

# Fitness\_and\_location

This is a special app that will help anyone who is going for a vacation and want to see the distance travelled (and number of steps taken) by him/her , information about the place where he/she is going , latest news of that location and his/her present location.

# Purposes of the App

- The first purpose of the app to provide the users a special app that is enough for a traveller during his journey.
- The second purpose of the app is to provide an app that measures distance travelled and footsteps (for fitness) taken by the user.
- The third purpose of the app is to provide their present location.
- The fourth purpose of the app is to provide the details of the location where user is going or want to know about . Also it will provide them the latest news related to that location or place.
- The fifth and the last purpose of the app is to check their internet connection that whether they are connected to a internet network or not.

# How the app works

## 'Screen 1'

- First of all, the user decides whether he/she wants to calculate his/her distance covered or wants to know his/her present location.
- If one wants to know the distance (steps taken), he/she saves his/her present location name and click the button "Save" and then press the button "start". When he/she is done, click the button "Calculate". It will tell you your distance travelled and the steps taken.
- If one wants to know his present location just click the button "Present location" and the map on the screen will take the user to his/her present location.
- If one wants to delete all the information just click the button "Delete all information" and all the inserted information on the screen will be deleted.
- If one wants to know the information of a place just type the name of the place in front of the label "Place" and click the button "Get info" and it will lead user to a place where the information of the place is given.

## 'Screen 2'

- When the screen initializes it leads the user to the Wikipedia page of the place what the user searched for. Here one can read all the information related to the place.
- When he/she complete reading either he/she can read the news related to that place by clicking "News" or he/she can close the screen by clicking "Back".

## 'Screen 3'

- When the screen initializes it leads the user to the Google News page of the place he/she searched in the first screen. Here he/she can read the latest news of that place.
- When he/she complete reading the news he/she can close the screen by clicking "Back".
- If the 2<sup>nd</sup> and 3<sup>rd</sup> screens does not load he/she can click "Check Connection".

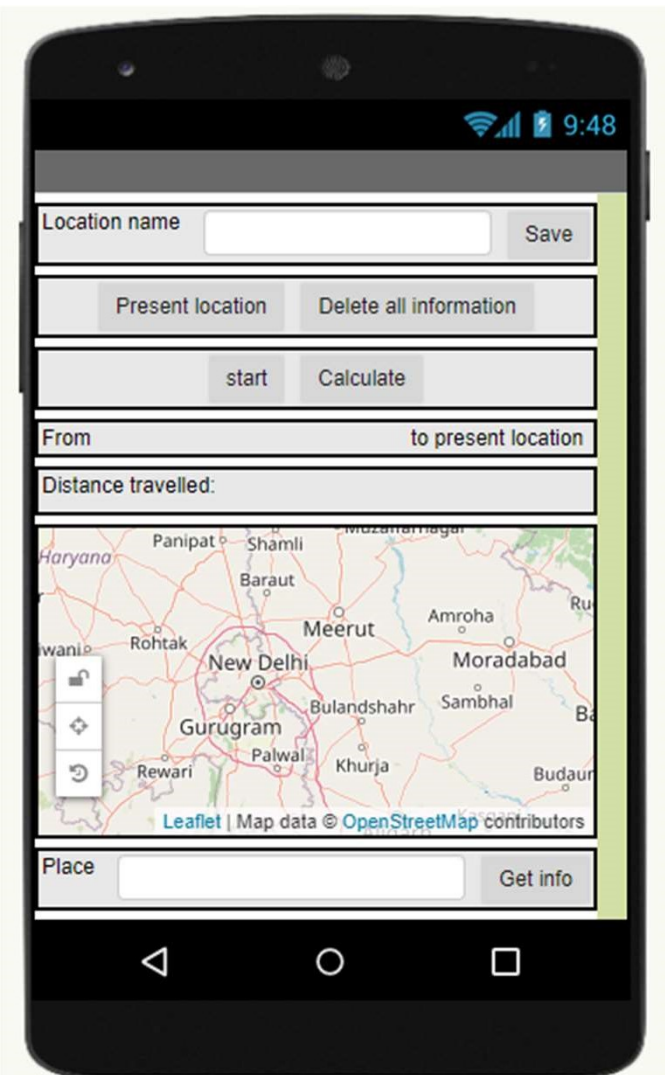
## 'Screen 4'

- This screen is mainly used by the user to check his/her internet connection. This page will tell the user whether he/she have a proper internet connection or not.
- This page generally works by directing the google home page and show you the result whether he/she have a proper internet connection or not.

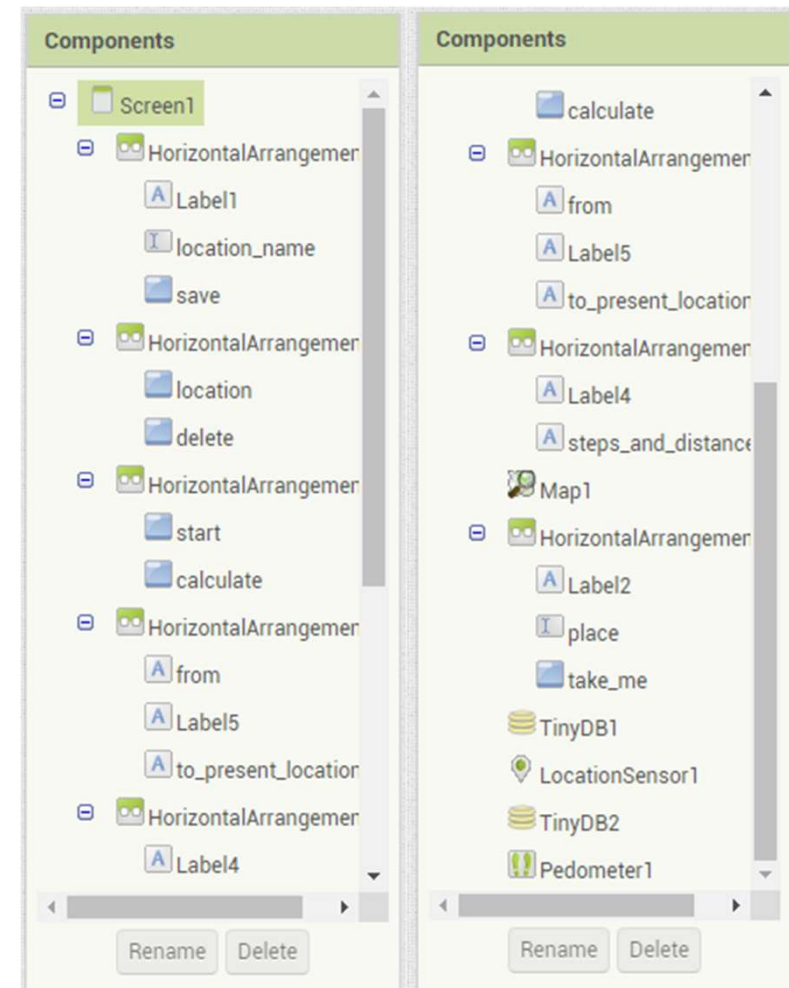
## Components we used

- In this app we used GPS, Pedometer, TinyDB component, Web viewer and Web1 component.

# Working of the App

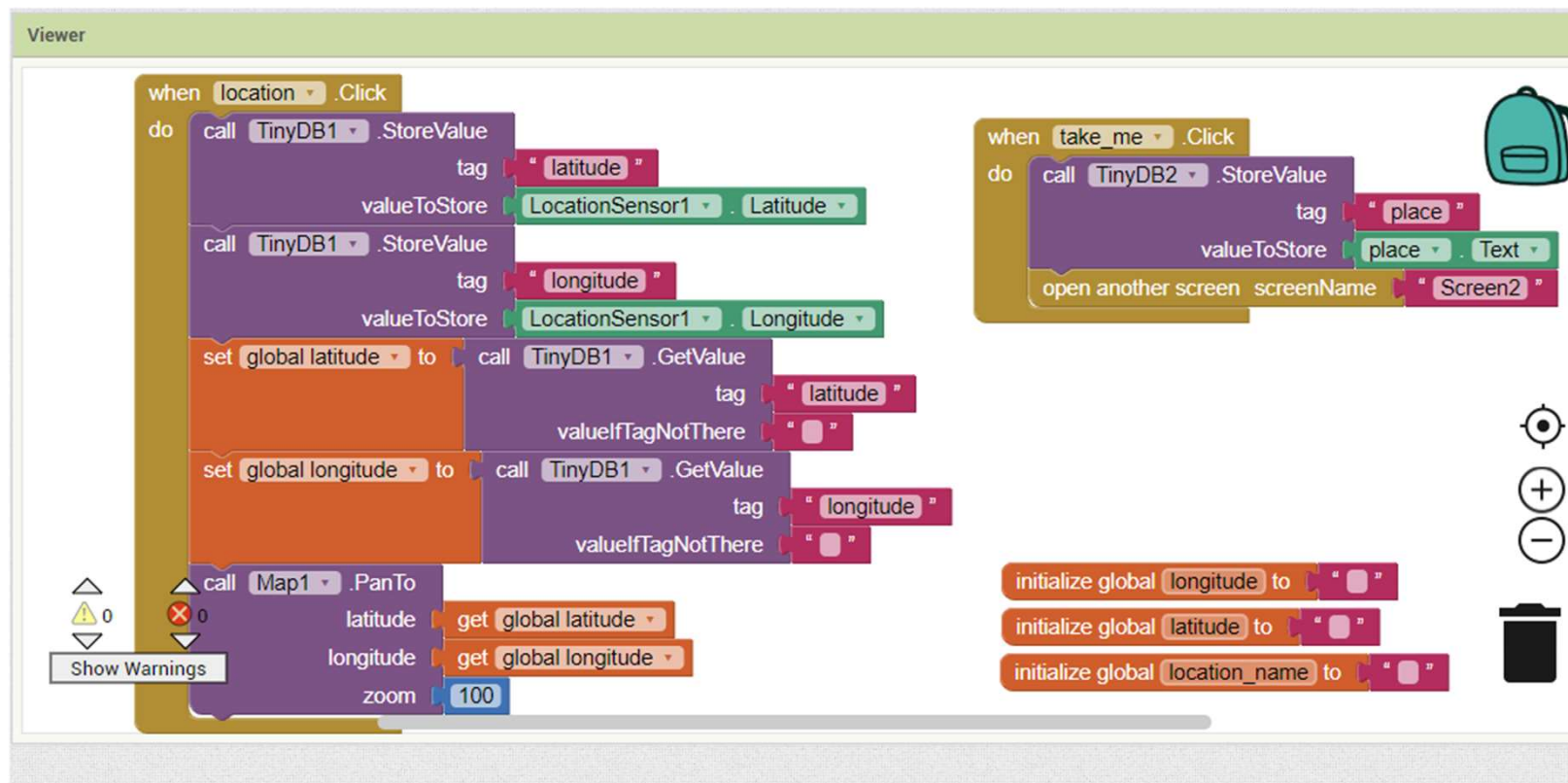


- Screen 1
- The components of the 1<sup>st</sup> screen is given on the right.
- The screen after adding these components will look like the image on the left
- The Block diagram and programming is given on the next page.



# Block diagram and programming

Initialize global variables for latitude, longitude and location name which user has entered. When user click button “Present location” it will use GPS and inserted map will show the present location of the user.



# Block diagram and programming

When “Save” button is clicked then the name of present location is saved. And when “Delete all information” button is clicked it will clear all the information including the latitude, longitude and name of the location.

The image shows a Scratch 'Viewer' window with a block diagram for a location management application. The diagram consists of two main event-driven blocks:

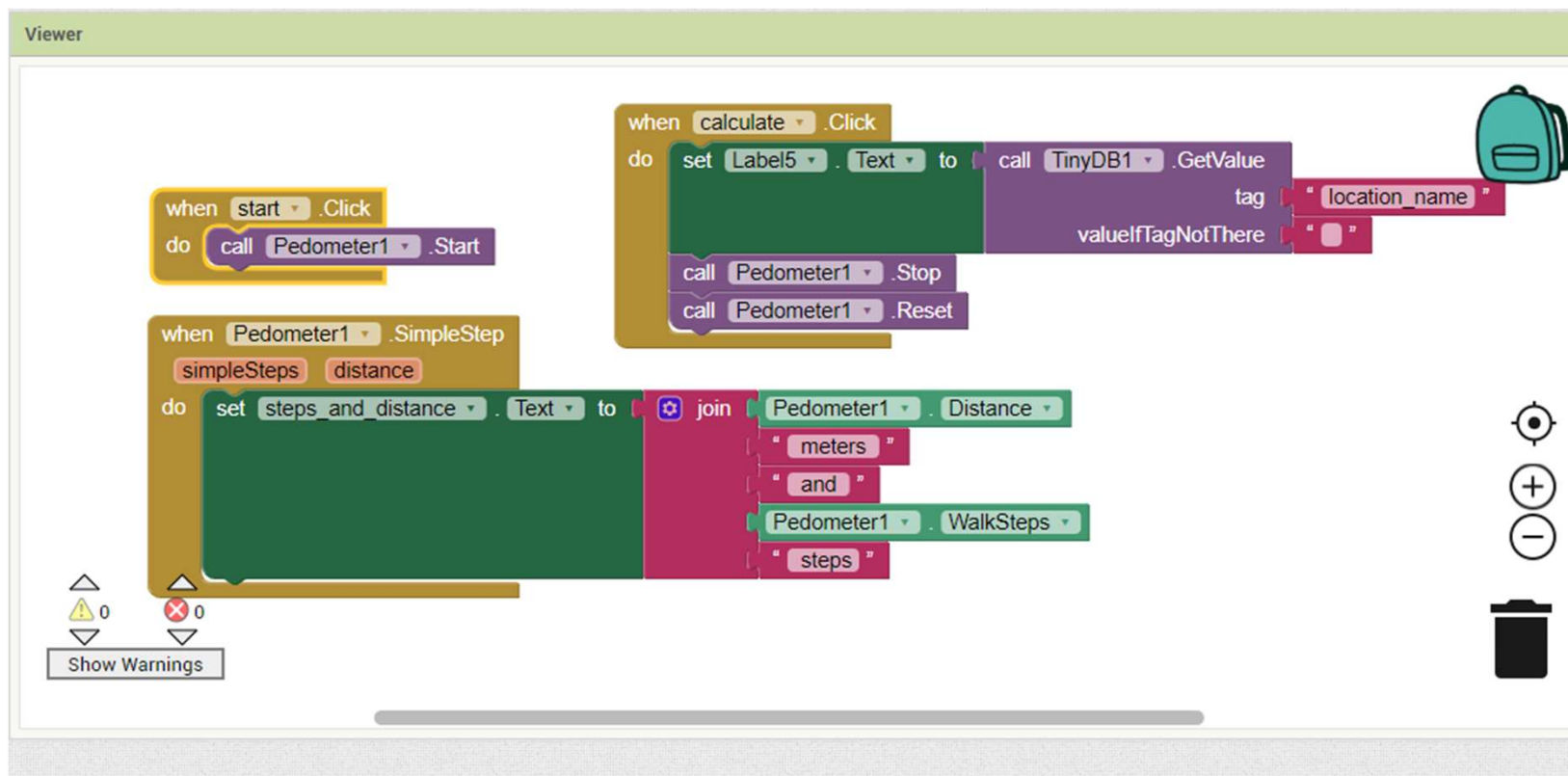
- When save button is clicked:**
  - Call TinyDB1 .StoreValue with tag 'location\_name' and value 'location\_name . Text'.
  - Set global location\_name to the result of call TinyDB1 .GetValue with tag 'location\_name' and value 'valueIfTagNotThere'.
- When delete button is clicked:**
  - Call TinyDB1 .ClearAll.
  - Set location\_name . Text to ' '.
  - Set Label5 . Text to ' '.
  - Set steps\_and\_distance . Text to ' '.

At the bottom left, there are two warning icons (a yellow triangle and a red X) with a 'Show Warnings' button below them. On the right side, there are several icons: a blue backpack, a target, a plus sign, a minus sign, and a trash can.

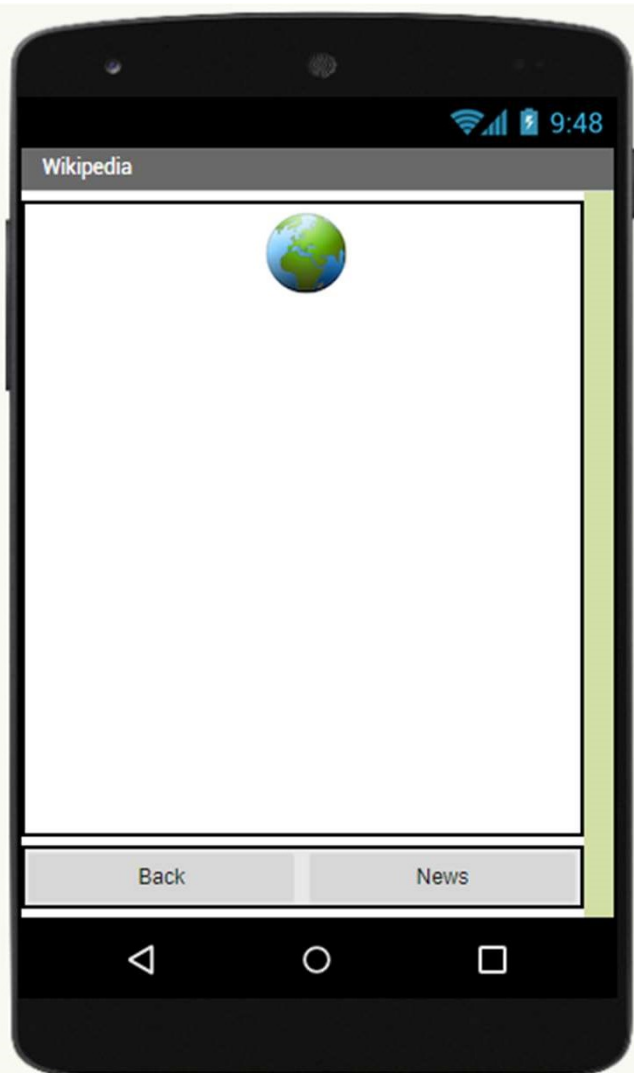


# Block diagram and programming

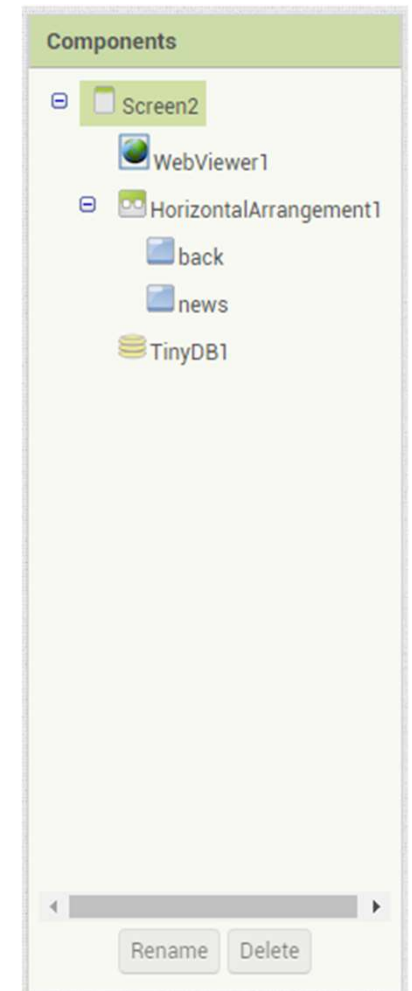
When “Start” button is clicked it will activate pedometer and when “Calculate” button is clicked it will stop pedometer and show the value of distance travelled and step taken by the user. And when “Get info” button is clicked a new screen initializes along with saving the name of the location typed in the box ‘information of the place’.



# Working of the App

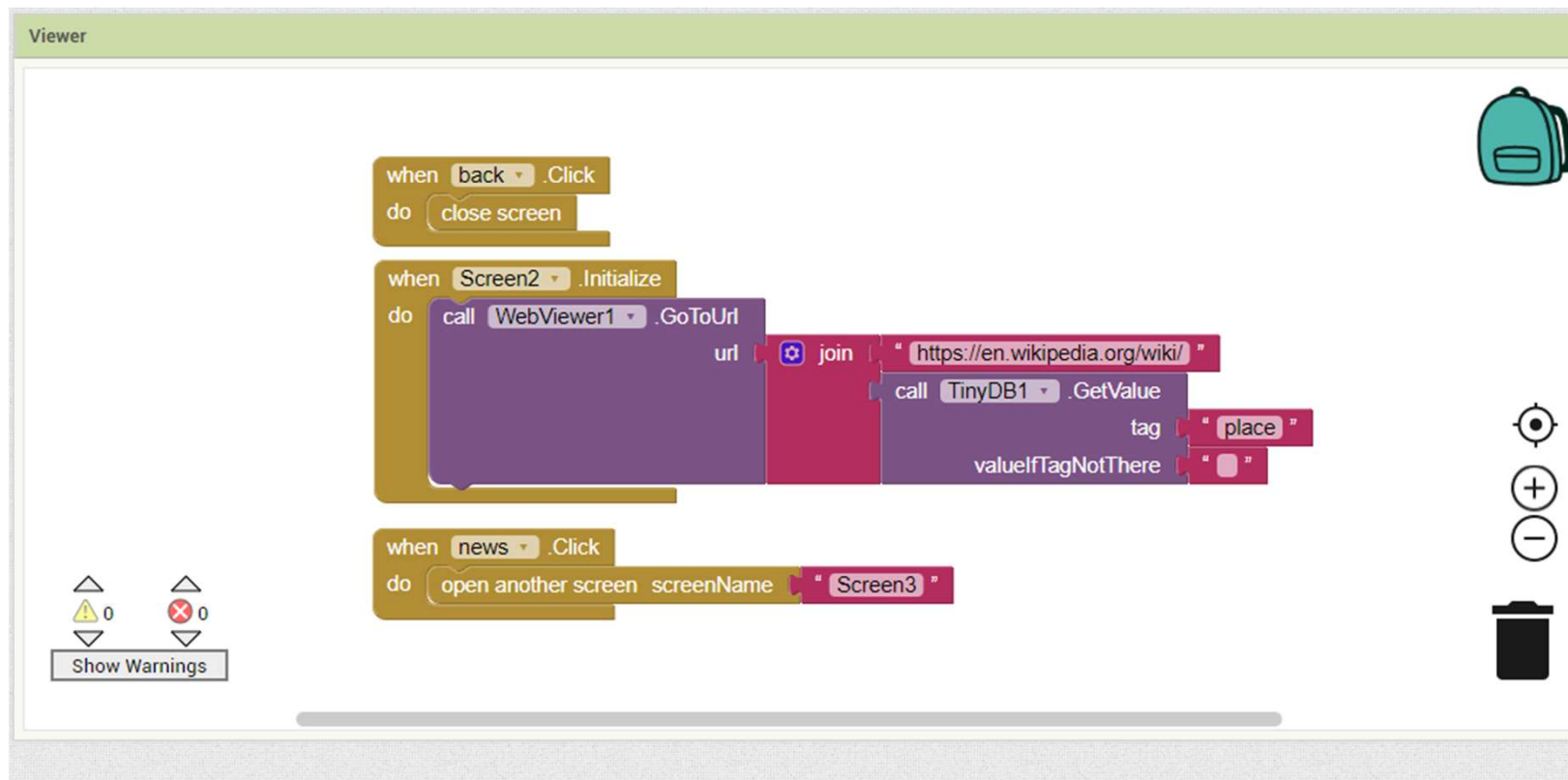


- Screen 2
- The components of the 2<sup>nd</sup> screen is given on the right.
- The screen after adding these components will look like the image on the left.
- The block diagram and programming is given on the next page.

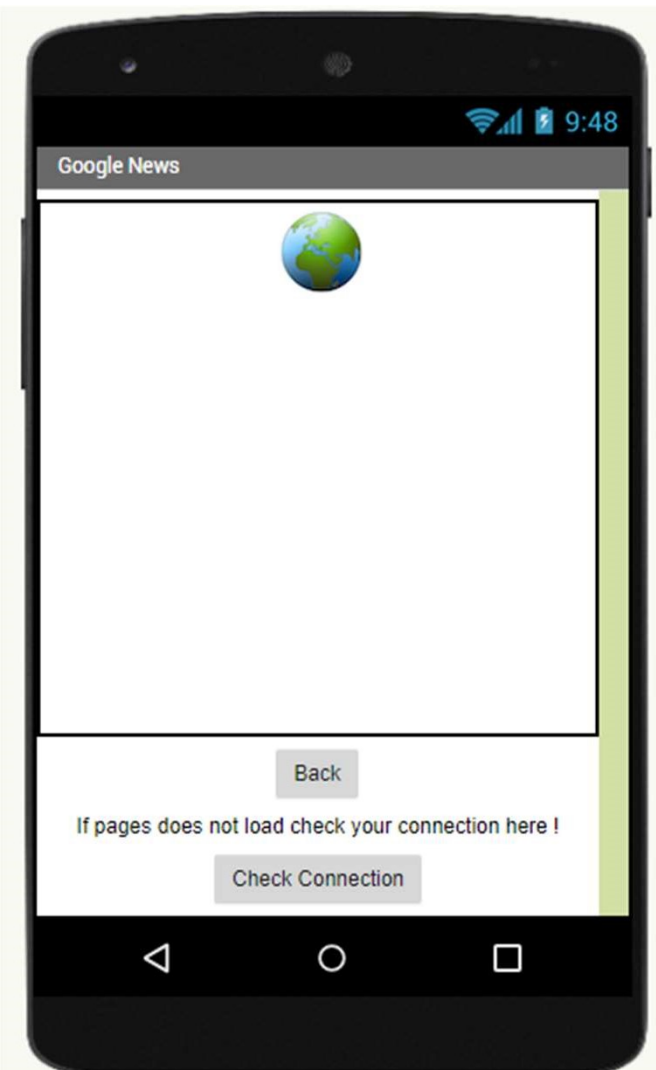


# Block diagram and programming

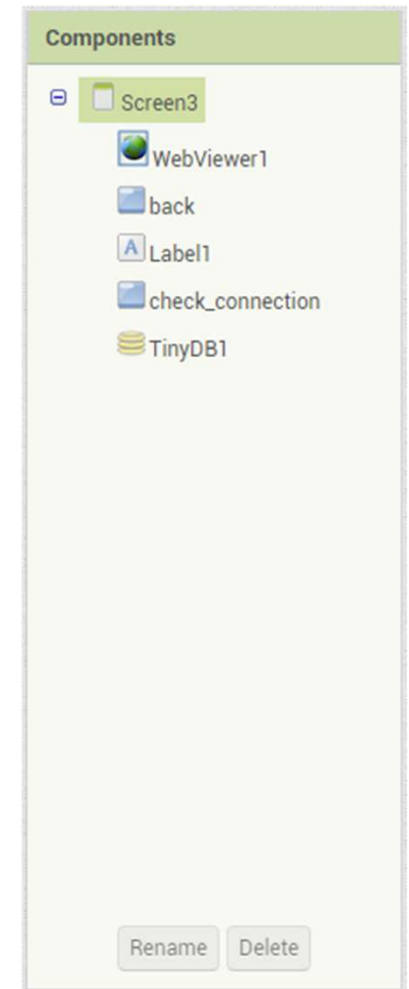
When the screen 2 initializes it leads the user to the web page of the Wikipedia showing you the details of the place which he/she searched for, by using the saved value. When “Back” button is clicked it will close the present screen. And when “News” button is clicked it will initialize a new screen.



# Working of the App

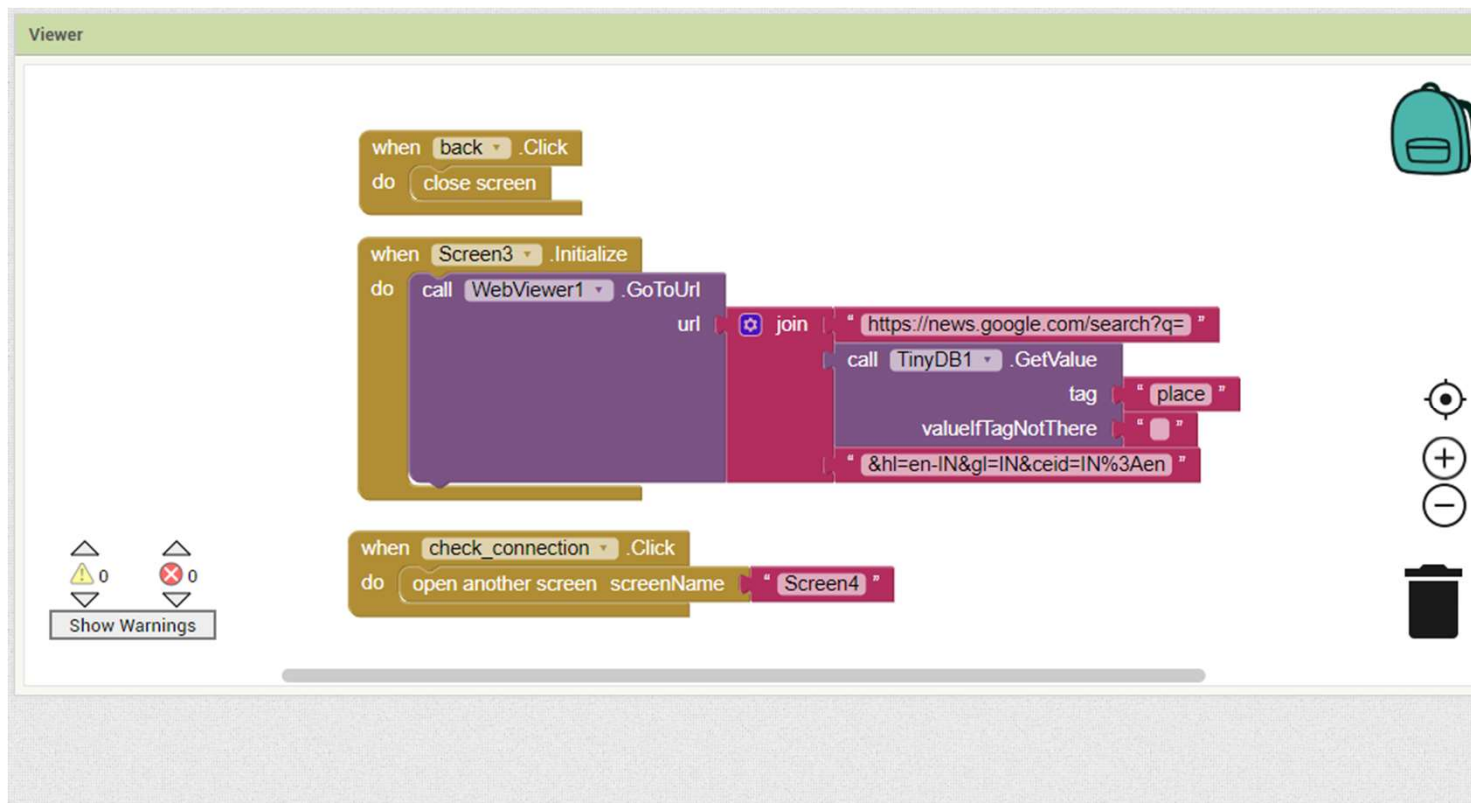


- Screen 3
- The components of the 3<sup>rd</sup> screen is given on the right.
- The screen after adding these components will look like the image on the left.
- The block diagram and programming is given on the next page.

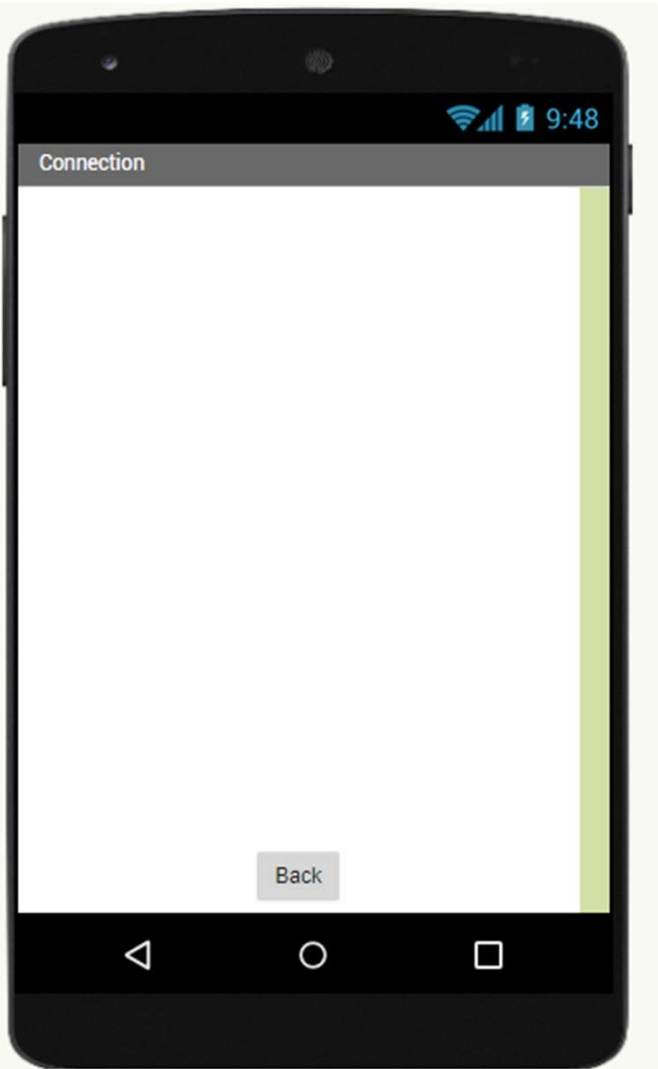


# Block diagram and programming

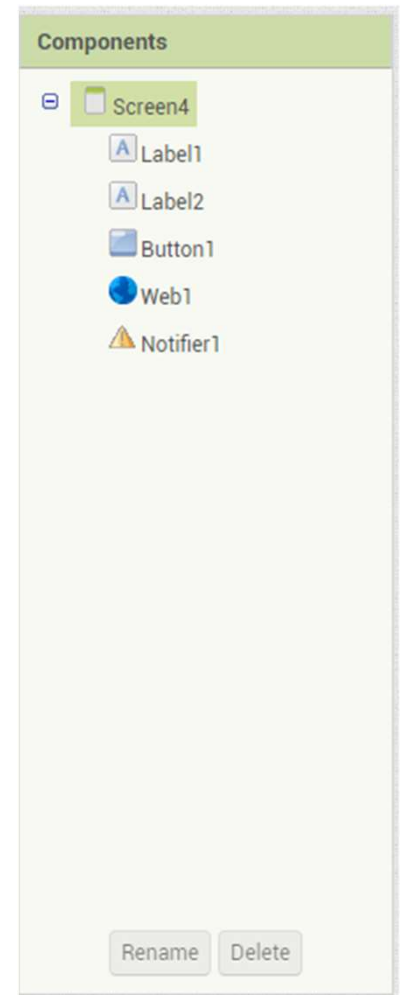
When the screen 3 initializes it leads the user to the web page of the Google News showing him/her the latest news of the place which he/she searched for, by using the saved value. When “Back” button is clicked it will close the present screen. And if both of the web pages does not load the user can check your internet connection by clicking the button “Check Connection”, it will initialize a new screen.



# Working of the App

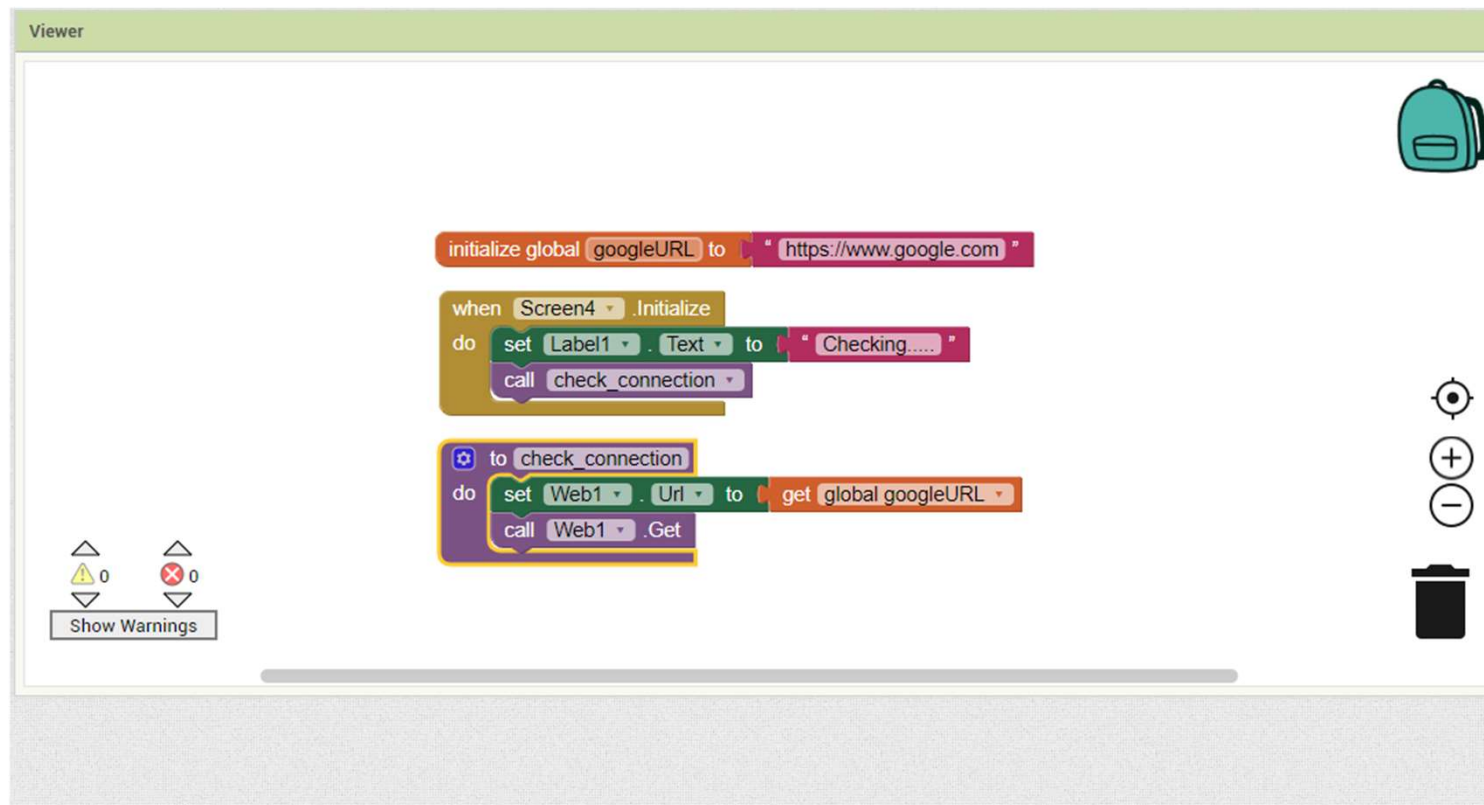


- Screen 4
- The components of the 4<sup>th</sup> screen is given on the right.
- The screen after adding these components will look like the image on the left.
- The block diagram and programming is given on the next page.



# Block diagram and programming

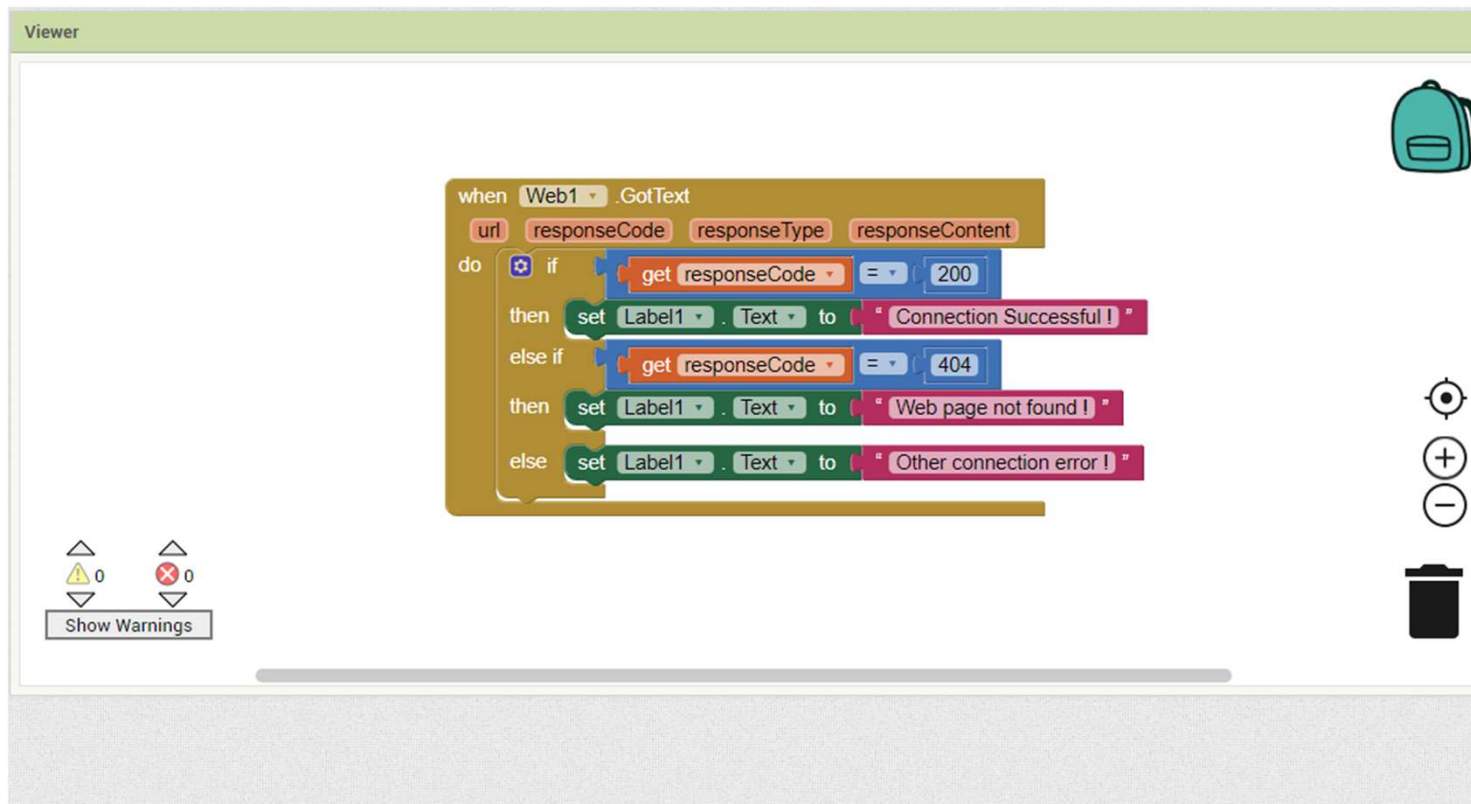
Initialize a global variable for directing the home page site of google. When screen initializes it will show 'Checking....'. The web1 component will now check site google.





# Block diagram and programming

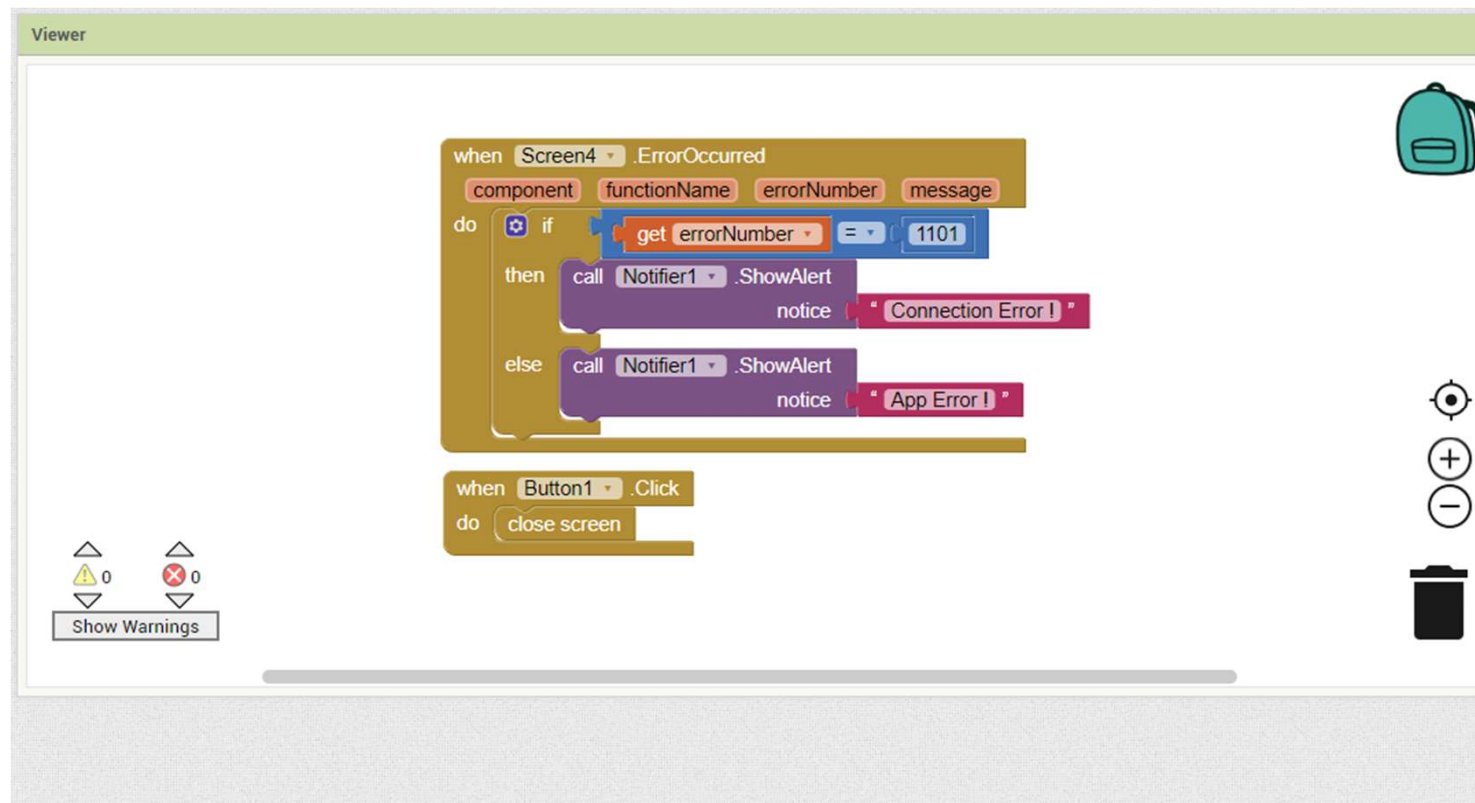
When web1 got response code 200 it means generally internet is connected. So it will show 'Connection Successful !'. If web1 got response code 404 it means web page is not there. So it will show 'Web page not found !'. If any other code appear it will show 'Other connection error !'.





# Block diagram and programming

If screen error occurred with error number 1101 then notifier will show alert 'Connection Error !'. Otherwise it will show 'App Error !'. And when back button is clicked it will close the screen. And after this the app is completed and ready to use.



# Summary

- This app is very beneficial for those who are frequently visiting some other places they are unknown from.
- It will reduces time for people because this single app will help the user to direct different web pages such as Wikipedia and Google News which are very useful for those who are unknown to new places.
- It will help people to fight obesity which is one of the major issues in today's world.
- It will be helpful to the people who don't have enough space in their mobile phones to download multiple apps. (not so major problem)
- Direct link to download or study this app is given below:  
[ai2.appinventor.mit.edu/?galleryId=5597412739907584](https://ai2.appinventor.mit.edu/?galleryId=5597412739907584)