PROJECT DEVELOPMENT PHASEPROJECT

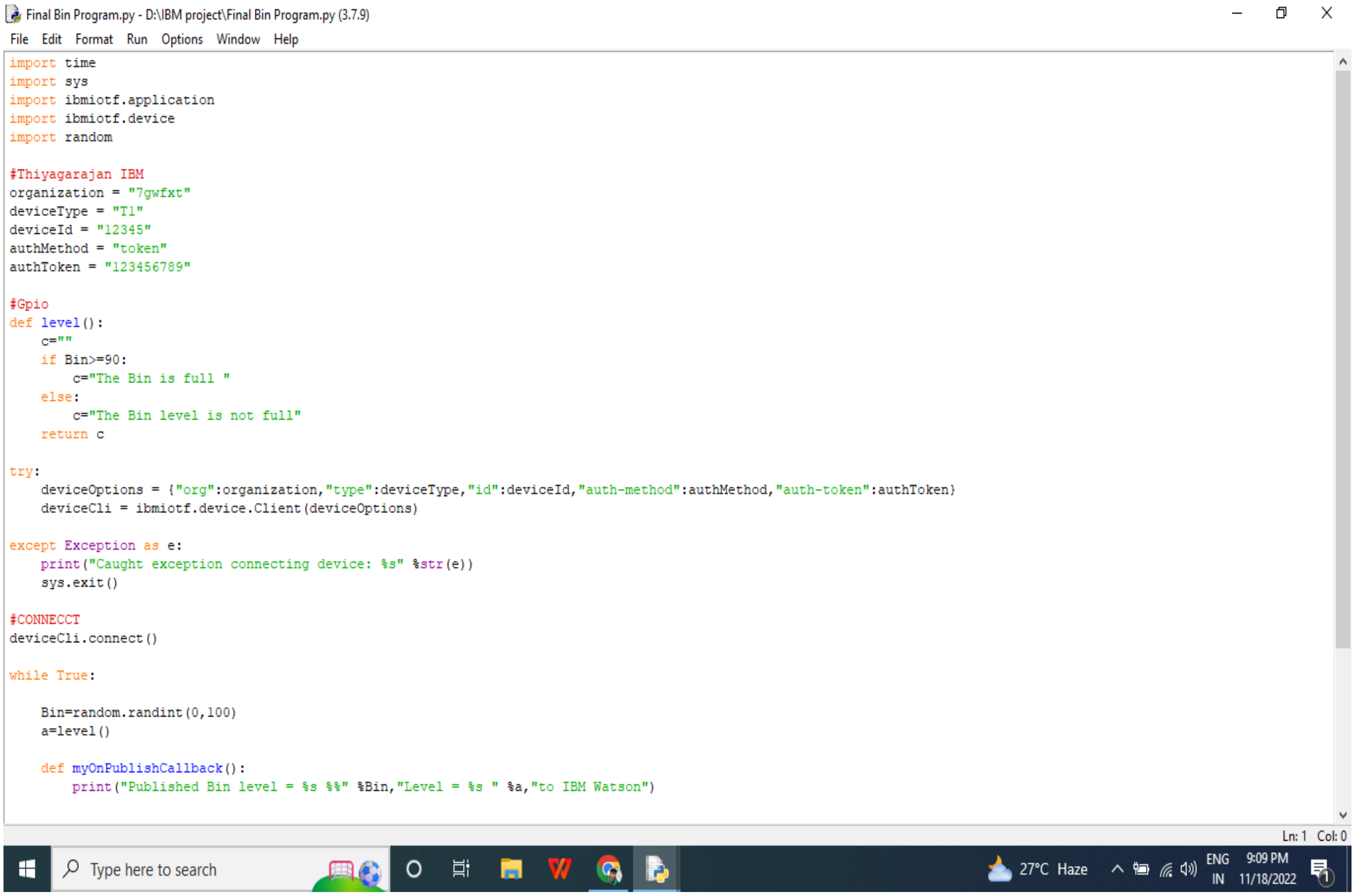
DEVELOPMENT DELIVERY OF SPRINT 4

Date	19 Nov 2022
Team ID	PNT2022TMID38568
Project Name	Smart Waste Management System For Metropolitant Cities
Marks	

SPRINT DESCRIPTION

In this Sprint we are about to describe about the Application we have developed and the Final Testing of the Python Code.

PYTHON CODE


Final Bin Program.py - D:\IBM project\Final Bin Program.py (3.7.9)
File Edit Format Run Options Window Help
Ln: 1 Col: 0
Type here to search
27°C Haze
ENG IN
9:09 PM
11/18/2022

```
import time
import sys
import ibmiotf.application
import ibmiotf.device
import random

#Thiyagarajan IBM
organization = "7gwfxt"
deviceType = "T1"
deviceId = "12345"
authMethod = "token"
authToken = "123456789"

#Gpio
def level():
    c=""
    if Bin>=90:
        c="The Bin is full "
    else:
        c="The Bin level is not full"
    return c

try:
    deviceOptions = {"org":organization,"type":deviceType,"id":deviceId,"auth-method":authMethod,"auth-token":authToken}
    deviceCli = ibmiotf.device.Client(deviceOptions)

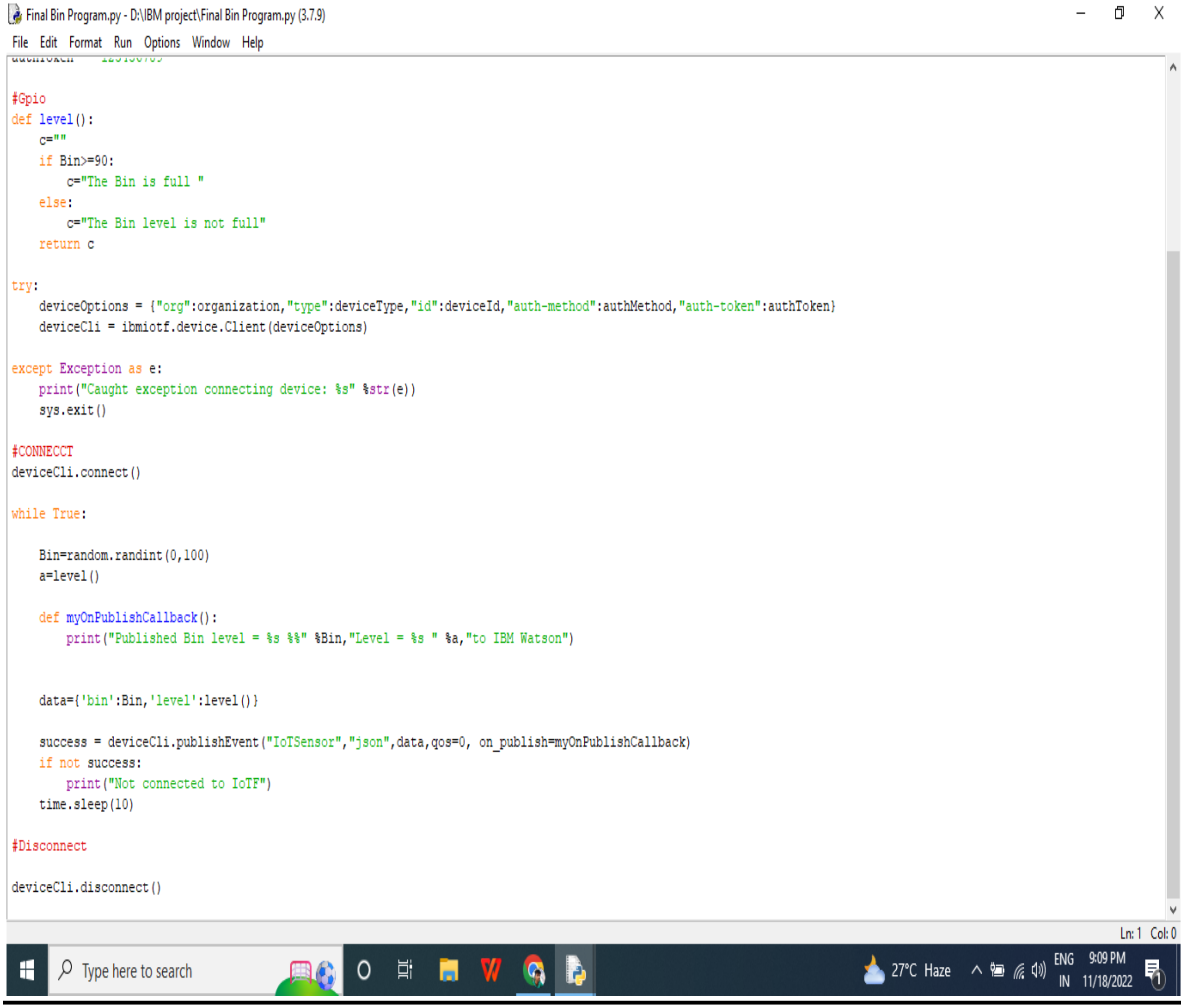
except Exception as e:
    print("Caught exception connecting device: %s" %str(e))
    sys.exit()

#CONNECCT
deviceCli.connect()

while True:

    Bin=random.randint(0,100)
    a=level()

    def myOnPublishCallback():
        print("Published Bin level = %s %%" %Bin,"Level = %s " %a,"to IBM Watson")
```



```
authToken = "123456789"

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#CONNECCT
deviceCli.connect()

while True:

    Bin=random.randint(0,100)
    a=level()

    def myOnPublishCallback():
        print("Published Bin level = %s %%" %Bin,"Level = %s " %a,"to IBM Watson")

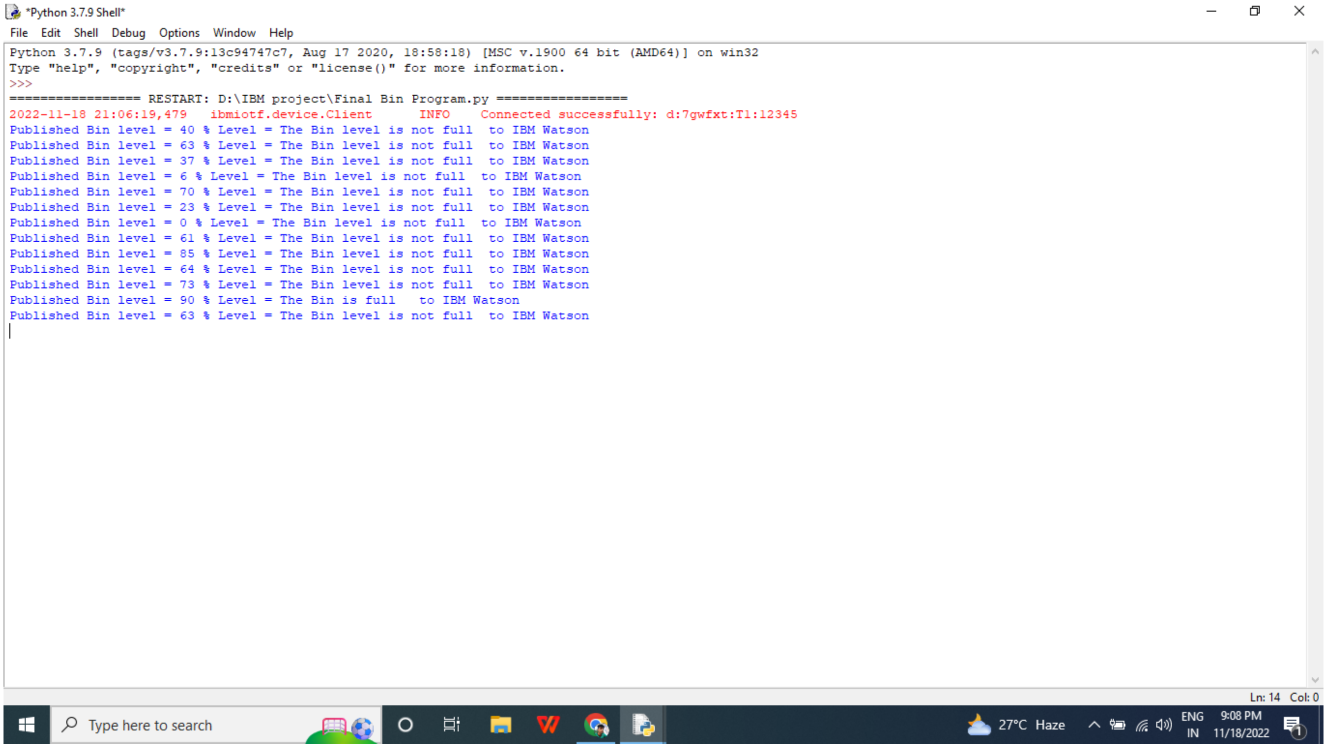

    data={'bin':Bin,'level':level()}

    success = deviceCli.publishEvent("IoTSensor","json",data,qos=0, on_publish=myOnPublishCallback)
    if not success:
        print("Not connected to IoTF")
    time.sleep(10)

#Disconnect

deviceCli.disconnect()
```

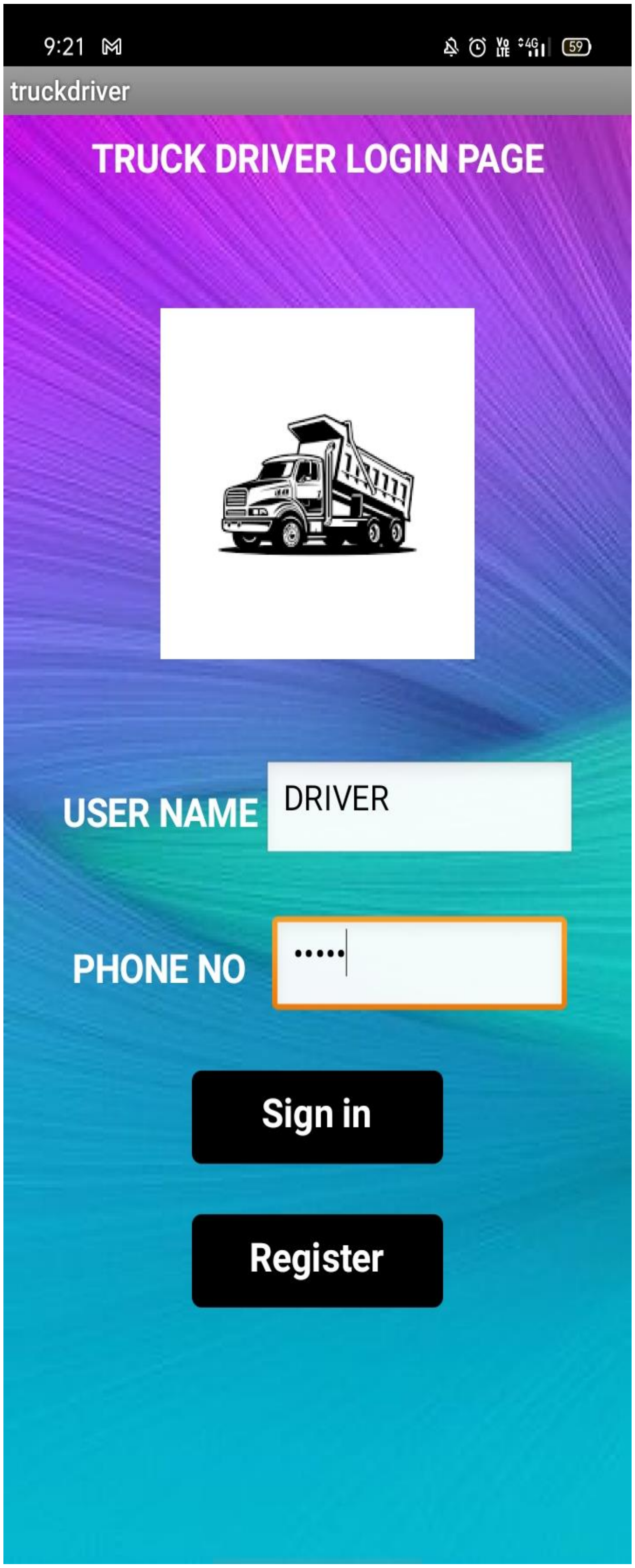
PYTHON EXECUTED OUTPUT



```
Python 3.7.9 (tags/v3.7.9:13c94747c7, Aug 17 2020, 18:58:18) [MSC v.1900 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 
================= RESTART: D:\IBM project\Final Bin Program.py =================
2022-11-18 21:06:19,479   ibmiotf.device.Client      INFO    Connected successfully: d:7gwfxt:T1:12345
Published Bin level = 40 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 63 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 37 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 6 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 70 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 23 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 0 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 61 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 85 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 64 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 73 % Level = The Bin level is not full  to IBM Watson
Published Bin level = 90 % Level = The Bin is full   to IBM Watson
Published Bin level = 63 % Level = The Bin level is not full  to IBM Watson
```

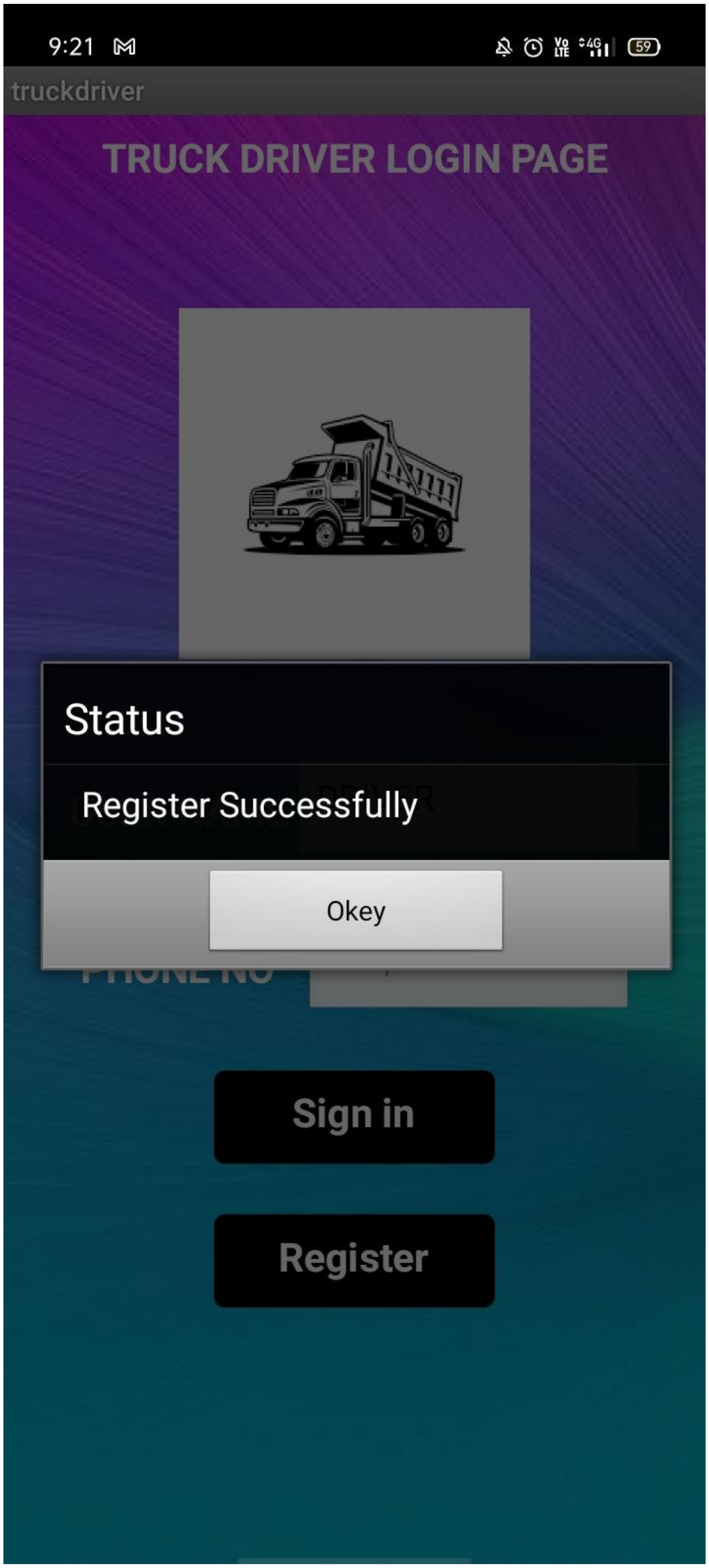
APPLICATION SCREENS

HERE WE DISPLAYED SCREEN 1 OF OUR CREATED APPLICATION



USER NAME DRIVER

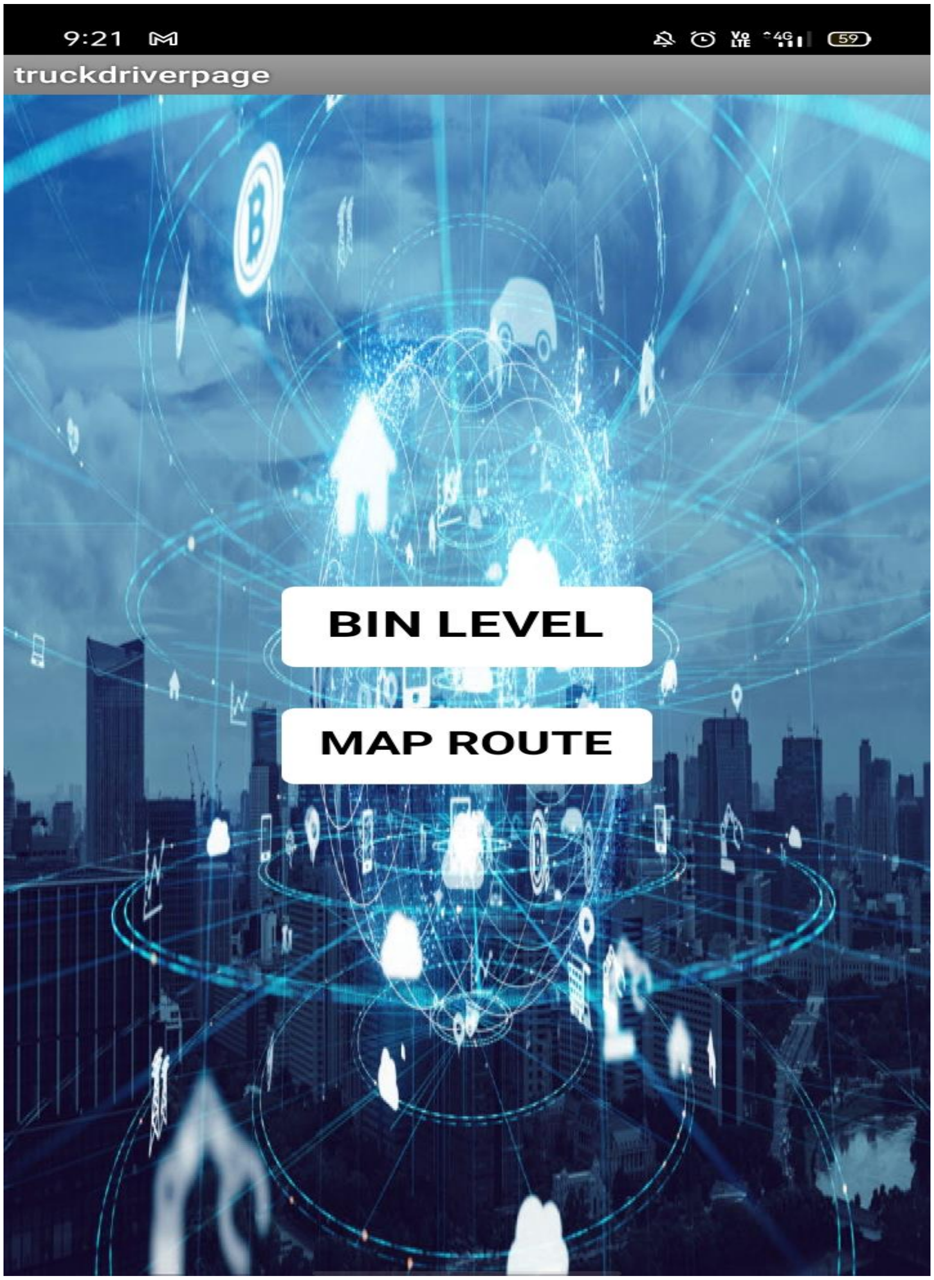
PHONE NO •••••



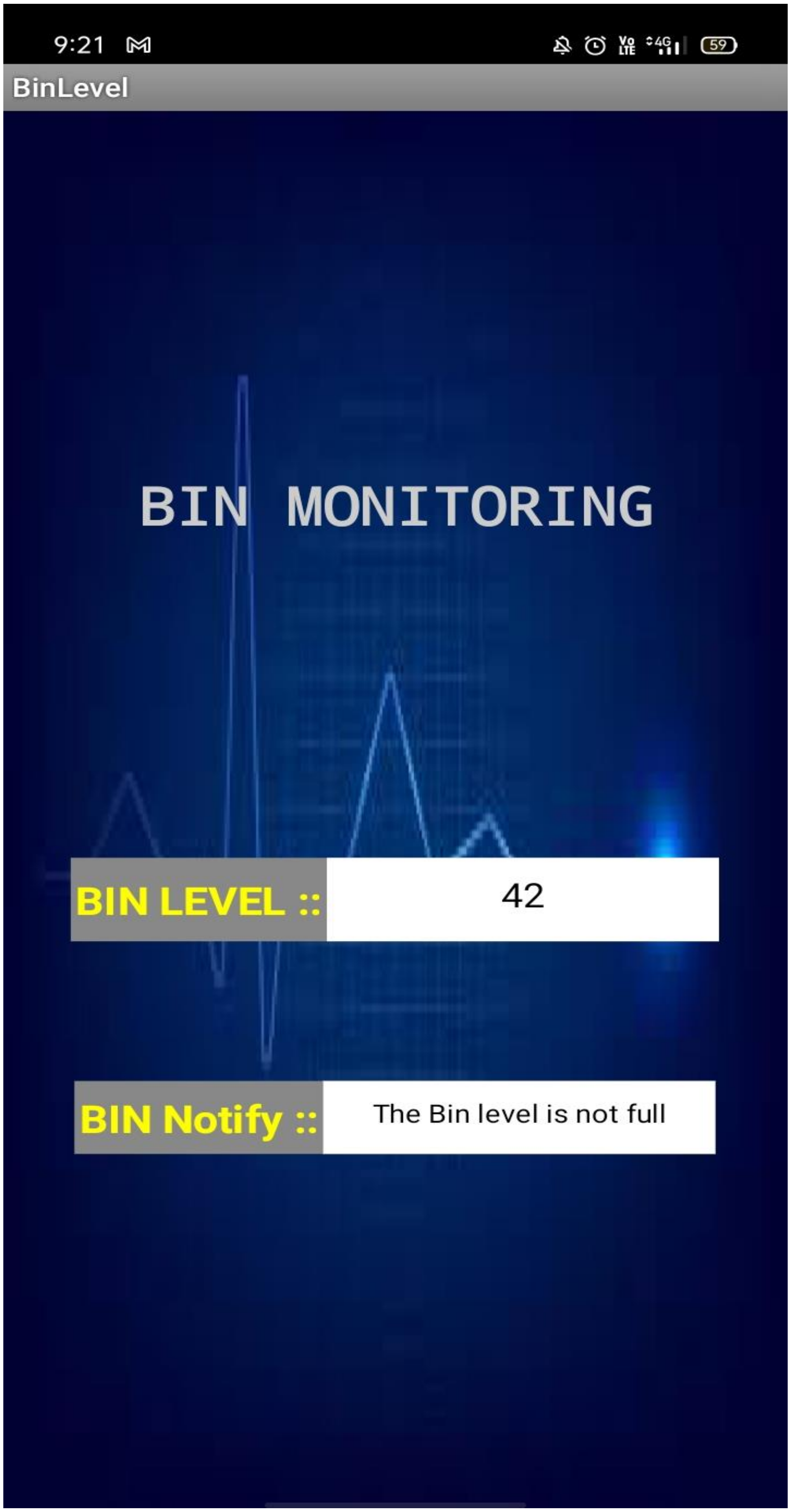
Status

Register Successfully

HERE WE DISPLAYED SCREEN 2 OF OUR CREATED APPLICATION



HERE WE DISPLAYED SCREEN 3 OF OUR CREATED APPLICATION

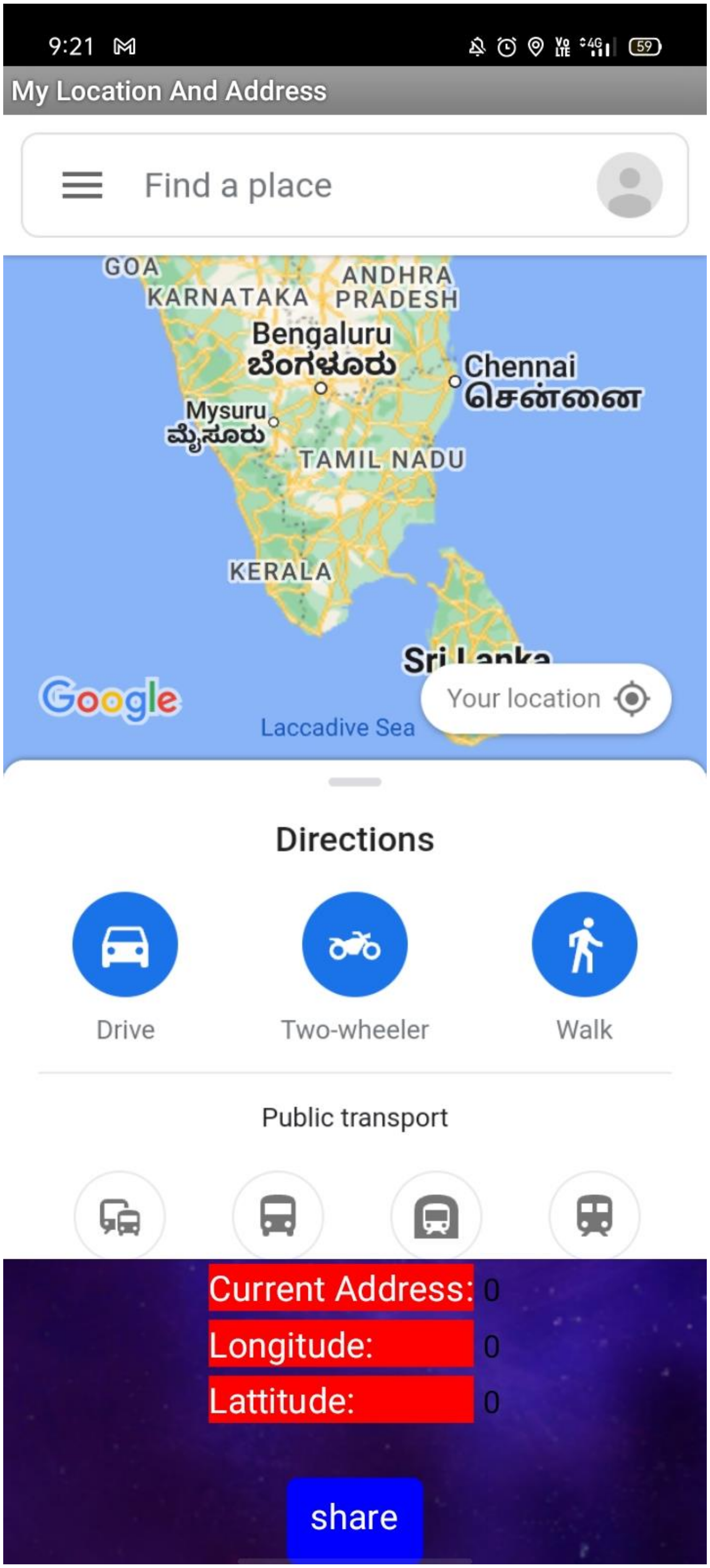


BIN MONITORING

BIN LEVEL :: 42

BIN Notify :: The Bin level is not full

HERE WE DISPLAYED SCREEN 4OF OUR CREATED APPLICATION



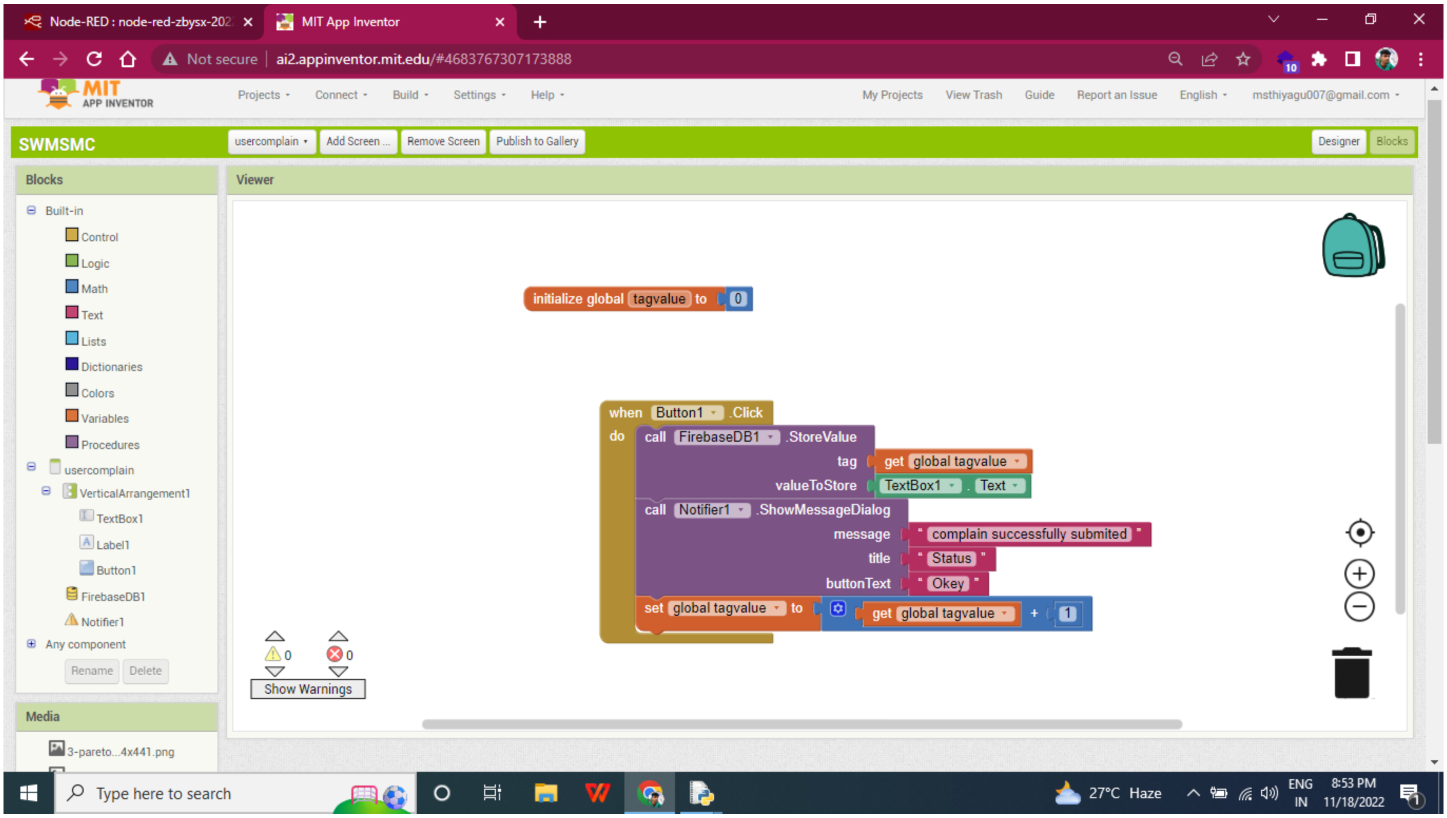
Current Address: 0

Longitude: 0

Lattitude: 0

BLOCKS FUNCTIONS USED IN OUR APPLICATION

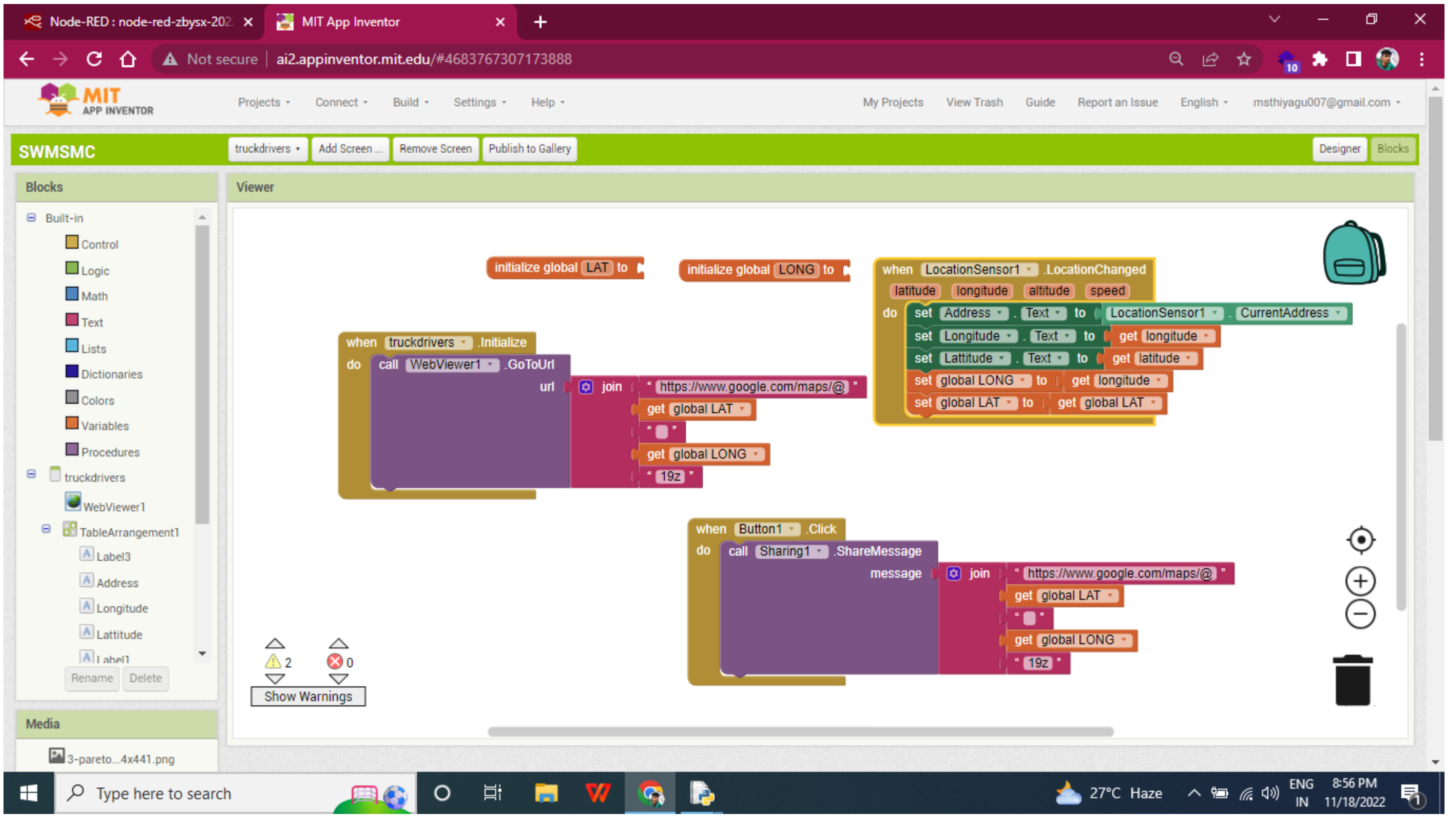
SCREEN 1



```
initialize global tagvalue to 0

when Button1 .Click
do  call FirebaseDB1 .StoreValue
        tag  get global tagvalue
        valueToStore  TextBox1 . Text
    call Notifier1 .ShowMessageDialog
        message  " complain successfully submited "
        title  " Status "
        buttonText  " Okey "
    set global tagvalue to  get global tagvalue + 1
```

SCREEN 2



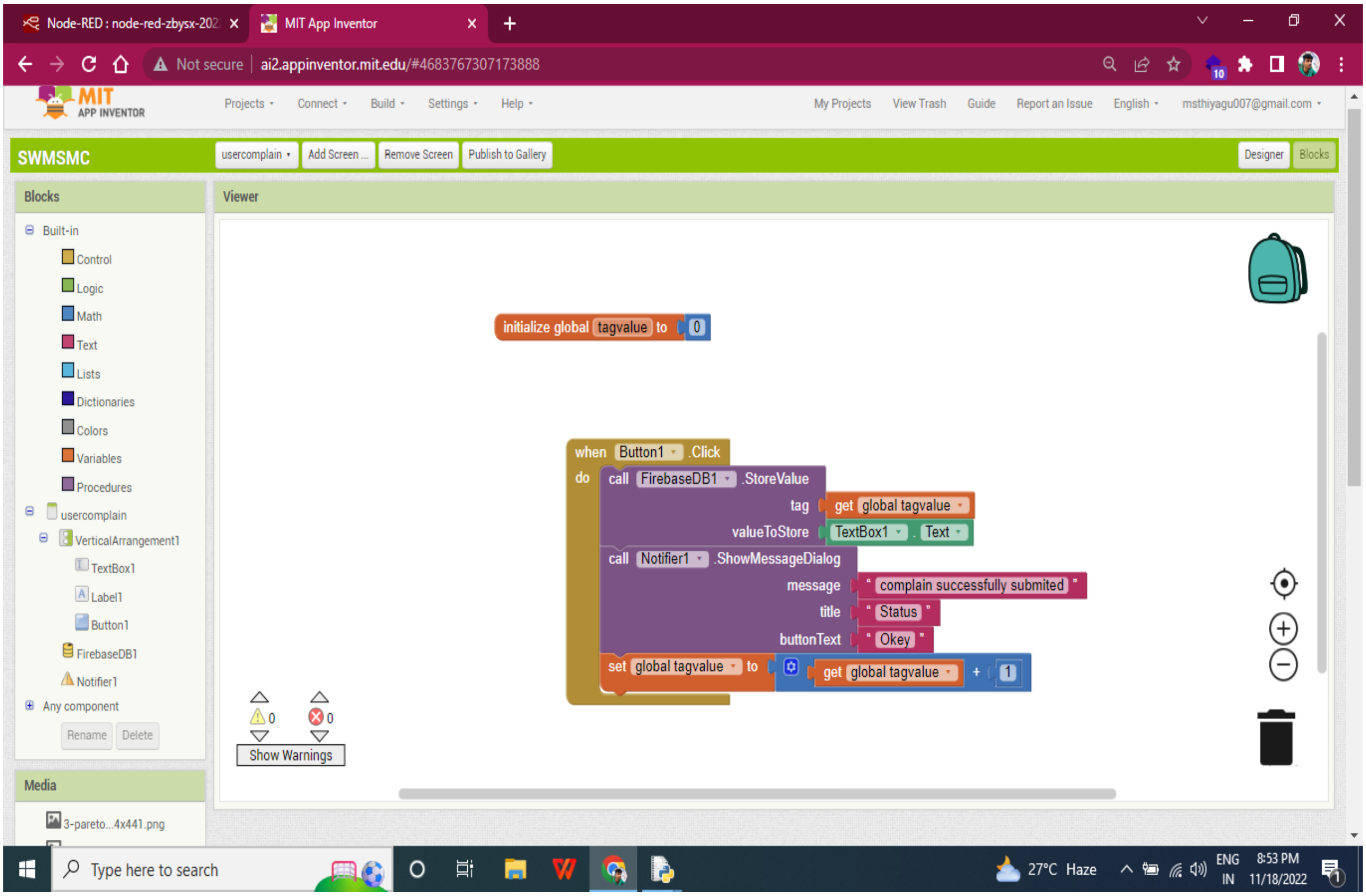
```
initialize global LAT to
initialize global LONG to

when truckdrivers .Initialize
do  call WebViewer1 .GoToUrl
        url  join  "https://www.google.com/maps/@"
                   get global LAT
                   ""
                   get global LONG
                   "19z"

when LocationSensor1 .LocationChanged
  latitude  longitude  altitude  speed
do  set Address . Text to LocationSensor1 . CurrentAddress
    set Longitude . Text to get longitude
    set Lattitude . Text to get latitude
    set global LONG to get longitude
    set global LAT to get global LAT

when Button1 .Click
do  call Sharing1 .ShareMessage
        message  join  "https://www.google.com/maps/@"
                       get global LAT
                       ""
                       get global LONG
                       "19z"
```

SCREEN 3



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    set global tagvalue to  get global tagvalue + 1
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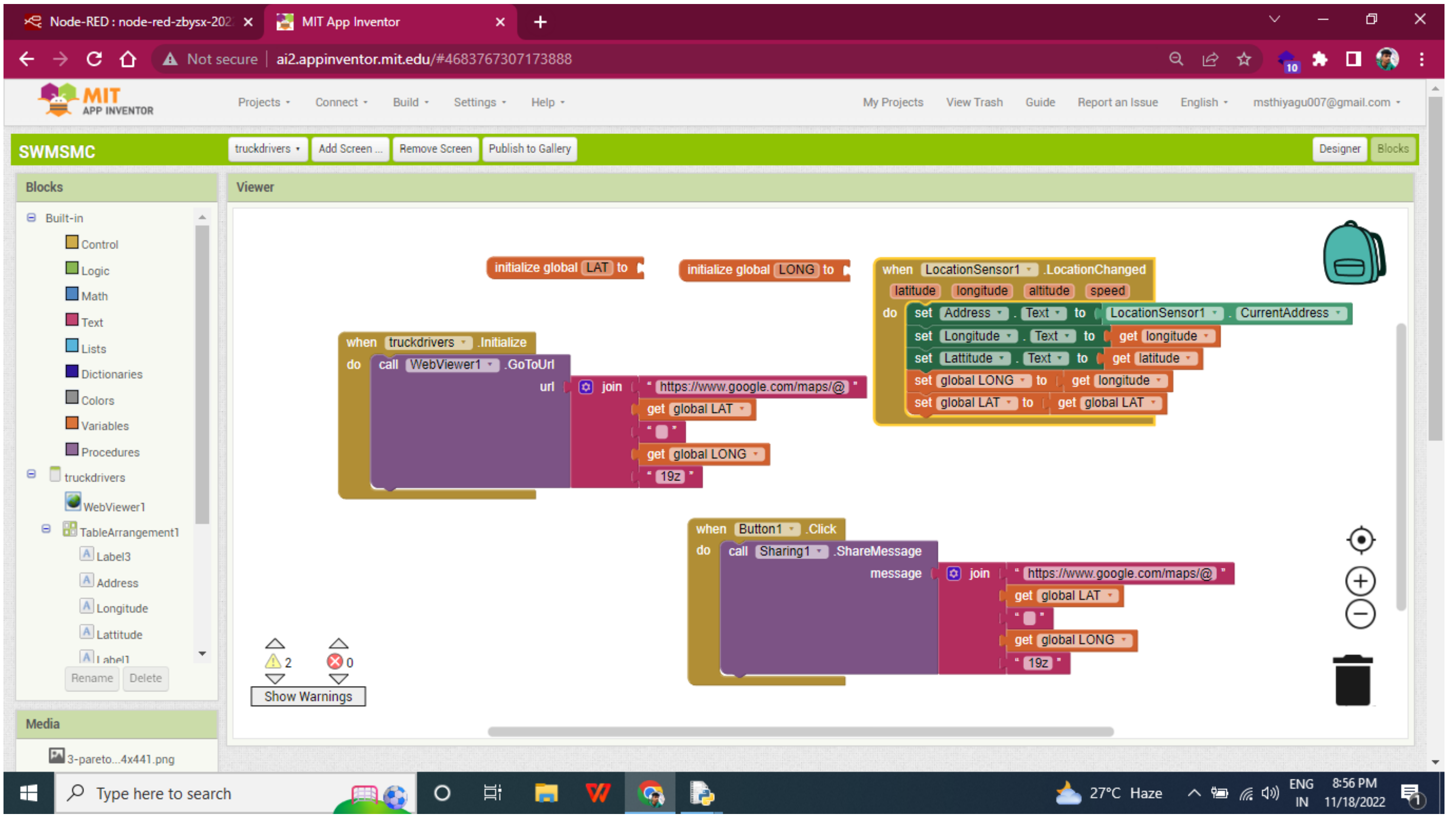
SCREEN 4



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initialize global LAT to

initialize global LONG to

when truckdrivers .Initialize
do  call WebViewer1 .GoToUrl
         url  join  " https://www.google.com/maps/@ "
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when LocationSensor1 .LocationChanged
  latitude  longitude  altitude  speed
do  set Address . Text to LocationSensor1 . CurrentAddress
    set Longitude . Text to get longitude
    set Lattitude . Text to get latitude
    set global LONG to get longitude
    set global LAT to get global LAT

when Button1 .Click
do  call Sharing1 .ShareMessage
         message  join  " https://www.google.com/maps/@ "
                        get global LAT
                        " "
                        get global LONG
                        " 19z "
```