**KOLEJ PROFESIONAL MARA BERANANG**

**DIPLOMA IN COMPUTER SCIENCE**

| | |
|---|---|
| **COURSE NAME** | : **MOBILE APPLICATION DEVELOPMENT** |
| **COURSE CODE** | : **CSC2813** |
| **ACADEMIC SESSION** | : **1 2023 / 2024** |
| **TYPE OF ASSESSMENT** | : **FINAL PROJECT** |
| **DURATION** | : **29/5/2023 – 26/6/2023** |

**CLO 2:** Build a mobile application for a specific platform or operating system. (C3,PLO6)

**INSTRUCTION TO CANDIDATES:**

1. Late submissions after given due date will not be accepted.
2. Report should be written using: Font type: Arial
   Size: 11 pts
   Line Spacing: 1.5

| **Personal Details** | |
|---|---|
| **Name** | ALIF HILMY BIN ROSDI |
| **I/D Number** | BCS2111-023 |
| **Class** | DCS5C |
| **Lecturer** | PUAN NOOR FAZLIANI |

| **Section / Question No.** | **Marks** |
|---|---|
| Task 1 | |
| Task 2 | |
| Task 3 | |
| Task 4 | |
| Task 5 | |
| **Total** | **/ 52** |
| **Total Percentage** | **/45** |

**Scenario**

Android apps are currently used in various devices such as mobiles, tablets, televisions, etc. It provides a rich application framework that allows us to build innovative apps and games for mobile devices in a Java language environment.

Mobile apps have the advantage of utilizing features of a mobile device like a camera, contact list, GPS, phone calls, accelerometer, compass, etc. Such device features, when used within an app, can make the user experience interactive and fun.

As an android developer you are required to build an android application of your choice based on below domain. Choose your domain and define your apps to be developed.

| No | Domain |
|---|---|
| 1 | Services |
| 2 | Medical (Clinic/Hospital/Farmacy) |
| 3 | Traveling |
| 4 | Games |
| 5 | Education – Interactive learning |

Remember - The application needs to be well-developed, interesting, and helpful in resolving users' present issues.

**Task:**

1. Describe the project overview (Documentation)
    a. Project Name
    b. Target Audience
    c. Description of the project
2. Create your mobile application and include features/components to have a complete set of your design
    a. User Interface
    b. Layout
    c. Media
    d. Sensor
    e. Storage
    f. Common Intents
    g. Use of block editor content
3. Include the honors software design custom for android application.
    a. Complexity
    b. User friendly
    c. Functionality

    d. Graphics
    e. Creativity
    f. Information
    g. Programming
4. Submit a runtime screen capture throughout the application. (Documentation)
5. Demo your android application project.
6. Evaluate group presentation team (Refer Appendix 1)

**Turning in project:**

Project should be saved as .apk file and upload to the teams group class. The project also needs to be published to gallery with clear description of the application. Share the link in your report. Print QR code of your android package kit(apk) file as a front page of your project.

**Assessment Rubrics:**

| Task | | 1 | 2 | 3 | 4 | Marks |
|---|---|---|---|---|---|---|
| 1. | Describe the project overview (Documentation)<br>➢ Project Name<br>➢ Target Audience<br>➢ Description of the project | Provide **one** from the list below:<br>▪ Project Name<br>▪ Target Audience<br>▪ Description of the project | Provide **two** from the list below:<br>▪ Project Name<br>▪ Target Audience<br>▪ Description of the project | Provide **ALL** from the list below:<br>▪ Project Name<br>▪ Target Audience<br>▪ Description of the project | | |
| 2. | Create your mobile application and include features/components to have a complete set of your design<br>a. User Interface | Include **any one (1)** the user interface components below by using button, checkbox, image, label, textbox, etc.<br>▪ Input control / Content Area<br>▪ Navigational components<br>▪ Informational components | Include **any two (2)** the user interface components below by using button, checkbox, image, label, textbox, etc.<br>▪ Input control / Content Area<br>▪ Navigational components<br>▪ Informational components | Include **all** the user interface components below by using button, checkbox, image, label, textbox, etc.<br>▪ Input control / Content Area<br>▪ Navigational components<br>▪ Informational components | Include **all** the user interface components below by using button, checkbox, image, label, textbox, etc.<br>▪ Input control / Content Area<br>▪ Navigational components<br>▪ Informational components<br>▪ All the user interface components are well identified its name. | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | b. Layout | Minimal use of layout tools. | Layout features are used with good arrangement of buttons, image, label, and other components. | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | c. Media | At least **one (1)** media such as sound, player, etc. is used in Application. | Multiple media are used in application but not relevant for the specific audience. | Multiple media are used in App for a reasonable and practical purposes for the specific audience. | | |
| | d. Sensor | Attempted to use sensor in application. However, the sensor does not work as designed or does not add functionality to the application. | Sensors are used during application well coded. | Sensors are used during application and data from sensors is modeled and used to control functionality of application. | | |
| | e. Storage | Attempted to use storage in application. | Storage is used during application and all the data are well stored. | All the date are well stored and data can be retrieved by displaying the desired output. | Able to modify data by updating/deleting from storage. | |
| | f. Common intents | Attempted to use other explicit intents such as alarm, map, camera, drawing, web browser, etc in application. | Perform the action for specific intents. | The intents created serve a reasonable abd practical purpose for the application. | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | g. Use of block editor content | Include **one (1)** of the required components such as behaviors for the component, Event Handlers that use arguments, Variable(s) | Include **two (2)** of the required components such as behaviors for the component, Event Handlers that use arguments, Variable(s) | Include **all** of the required components such as behaviors for the component, Event Handlers that use arguments, Variable(s) | | |

| Task | | 1 | 2 | 3 | 4 | Marks |
|---|---|---|---|---|---|---|
| 3. | Include the honors software design custom for android application.<br><br>a. Complexity | The application looks trivial and not relevant for specific audience. | The application looks trivial, but relevant for specific audience. | The application must be non-trivial and serve a reasonable, practical purpose for a specific audience. | | |
| | b. User friendly | The application is not user friendly at all. | The application well userfriendly. Directions or explanatory messages is provided. | | | |
| | c. Functionality | Less than 60% of the app is working. | 60-70% of the app is working. | 80-90% of the app is working. | 100% of the app is working. | |
| | d. Graphics | Photos are blurry or fuzzy; icons and clip art do not "fit" with the topic. | Photos, icons, and clip art are appropriate, of high quality. | Photos, icons, and clip art are used creatively and may follow a theme. | | |
| | e. Creativity | Minimal effort. Poor layout/design. Did not incorporate required attributes, graphics, did not resize pictures, inappropriate graphics. | Well done and interesting to the audience. Added a few original touches to enhance the project; used a good variety of appropriate graphics. | Presented with originality. Excellent layout/design work incorporating all required attributes, great variety of appropriate graphics that enhanced the pages. | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | f. Information | Information is poorly written, inaccurate, or incomplete. | Information could be better written and too much information is given in each section. | Information is well written and interesting to read and is presented in short sections. | | |

| Task | | 1 | 2 | 3 | 4 | Marks |
|---|---|---|---|---|---|---|
| | g. Programming | ▪ The application has a very basic programming that does not show the knowledge of control structure. | ▪ The application has some minor error but works well for the most part.<br>▪ The application shows some understanding of programming control structure but can be better<br>▪ All the variables used are well initialized. | ▪ Coding standards should be followed consistently and easy to read.<br>▪ The application works perfectly and very well designed.<br>▪ All instructions and commands have been optimized wisely. | | |
| 4. | Submit a runtime screen capture throughout the application. (Documentation) | Provide partly screen capture from the application. | Provide all the screen capture throughout the application. | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 5. | Demo your android application project. | Provide at least **one (1)** from the list below:<br><br>▪ Able to fully understand and respond to questions very well ▪ The visual aids (slides, props, etc.) were cleverly chosen and presented which improve understanding of the topic. | Provide at least **two (2)** from the list below:<br><br>▪ Able to fully understand and respond to questions very well<br>▪ The visual aids (slides, props, etc.) were cleverly chosen and presented which improve understanding of the topic.<br>▪ The content was extremely organized in the delivery of this presentation. | Provide at least **three (3)** from the list below:<br><br>▪ Able to fully understand and respond to questions very well<br>▪ The visual aids (slides, props, etc.) were cleverly chosen and presented which improve understanding of the topic.<br>▪ The content was extremely organized in the delivery of this | Provide **ALL** from the list below:<br><br>▪ Able to fully understand and respond to questions very well<br>▪ The visual aids (slides, props, etc.) were cleverly chosen<br>▪ presented which improve understanding of the topic.<br>▪ The content was extremely | |

| **Task** | **1** | **2** | **3** | **4** | **Marks** |
|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| | | ▪ The content was extremely organized in the delivery of this presentation. Information was presented in a logical, interesting sequence that was easy to follow.<br>▪ Presenter is very fluent, and voice is easy to be heard clearly | Information was presented in a logical, interesting sequence that was easy to follow.<br>▪ Presenter is very fluent, and voice is easy to be heard clearly | presentation. Information was presented in a logical, interesting sequence that was easy to follow.<br>▪ Presenter is very fluent, and voice is easy to be heard clearly | organized in the delivery of this presentation. Information was presented in a logical, interesting sequence that was easy to follow.<br>▪ Presenter is very fluent, and voice is easy to be heard clearly | |
| **Total Marks Earned** | | | | | | /52 |

**Task:**

1. Describe the project overview (Documentation)
    1. Project Name

        - Follow Me

    2. Target Audience

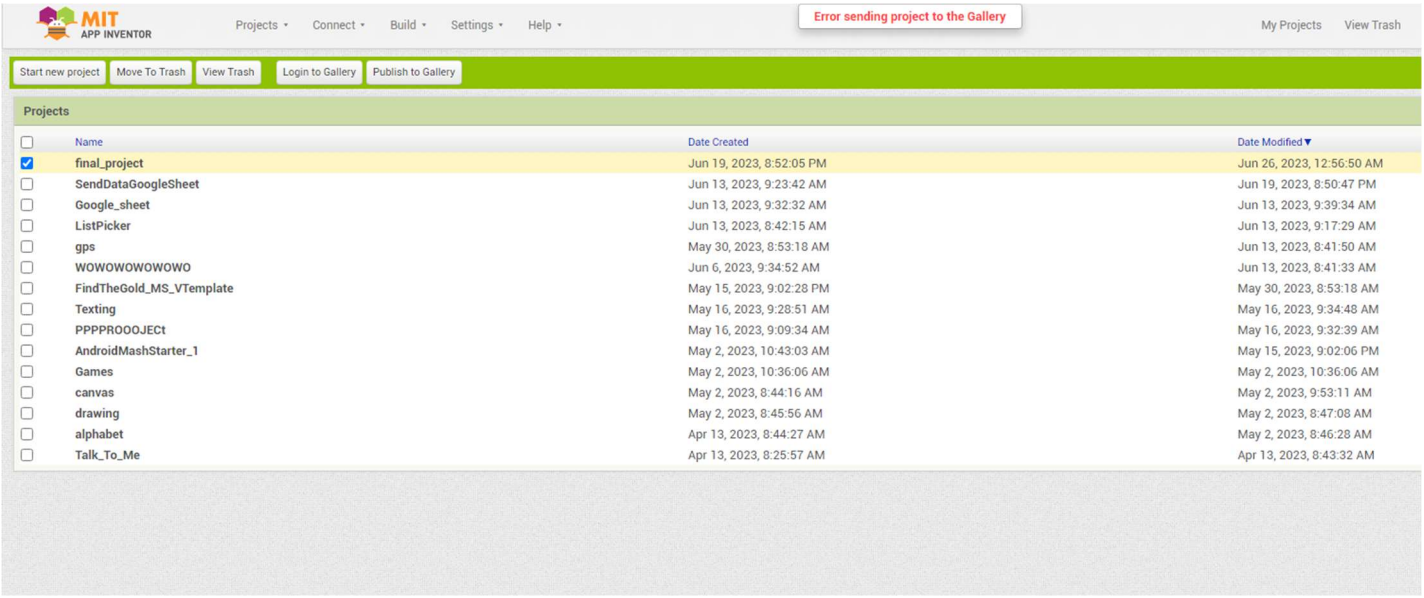
        - This service caters to local tourists seeking assistance in obtaining information about various tourist destinations within their country. Additionally, it extends its support to individuals interested in acquiring weather updates for different locations featured in the application.

    3. Description of the project

        - The application primarily focuses on providing tourists with information about various locations available within the app. The app's initial page offers users the option to search for information about a particular place or access weather updates by clicking on the respective buttons. On the Start Travel page, users are presented with a map and instructions, with markers indicating different places. If a user long-presses on a place's marker, they are directed to a separate location page that displays the place's picture, title, and description. The app also features a gallery page where users can navigate through multiple pictures of the place, take pictures themselves, and save them in the gallery. Moving on to weather information, users can search for a specific place by entering its name in the search bar, and upon clicking the search button, the app will display relevant weather information in the result bar.

4. Create your mobile application and include features/components to have a complete set of your design
5. Include the honors software design custom for android application.

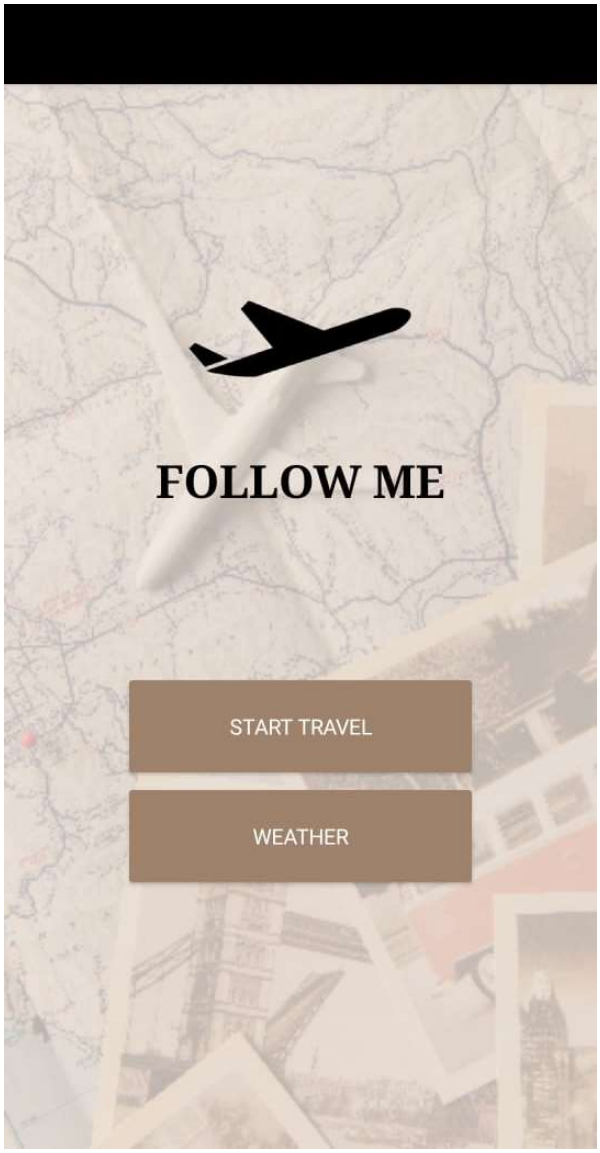
Cant publish gallery



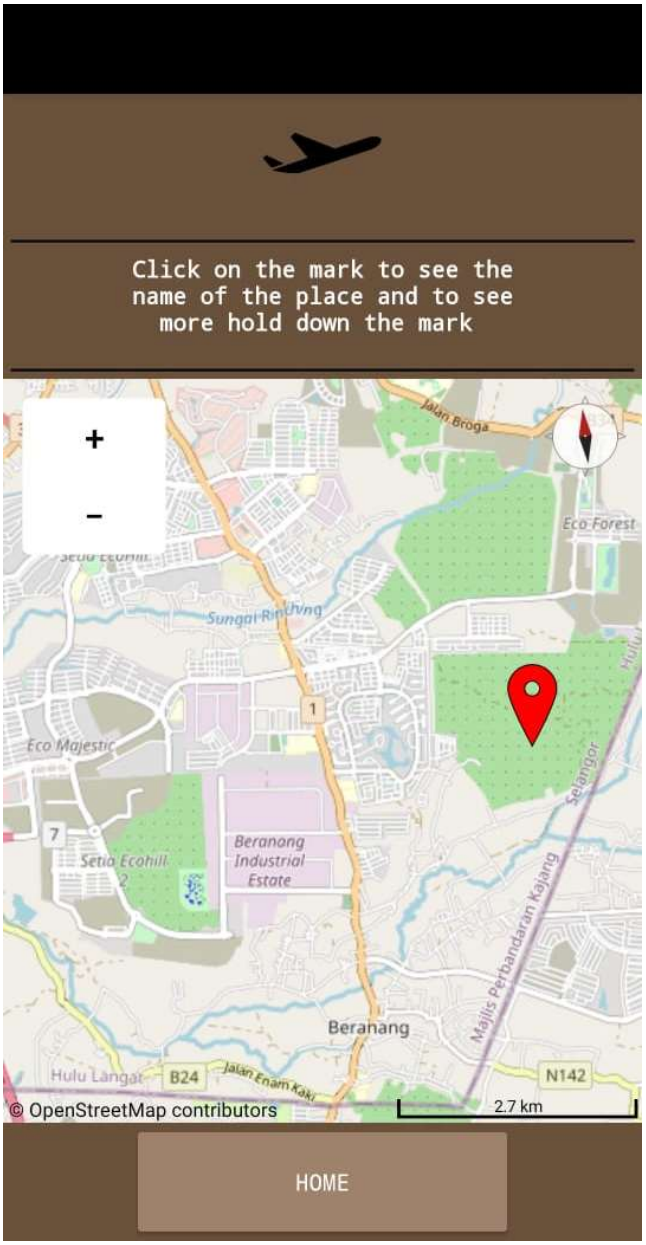

APK LINK
http://ai2.appinventor.mit.edu/b/3jwo1

APK QR CODE

Home page:

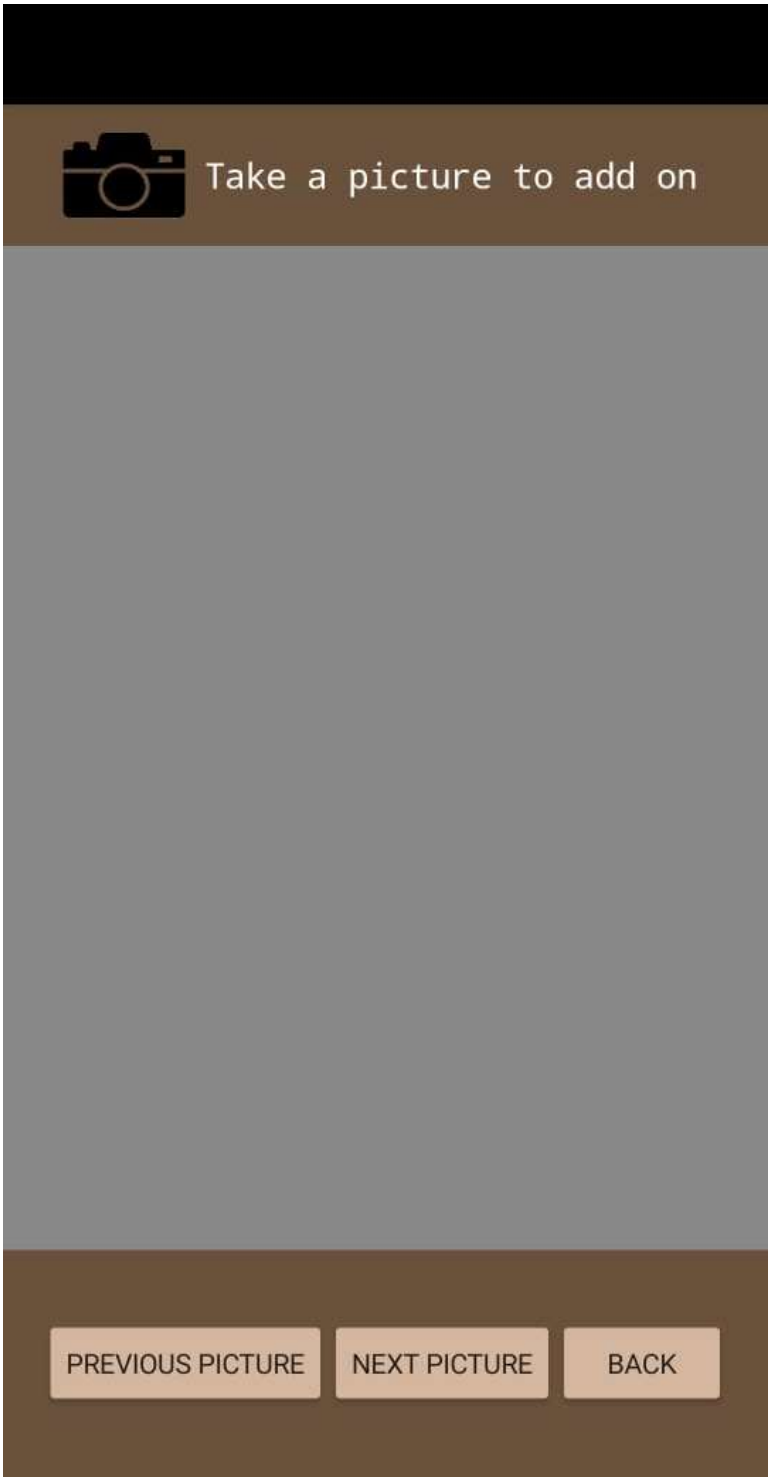


Start Travel page:

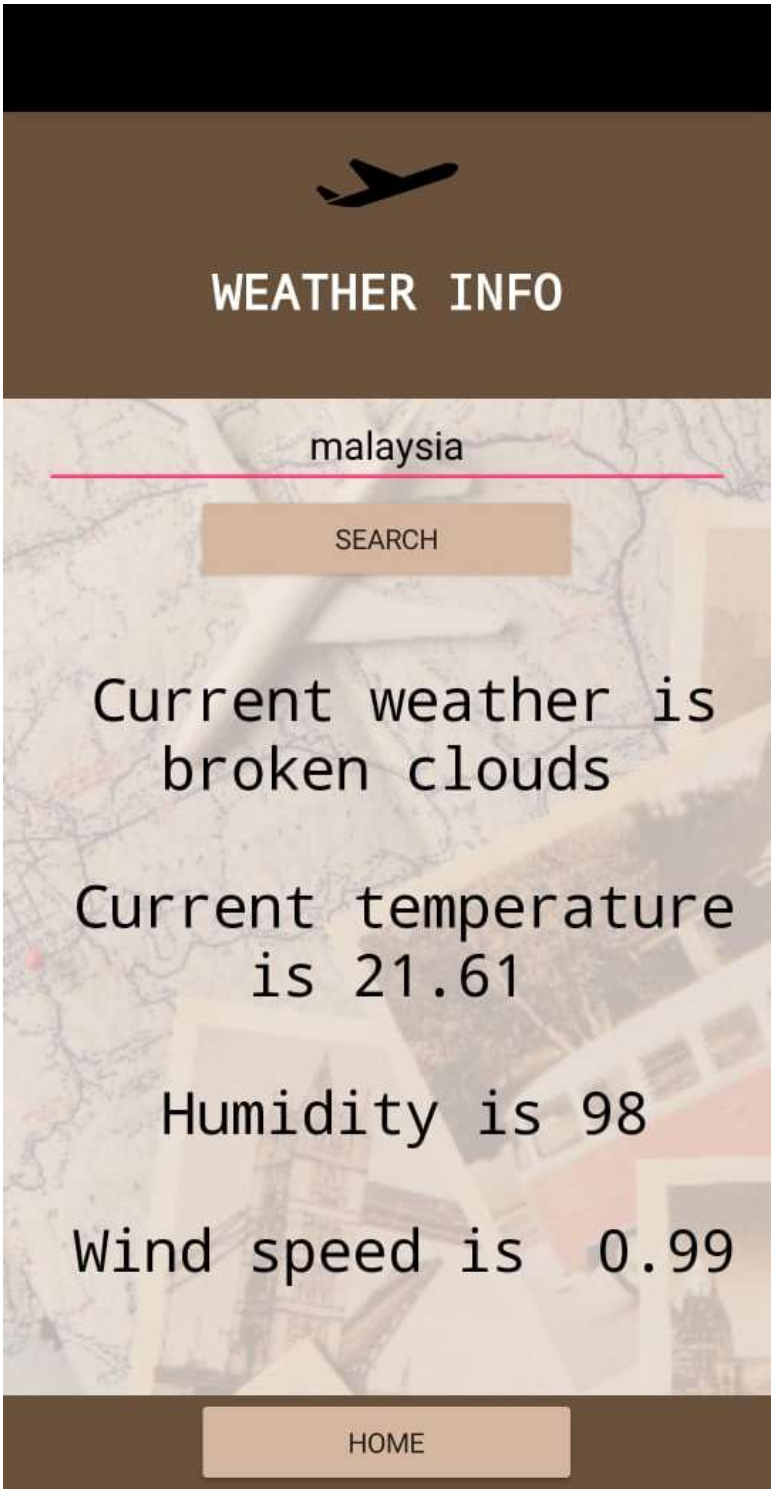


Information page:

Gallery page:

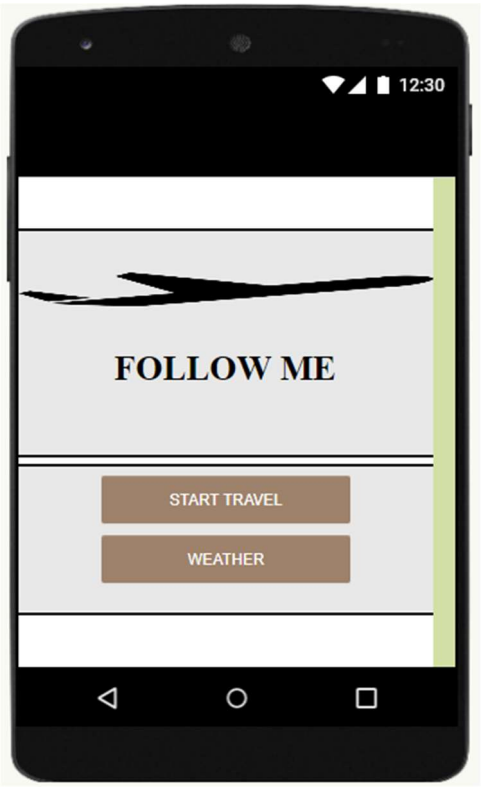


Weather Page:

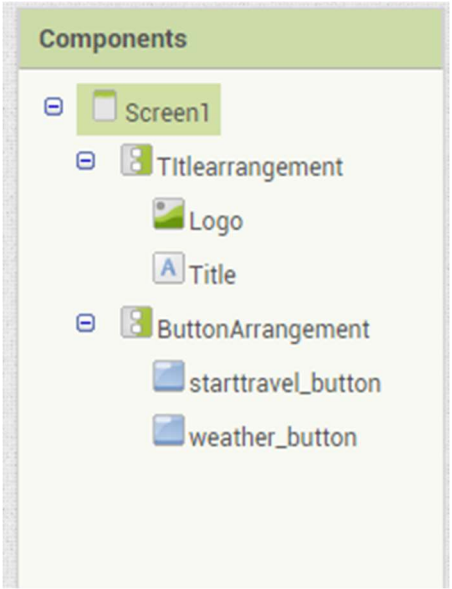


4. Submit a runtime screen capture throughout the application. (Documentation)

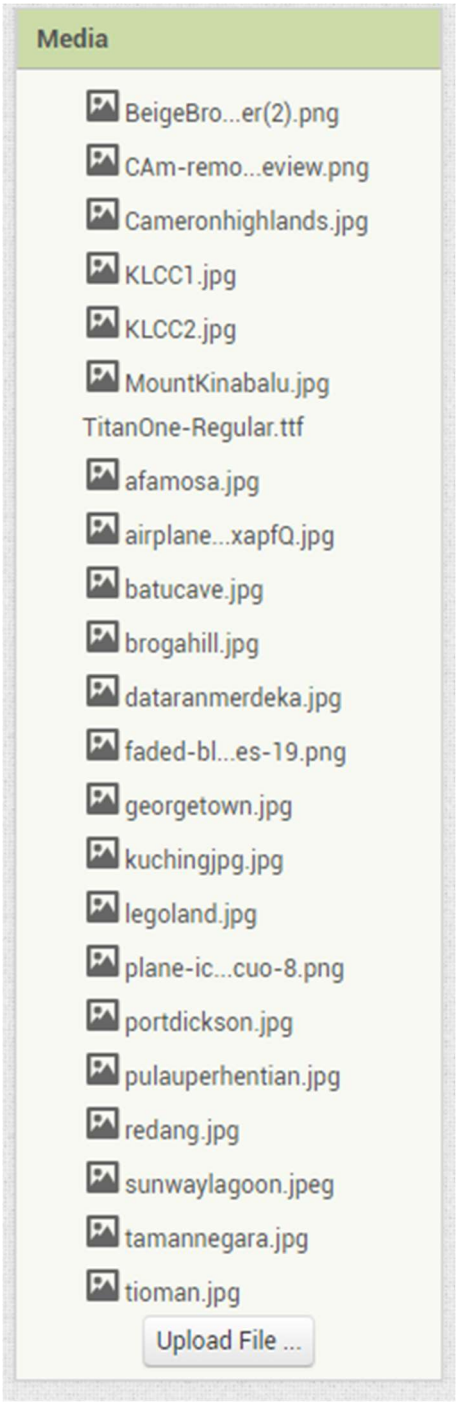
Homepage:



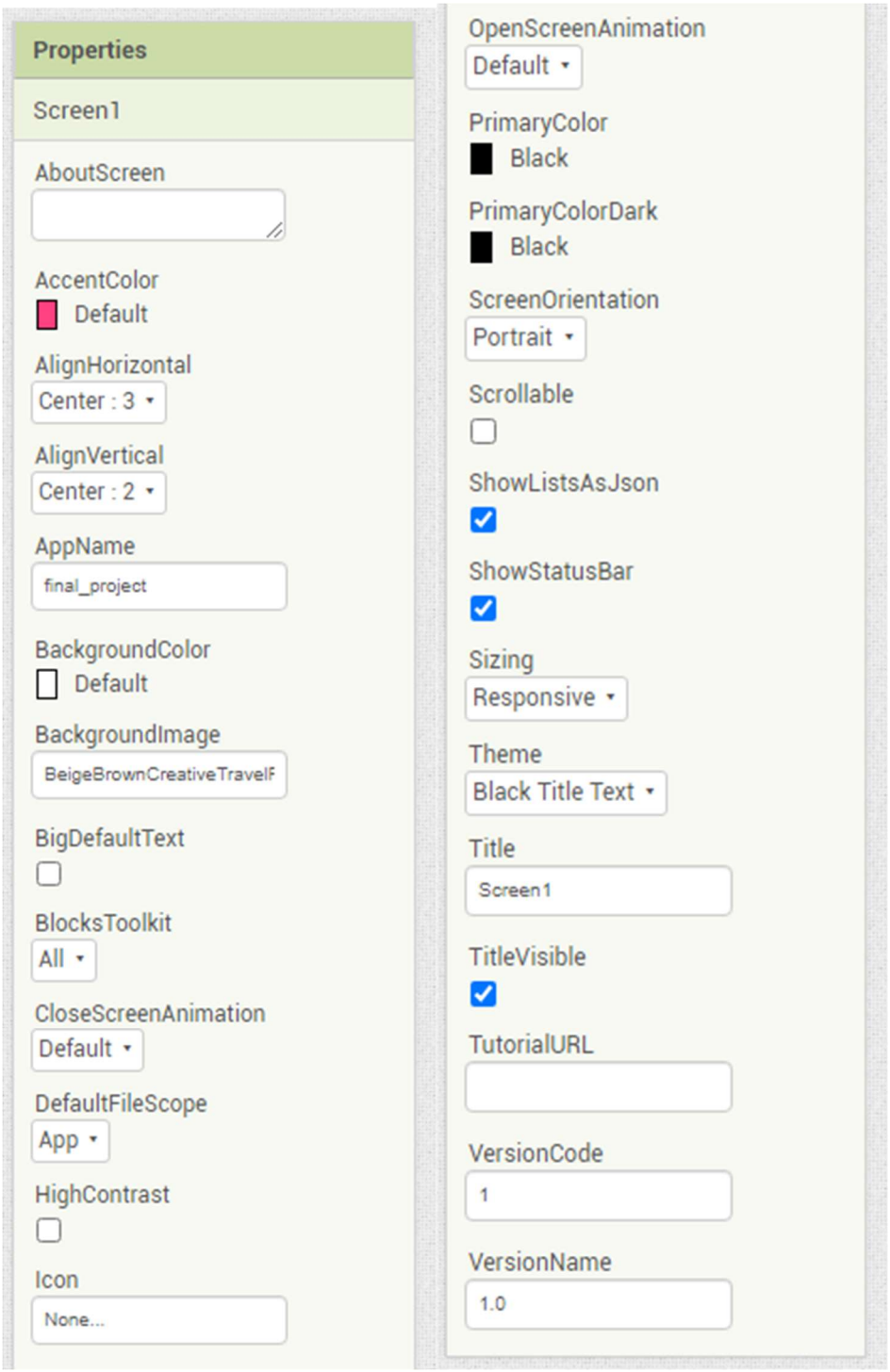

Homepage component:



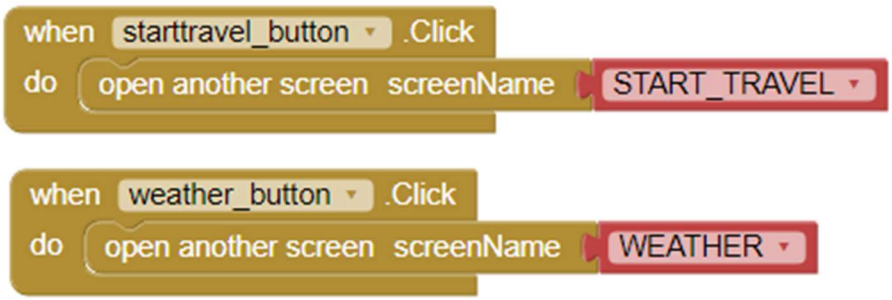
Media in this apps:



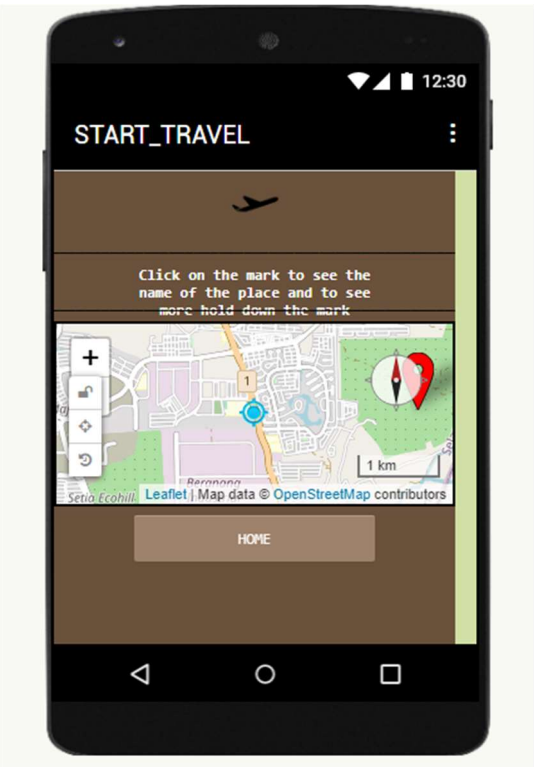
Homepage properties:



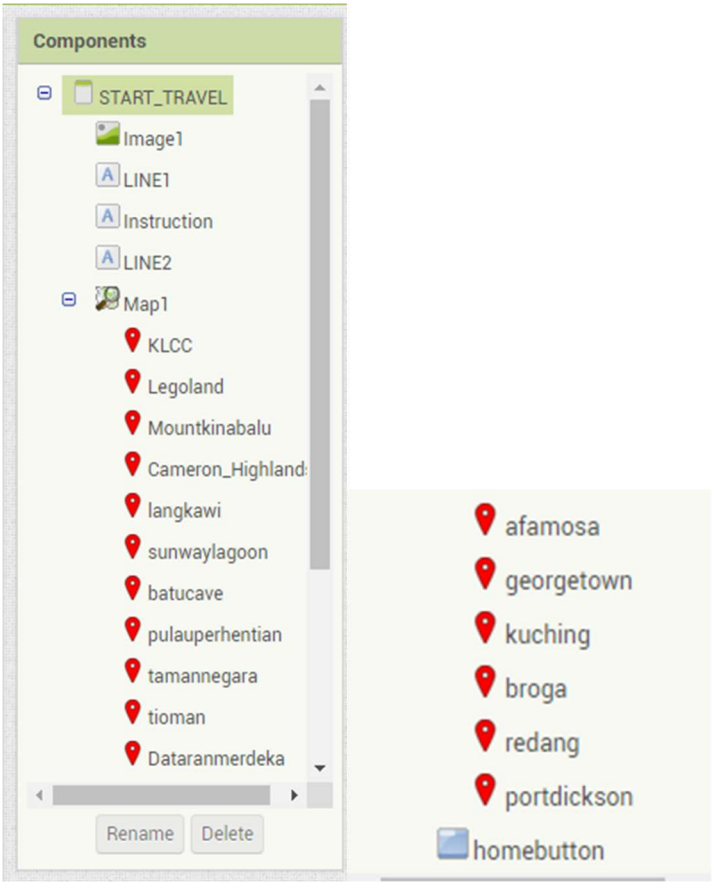
Block of Homepage:



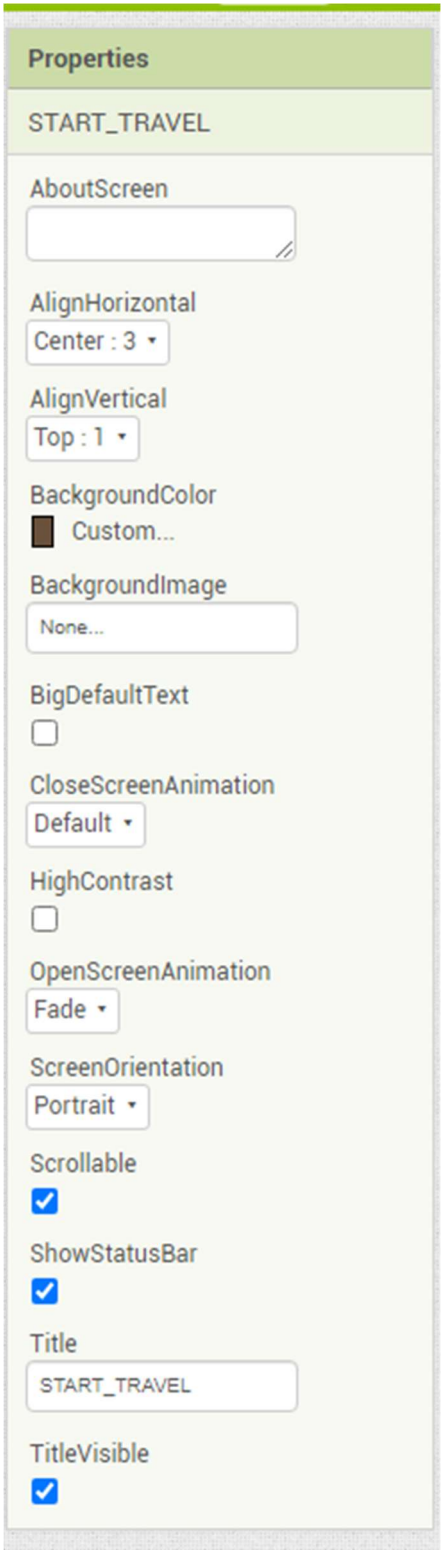
Start Travel page:



Start Travel component:



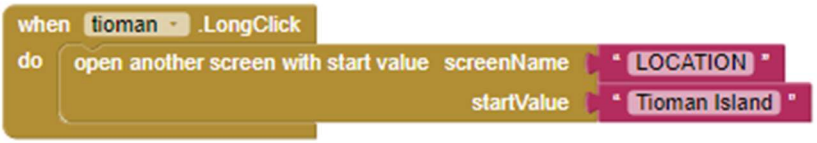
Start Travel properties:



Start Travel block:

when pulauperhentian .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Pulau Perhentian "

when tamannegara .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Taman Negara "


when tioman .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Tioman Island "

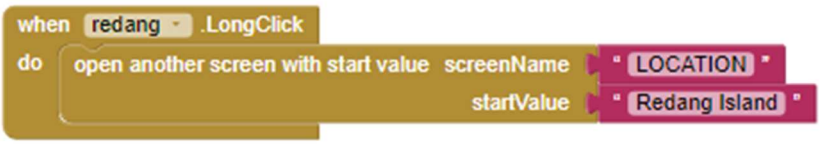
when Dataranmerdeka .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Dataran Merdeka "

when afamosa .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Afamosa "

when georgetown .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Georgetown "

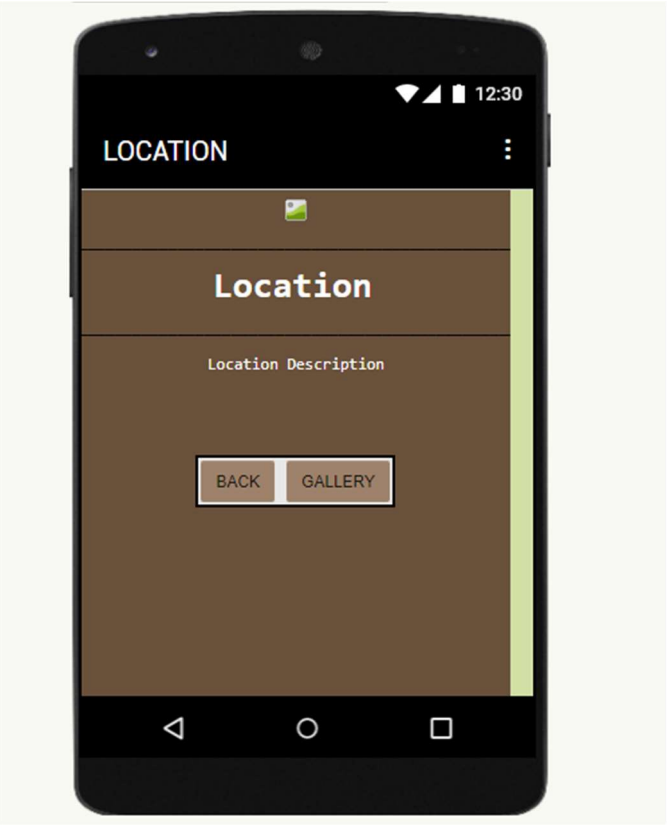
when kuching .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Kuching "

when broga .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Broga Hill "

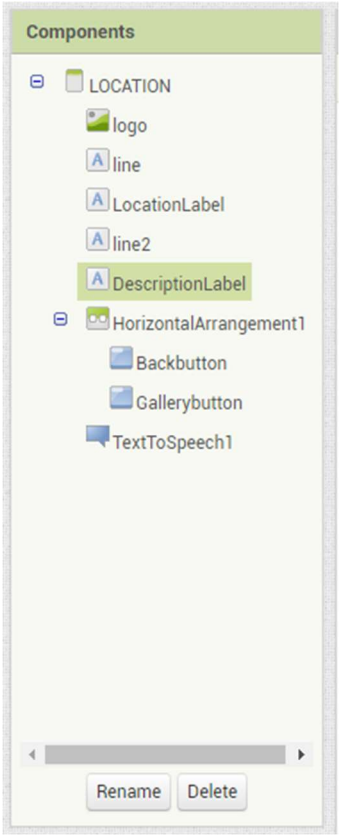

when redang .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Redang Island "

when portdickson .LongClick
do open another screen with start value screenName " LOCATION "
startValue " Port Dickson "

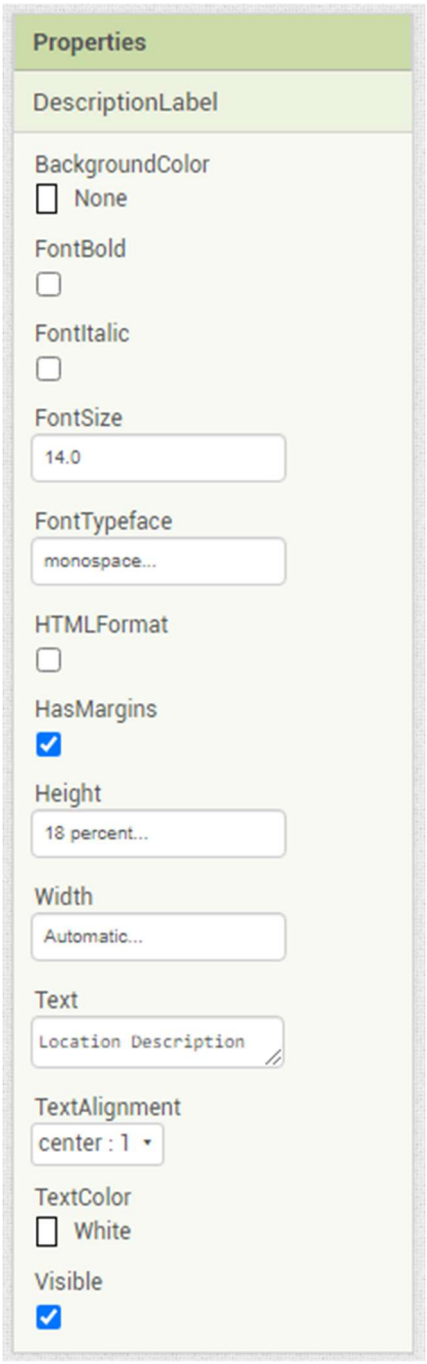
Location page:



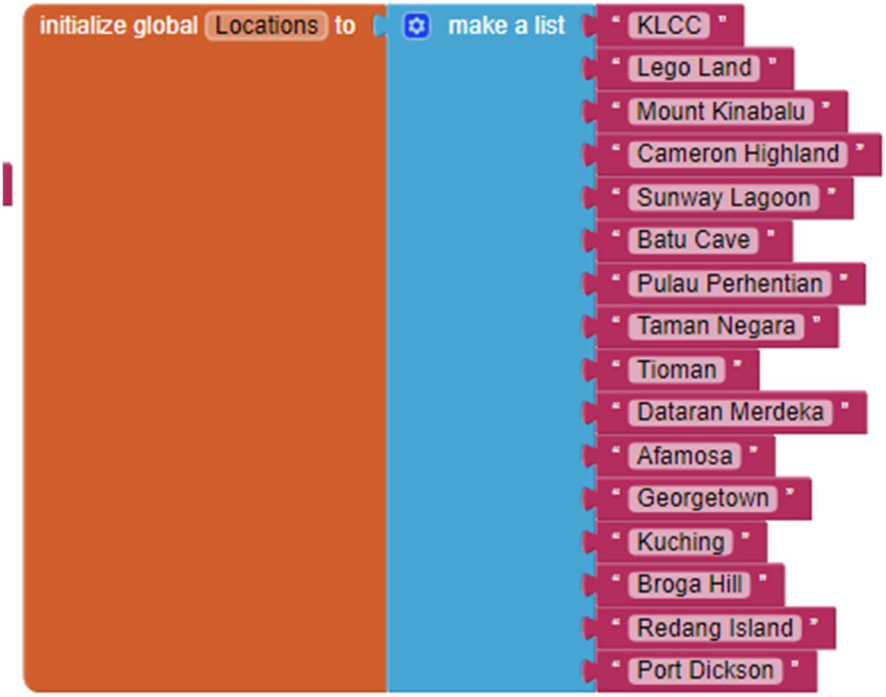

Location Component:

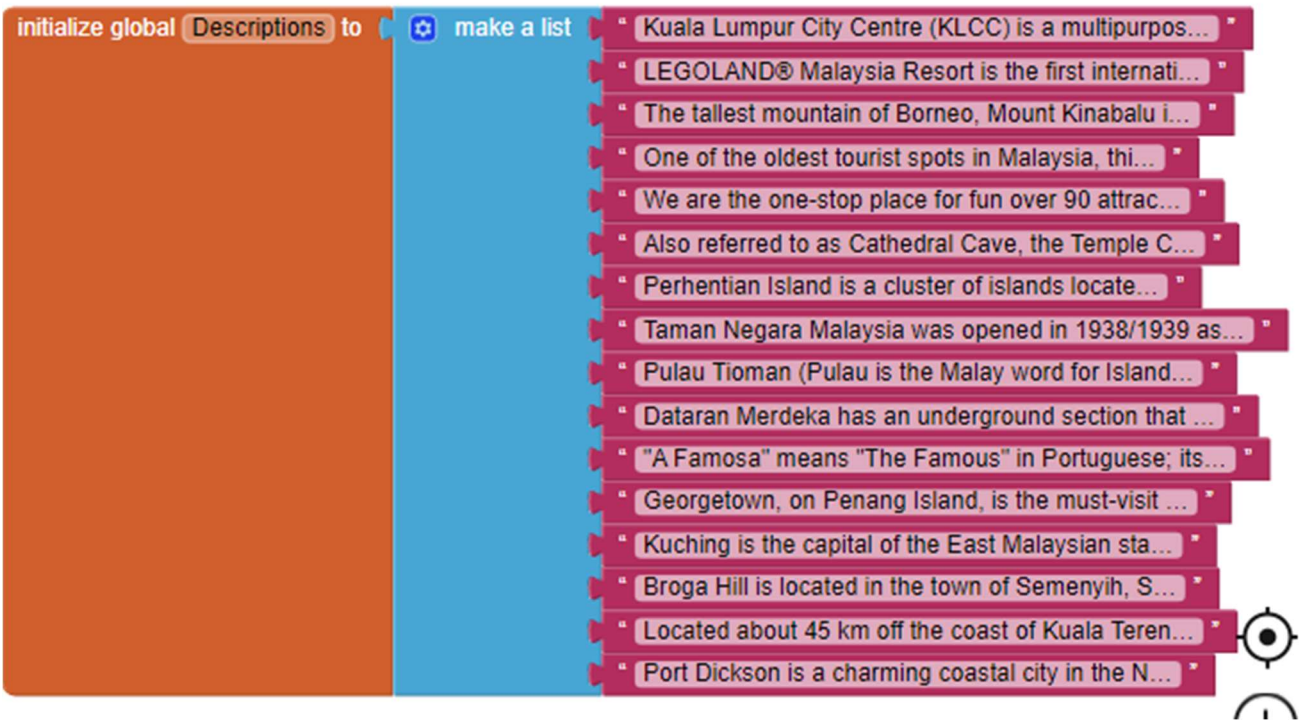


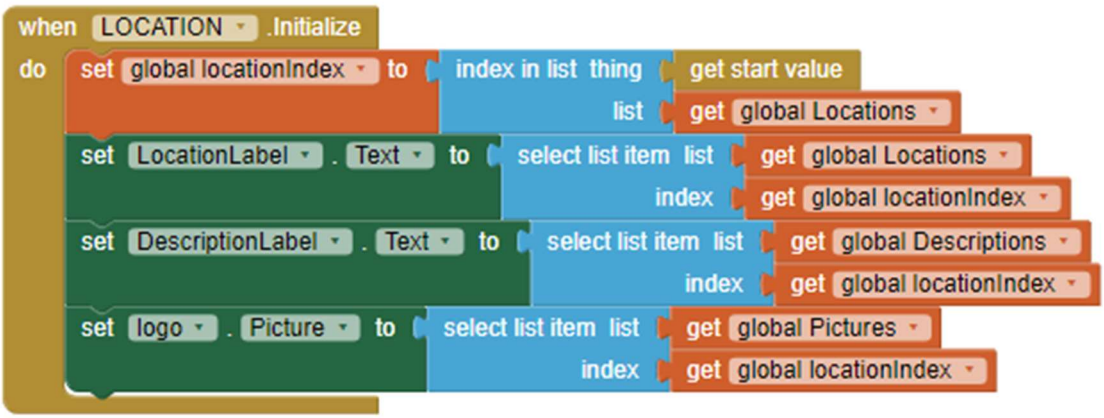
Location Properties:

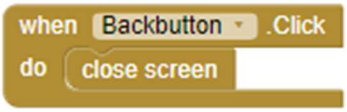


Location Block:




initialize global Descriptions to
make a list
" Kuala Lumpur City Centre (KLCC) is a multipurpos... "
" LEGOLAND® Malaysia Resort is the first internati... "
" The tallest mountain of Borneo, Mount Kinabalu i... "
" One of the oldest tourist spots in Malaysia, thi... "
" We are the one-stop place for fun over 90 attrac... "
" Also referred to as Cathedral Cave, the Temple C... "
" Perhentian Island is a cluster of islands locate... "
" Taman Negara Malaysia was opened in 1938/1939 as... "
" Pulau Tioman (Pulau is the Malay word for Island... "
" Dataran Merdeka has an underground section that ... "
" "A Famosa" means "The Famous" in Portuguese; its... "
" Georgetown, on Penang Island, is the must-visit ... "
" Kuching is the capital of the East Malaysian sta... "
" Broga Hill is located in the town of Semenyih, S... "
" Located about 45 km off the coast of Kuala Teren... "
" Port Dickson is a charming coastal city in the N... "

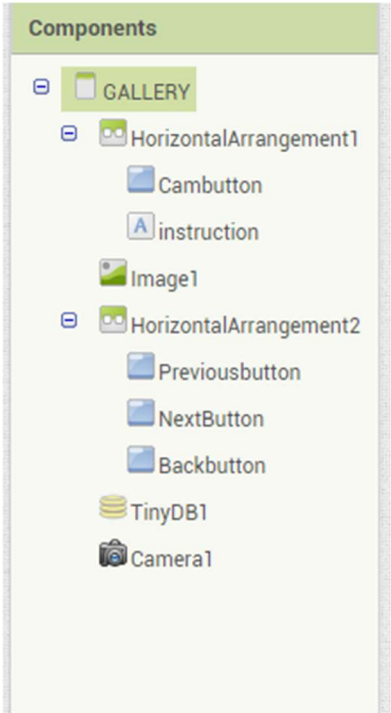

when LOCATION .Initialize
do
set global locationIndex to
index in list thing
get start value
list
get global Locations
set LocationLabel . Text to
select list item list
get global Locations
index
get global locationIndex
set DescriptionLabel . Text to
select list item list
get global Descriptions
index
get global locationIndex
set logo . Picture to
select list item list
get global Pictures
index
get global locationIndex


when Backbutton .Click
do
close screen

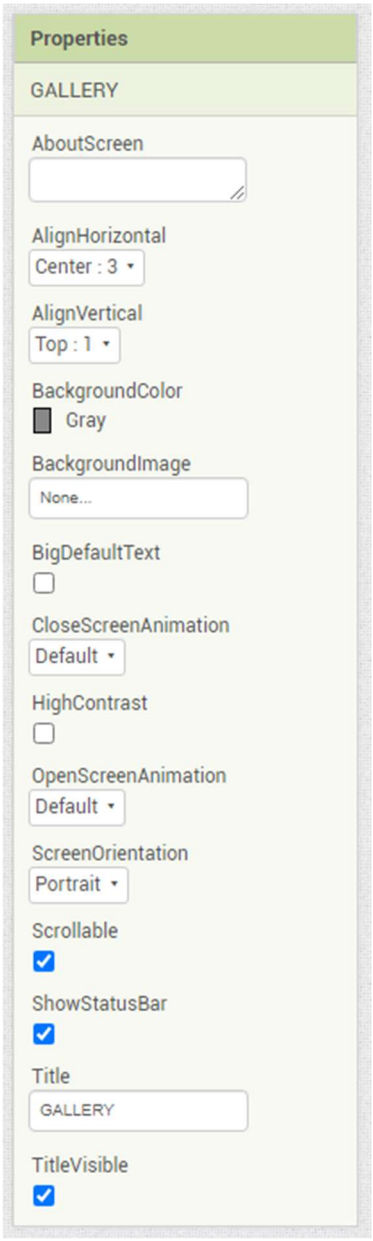
when Gallerybutton .Click
do
open another screen screenName
GALLERY

Gallery Page:

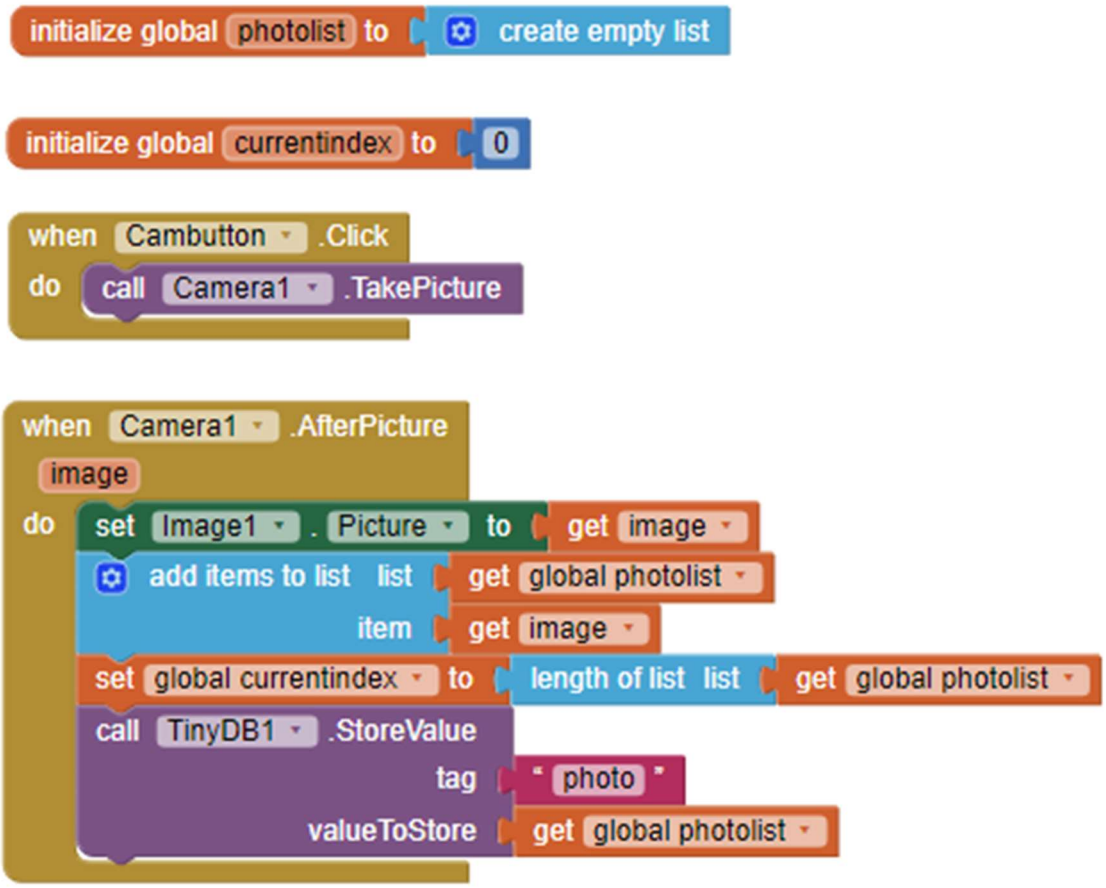
Gallery Component:

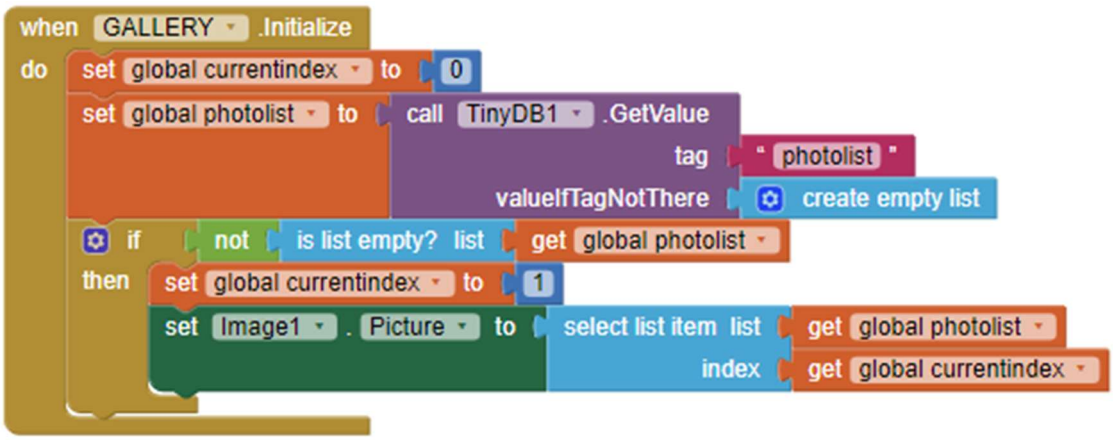


Gallery Properties:

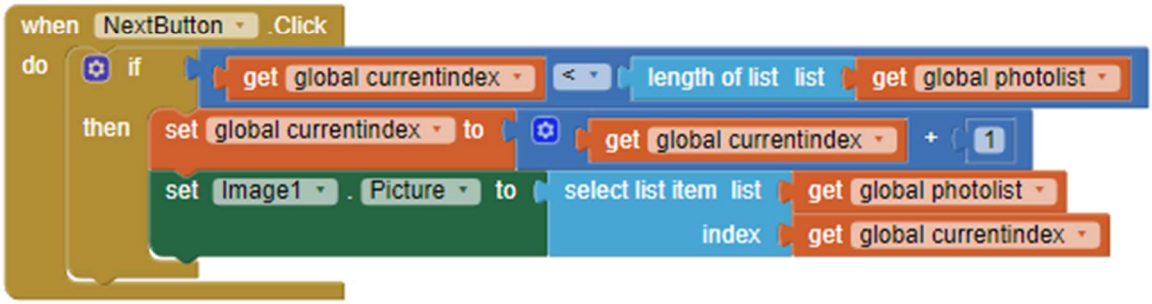


Gallery Block:




when GALLERY .Initialize
do set global currentindex to 0
set global photolist to call TinyDB1 .GetValue
tag " photolist "
valueIfTagNotThere create empty list
if not is list empty? list get global photolist
then set global currentindex to 1
set Image1 . Picture to select list item list get global photolist
index get global currentindex

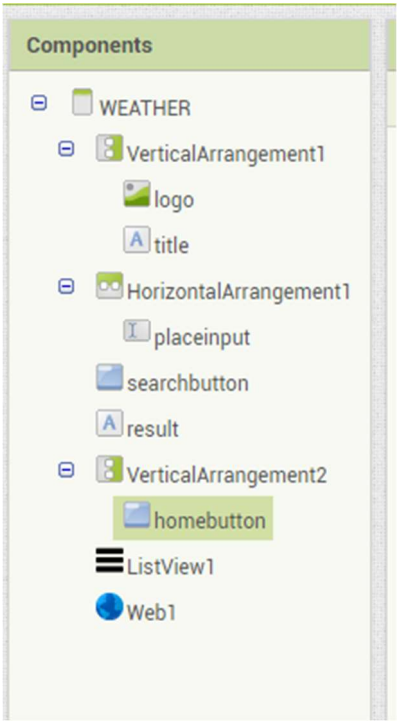
when Previousbutton .Click
do if get global currentindex > 1
then set global currentindex to get global currentindex - 1
set Image1 . Picture to select list item list get global photolist
index get global currentindex


when NextButton .Click
do if get global currentindex < length of list list get global photolist
then set global currentindex to get global currentindex + 1
set Image1 . Picture to select list item list get global photolist
index get global currentindex

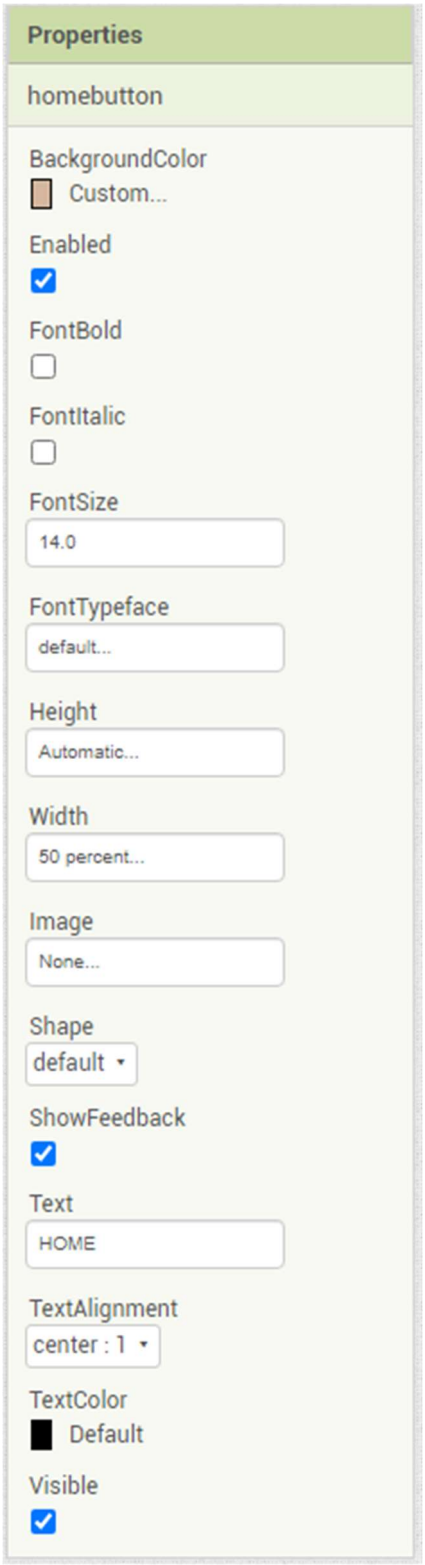
when Backbutton .Click
do open another screen screenName START_TRAVEL

Weather Page:

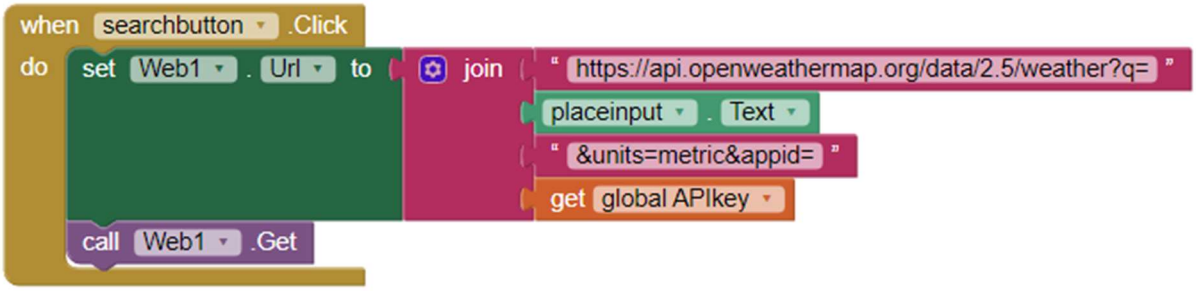
Weather Component:

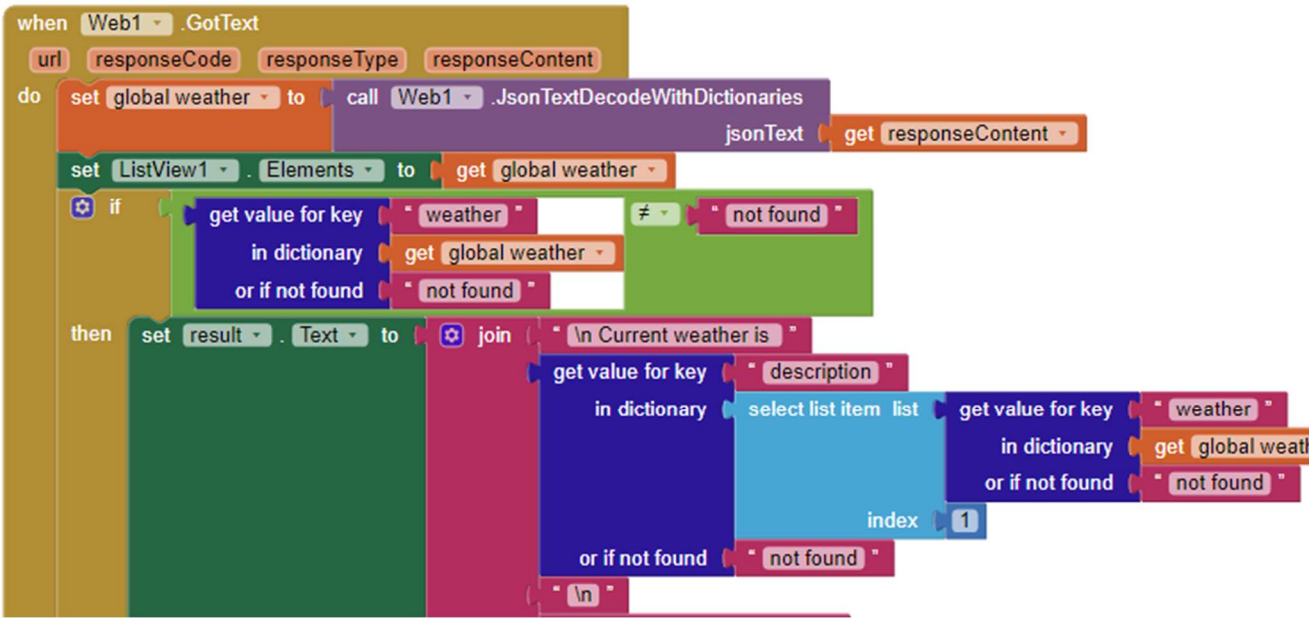


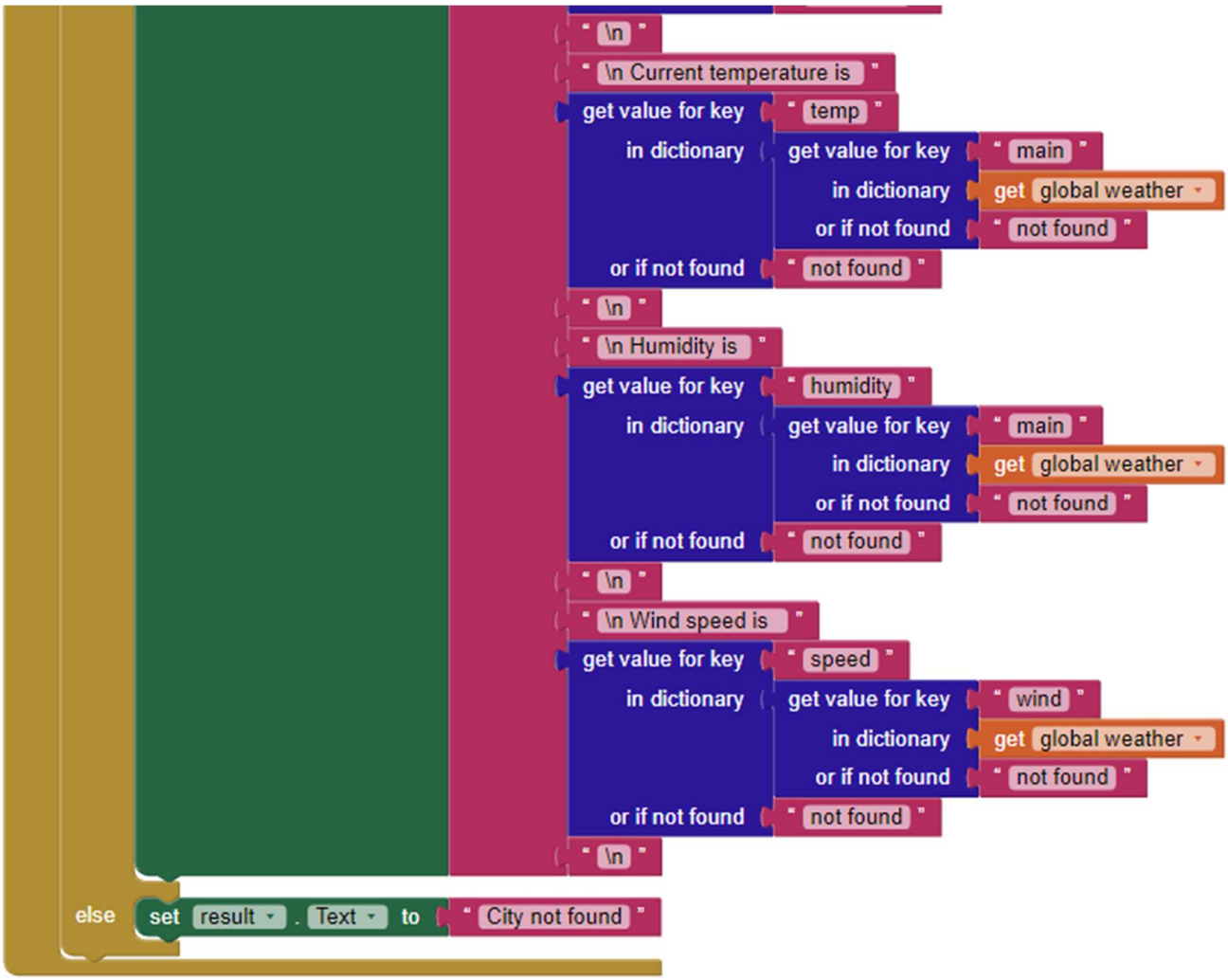
Weather Properties:



Weather Block:




" \n "
" \n Current temperature is "
get value for key " temp "
in dictionary get value for key " main "
in dictionary get global weather
or if not found " not found "
or if not found " not found "
" \n "
" \n Humidity is "
get value for key " humidity "
in dictionary get value for key " main "
in dictionary get global weather
or if not found " not found "
or if not found " not found "
" \n "
" \n Wind speed is "
get value for key " speed "
in dictionary get value for key " wind "
in dictionary get global weather
or if not found " not found "
or if not found " not found "
" \n "
else set result . Text to " City not found "

when homebutton .Click
do open another screen screenName Screen1