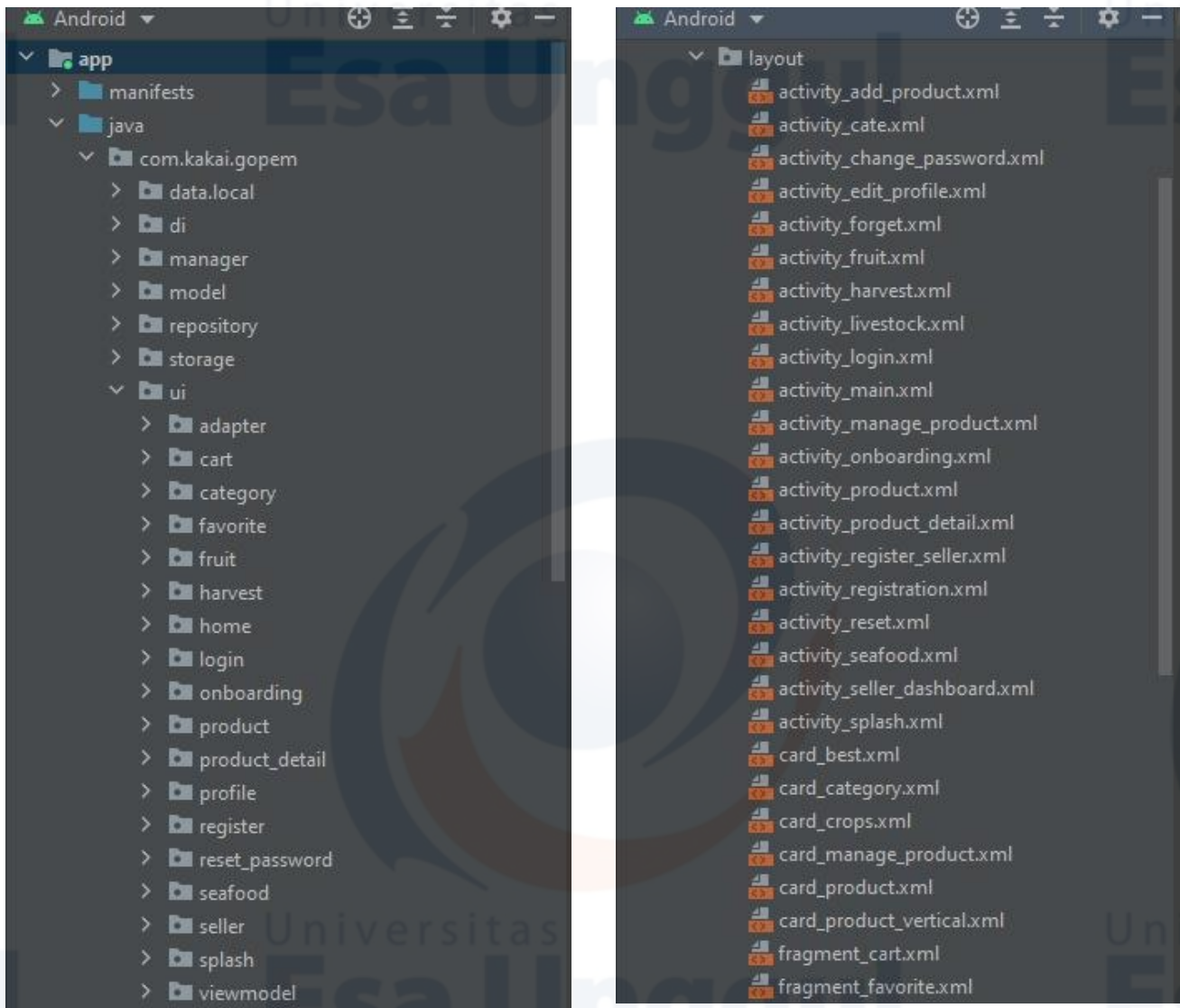


Figure 3.49 illustrates the directory structure of the author's project, from the left figure it can be seen the kotlin class file inside the "UI" folder which are all stored inside the android project package file and the right figure illustrates the layouts (XML) file for the project, stored in the "layout" folder inside the Res Folder.

S Code:

<https://drive.google.com/drive/folders/1iEdOvUgNt1ZEmlhWFLbqliCGNRDT0Bd4?usp=sharing>



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