Learning Location Sensor – My Map

NANYANG THE INNOVATIVE POLYTECHNIC

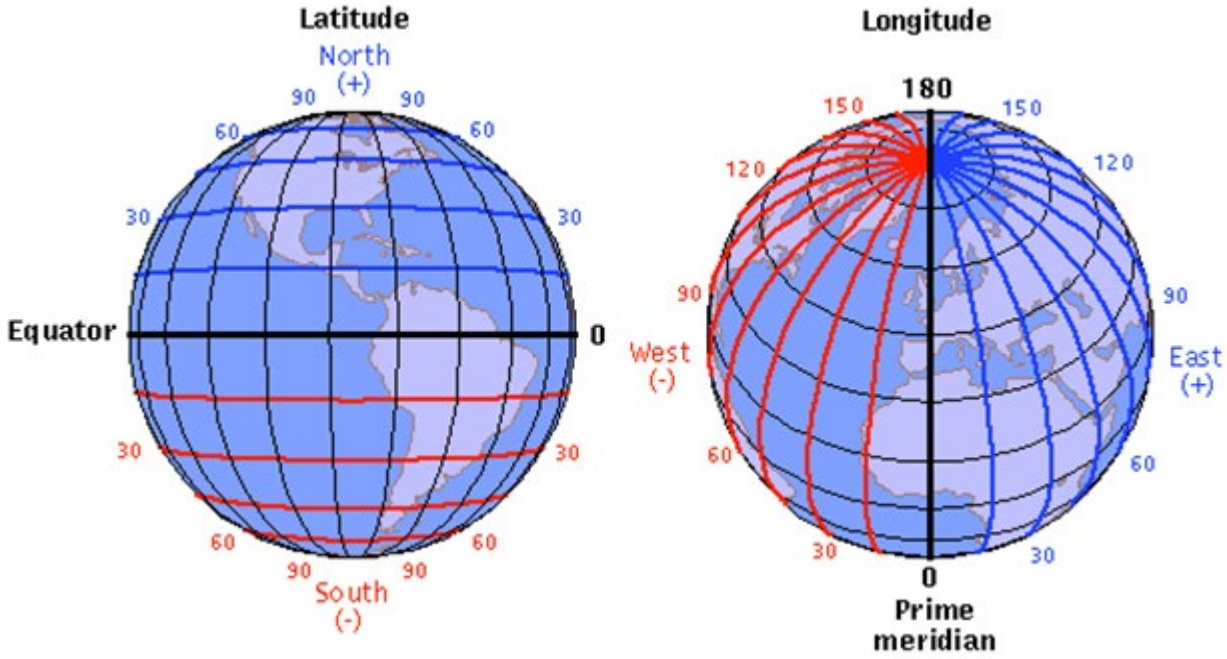
School of Information Technology

What will I learn?

- How do I get my GPS location?
- Using Multiple screens
- How do I start?
- Creating a MyMap App

How do I get my GPS location?

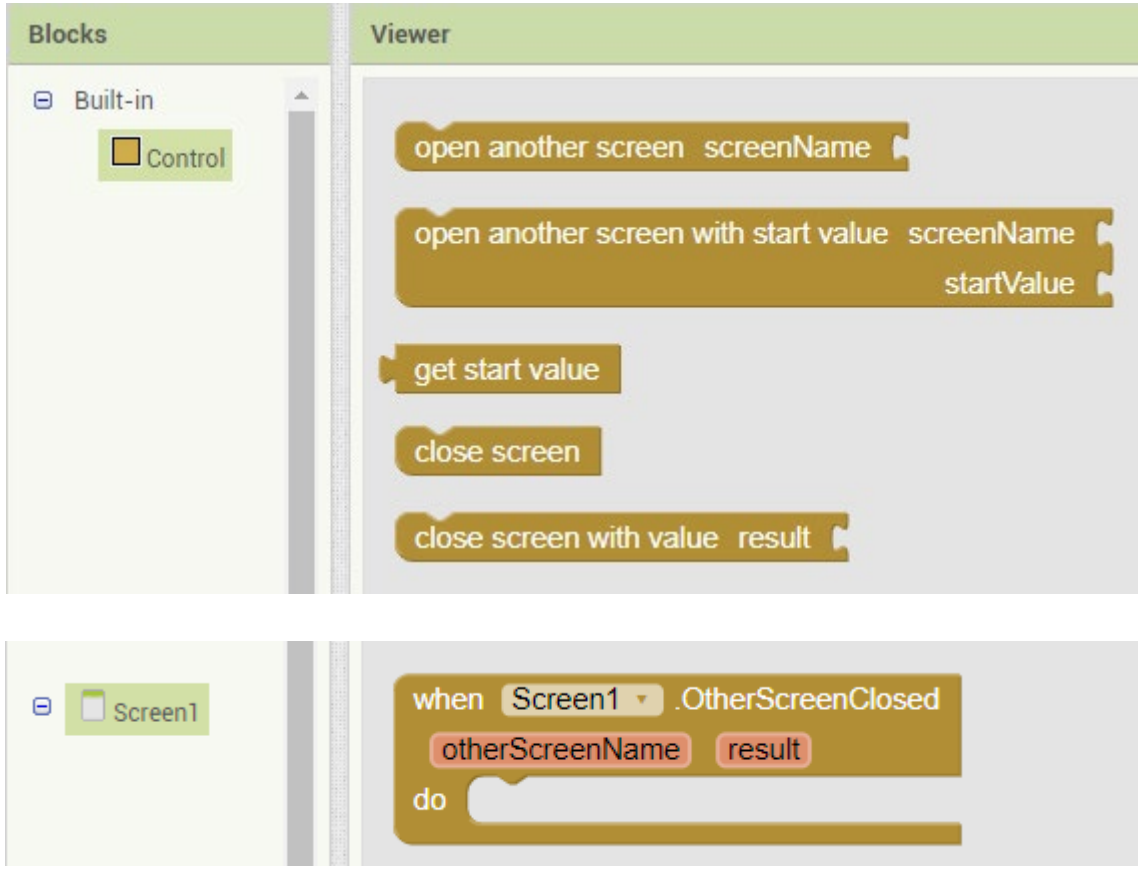
- LocationSensor component can determine the phone's latitude and longitude as well as a street address.



https://journeynorth.org/tm/LongitudeIntro.html

Using Multiple screens

- When creating multiple screens, you'll need to:
  1. Swap between screens
  2. Pass information (startValue / result) from one screen to another



How do I start?

Refer to Introduction to AI2s

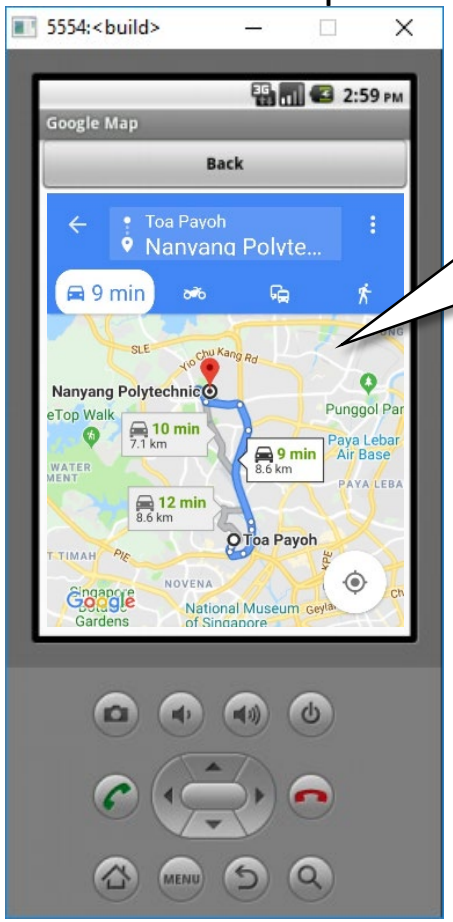
- Create and Run your App in 4 Simple Steps.
  - 1. You'll need a google account. Create if you don't have one.
  - 2. Using Chrome browser, log into App Inventor using Google account.
  - 3. Create App.
    a. Design how your app looks using App Inventor Designer.
    b. Instruct how your App should work by simply selecting and dragging standard block codes using App Inventor Blocks Editor.
  - 4. Load and Test your App using App Inventor Emulator on your computer or App Inventor Companion App on your phone

- http://appinventor.mit.edu/explore/get-started?

My Map

Screen1

ScreenMap



How can I get to NYP?

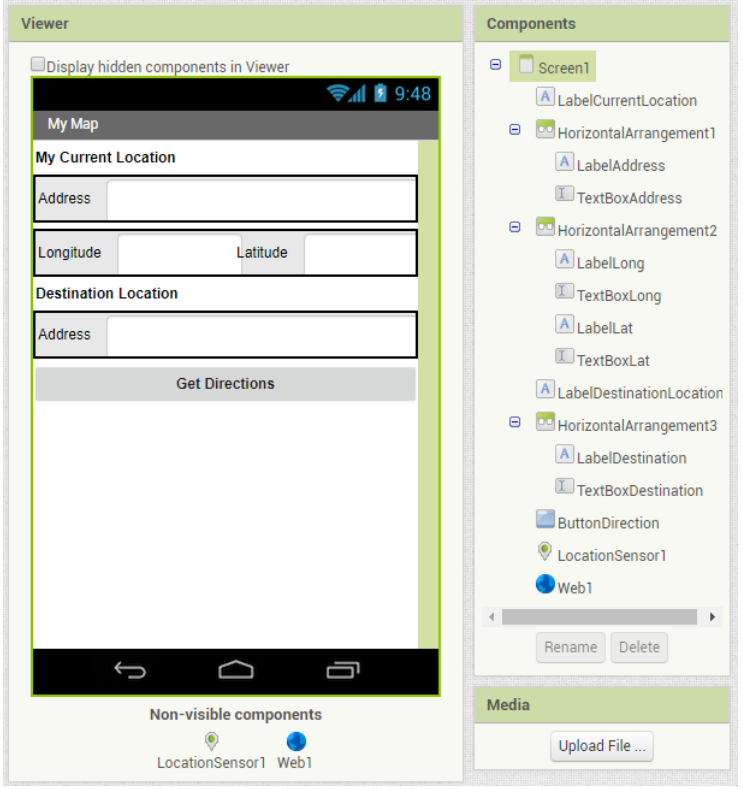
Reference:

https://appinventor.mit.edu/explore/content/location-sensor.html

https://appinventor.mit.edu/explore/ai2/android-wheres-my-car.html

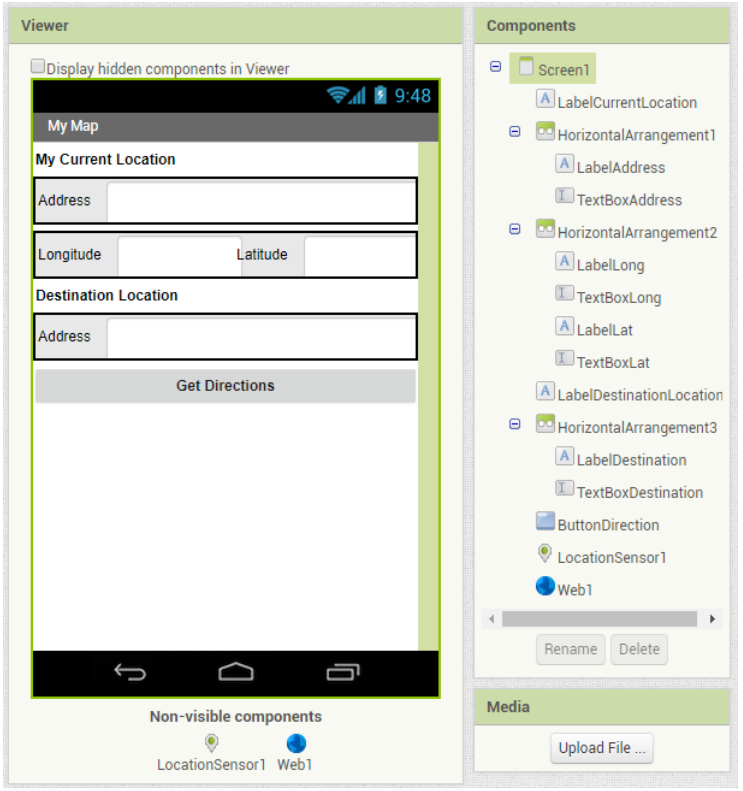
App Inventor Designer – Screen1

Component	Name	Properties
Label	LabelCurrentLocation	FontBold: Checked Text: My Current Location
HorizontalArrangement	HorizontalArrangement1	AlignVertical: Center Width: Fill parent
Label	LabelAddress	Text: Address
TextBox	TextBoxAddress	Width: Fill parent Hint: GPS Address Text: <Empty>
HorizontalArrangement	HorizontalArrangement2	AlignVertical: Center Width: Fill parent
Label	LabelLong	Text: Longitude
TextBox	TextBoxLong	Width: Fill parent Hint: GPS Long Text: <Empty>



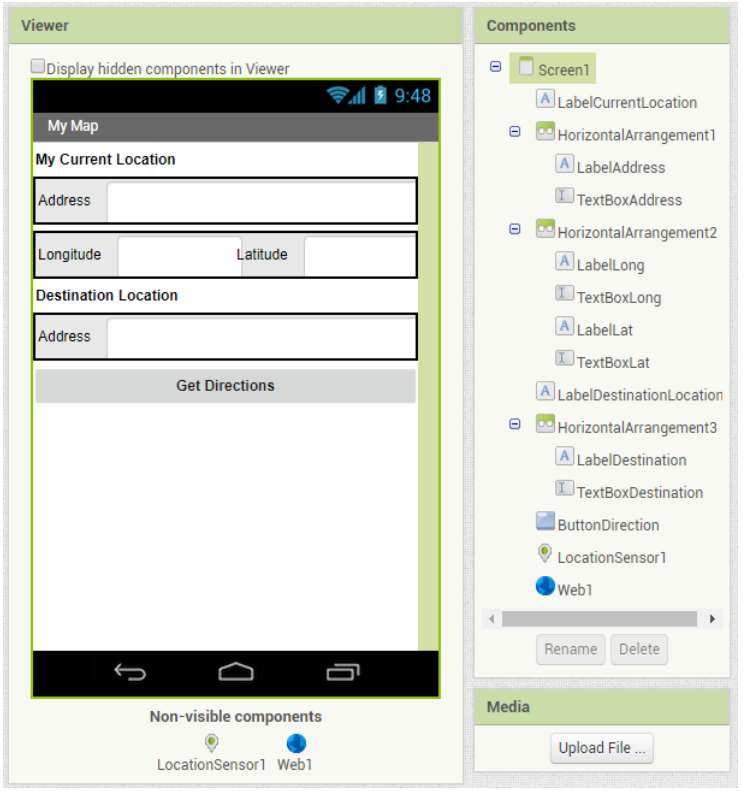
App Inventor Designer – Screen1

Component	Name	Properties
Label	LabelLat	Text: Ltitude
TextBox	TextBoxLat	Width: Fill parent Hint: GPS Lat Text: <Empty>
Label	LabelDestinationLocation	FontBold: Checked Text: Destination Loacation
HorizontalArrangement	HorizontalArrangement3	AlignVertical: Center Width: Fill parent
Label	LabelDestinatoin	Text: Address
TextBox	TextBoxDestinatoin	Width: Fill parent Hint: Enter Destination Text: <Empty>

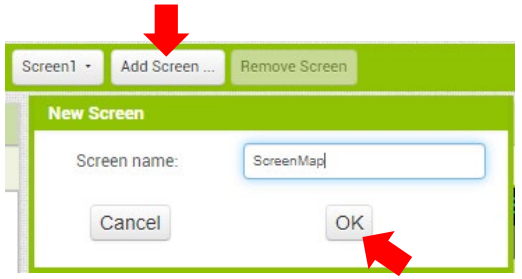


App Inventor Designer – Screen1

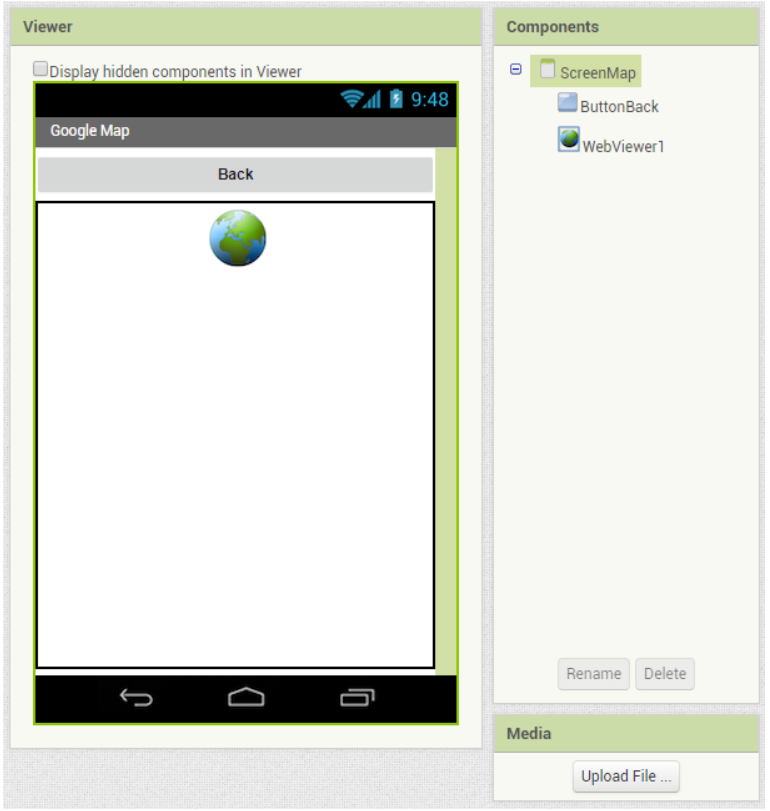
Component	Name	Properties
Button	ButtonDirection	FontBold: Checked Width: Fill parent Text: Get Directions TextAlignment: Center
LocationSensor	LocationSensor1	
Web	Web1	



App Inventor Designer – ScreenMap

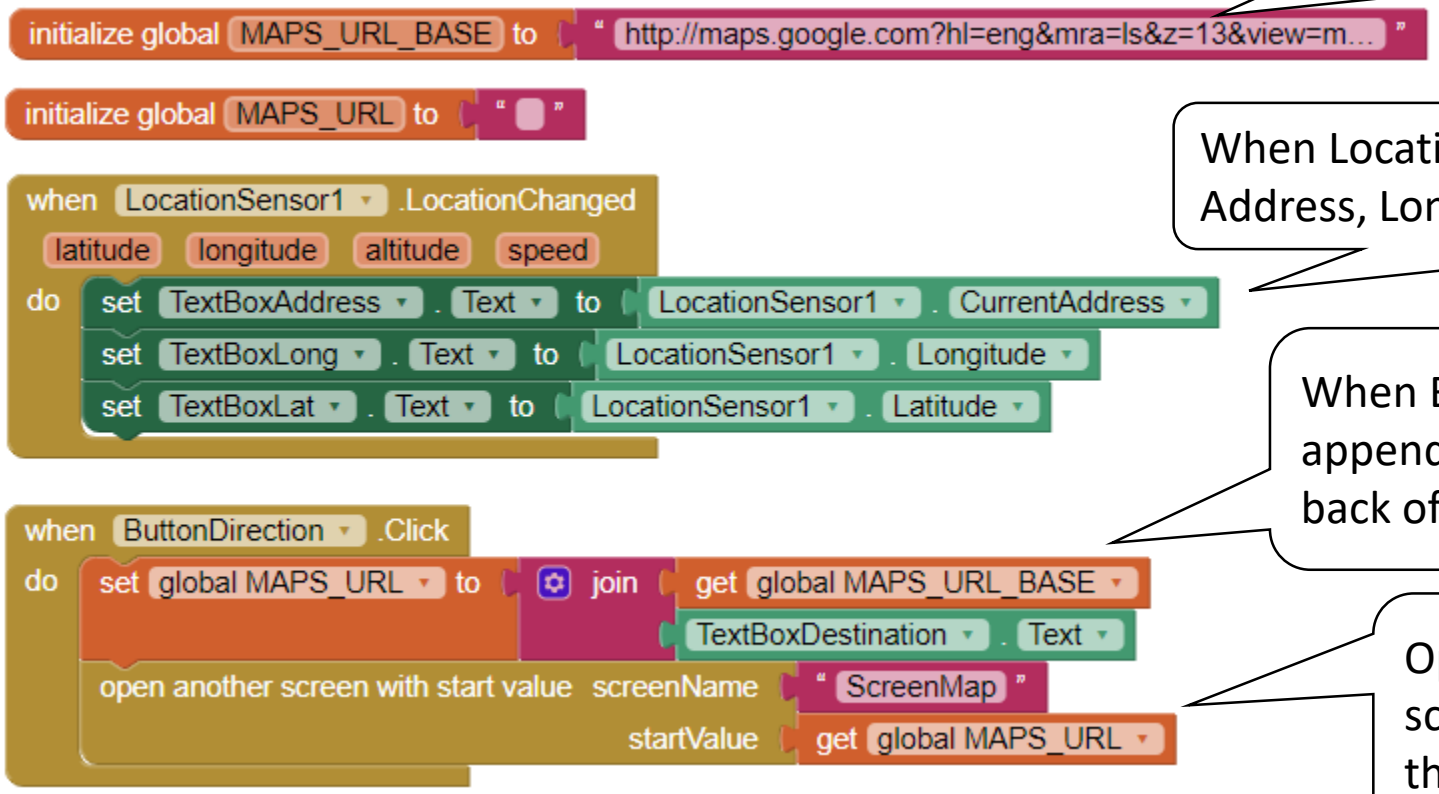


Component	Name	Properties
Button	ButtonBack	FontBold: Checked Width: Fill parent Text: Back TextAlignment: Center
WebViewer	WebViewer1	



App Inventor Block Editor – Screen1

http://maps.google.com?hl=eng&mra=ls&z=13&view=map&saddr=Current Location&daddr=

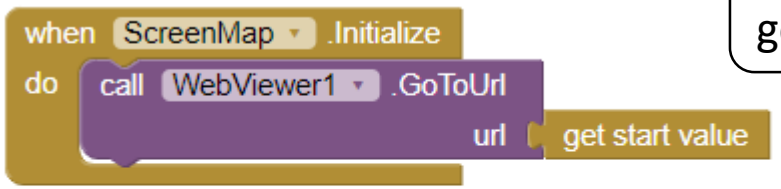


When LocationSensor1 detects change, get the Current Address, Longitude and Latitude it detected

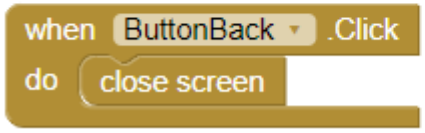
When ButtonDirection is Clicked, append the destination address to the back of MAP_URL_BASE

Open another Screen with screenname “ScreenMap” and pass the MAPS_URL to it

App Inventor Block Editor – ScreenMap



When ScreenMap first initializes, use WebViewer1 to go to Url that is passed from Screen1 (start value)



When ButtonBack is Clicked, just close the ScreenMap screen