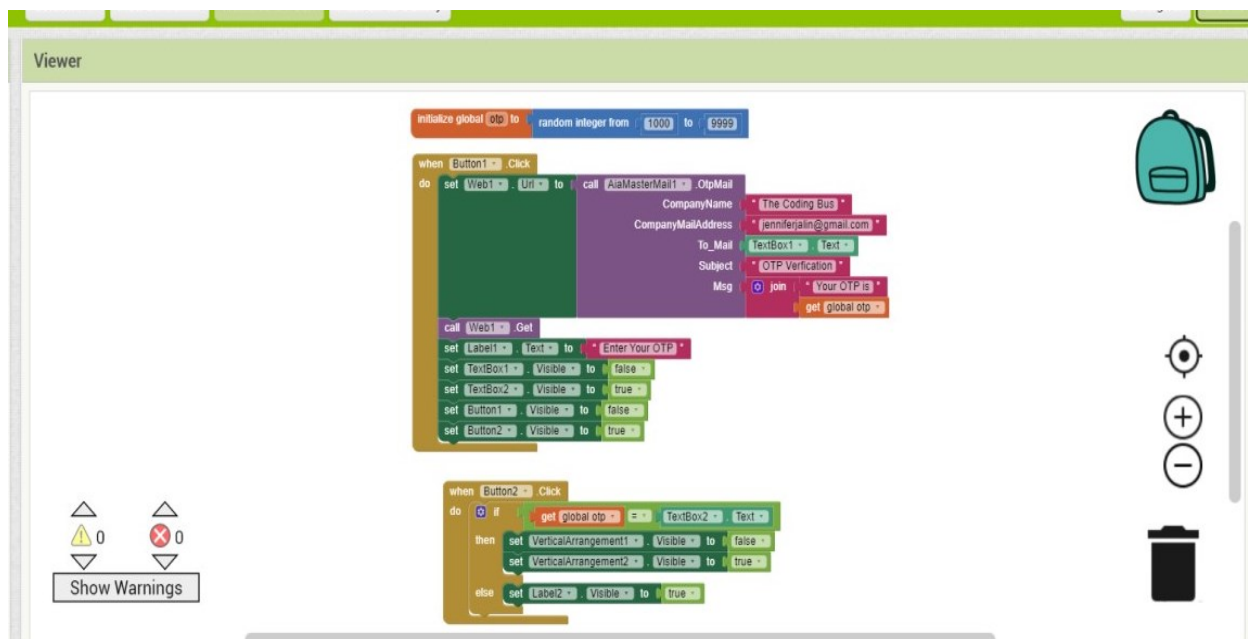
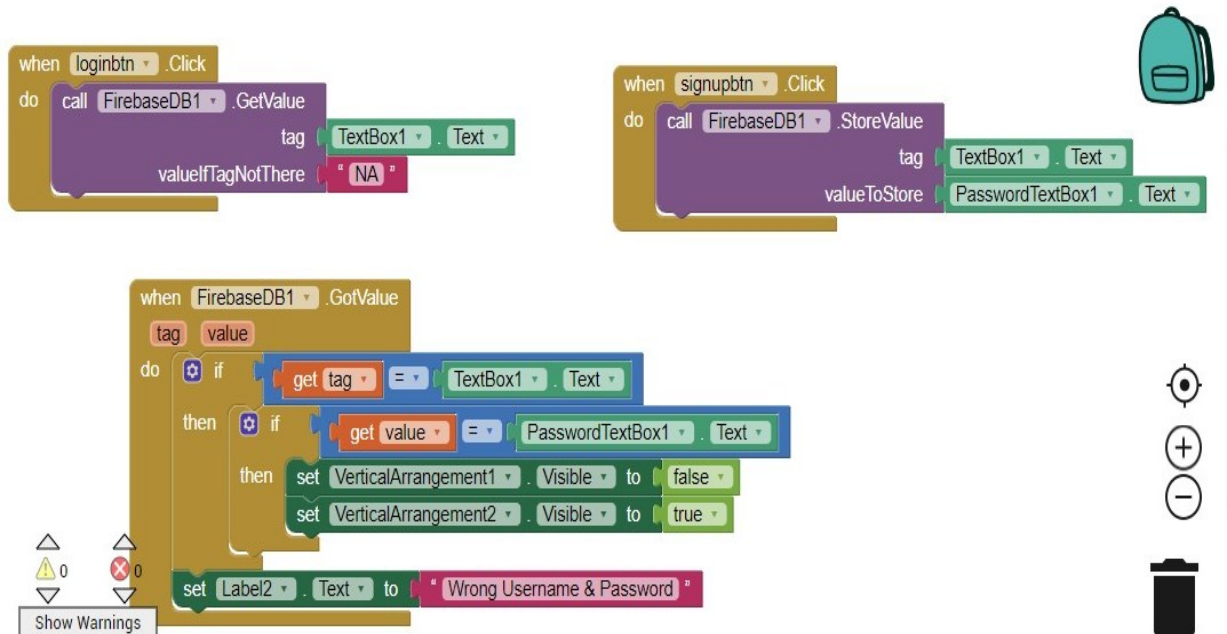
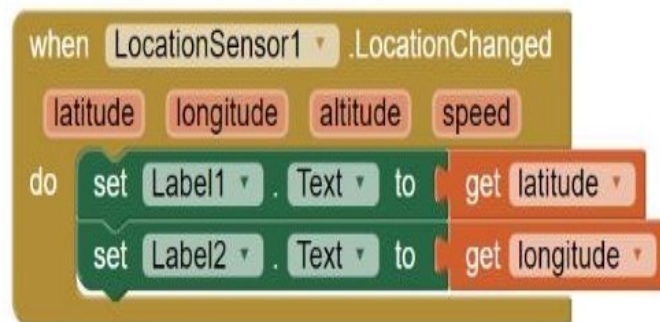
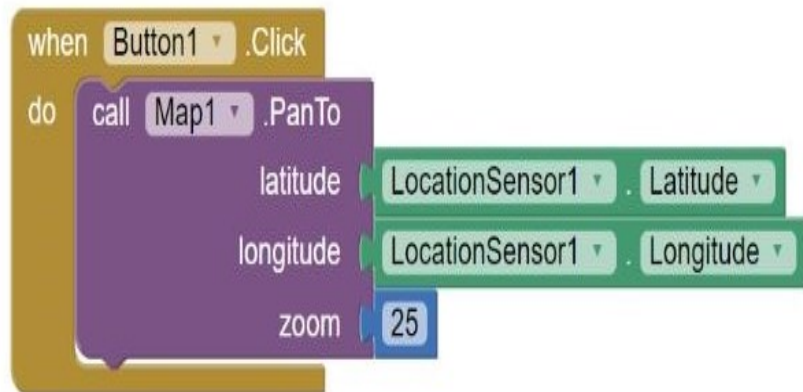


CODE AND SOLLUTION

TEAM ID :PNT2022TMID38406

CODE BLOCK FOR FRONTEND IN MIT APP INVENTOR





CODE FOR GEO-FENCING AND LOCATION TRACKING

```
loc.py - C:\Users\MALA\Desktop\loc.py (3.8.7)
File Edit Format Run Options Window Help

import time
import wiotp.sdk.application
from shapely.geometry import Polygon, Point

home_coordinates = [
    (12.509764, 80.189529),
    (12.512819, 80.159570),
    (12.504451, 80.152143),
    (12.502639, 80.187329),
    (12.509764, 80.189529),
]
home = Polygon(home_coordinates)

myConfig = {
    "identity": {
        "orgId": "68jcjt",
        "typeId": "Wokwi",
        "deviceId": "012345",
    },
    "auth": {
        "token": "Sandhya_09"
    }
}

client = wiotp.sdk.device.DeviceClient(config = myConfig, logHandlers = None)
client.connect()

while True:
    name = "Child"
    #in area location
    latitude = [12.9589532, 12.345334, 12.055556, 13.2229]
    longitude = [80.1319989, 80.87997, 81.08997, 81.78979]
    #out area location
    #latitude = 17.4219272
    #longitude = 78.5488783
    for i in range(len(latitude)):
        myData = {"name": name, "lat": latitude[i], "lon": longitude[i]}
        client.publishEvent(eventId = "status", msgFormat = "json", data = myData, qos = 0, onPublish = None)
        print("Data published to IBM IoT Platform: ", myData)
        loc = Point(latitude[i], longitude[i])
        home.contains(loc)
        time.sleep(1)
client.disconnect()
```

Node-RED

Deploy

debug

all nodes all

```
▶ { name: "Child", lat: 12.9089532, lon: 80.1819989,
  bcheck: true }
17/11/2022, 9:10:44 pm node: debug 1
msg.payload: string[26]
"Child safe inside geofence"
17/11/2022, 9:10:45 pm node: msg payload
lot-2/type/WokwId/012345/evt/status/fmt/json : msg.payload : Object
▶ { name: "Child", lat: 12.90432, lon: 80.18149,
  bcheck: true }
17/11/2022, 9:10:45 pm node: debug 1
msg.payload: string[26]
"Child safe inside geofence"
17/11/2022, 9:10:46 pm node: msg payload
lot-2/type/WokwId/012345/evt/status/fmt/json : msg.payload : Object
▶ { name: "Child", lat: 12.90435, lon: 80.182345,
  bcheck: true }
17/11/2022, 9:10:46 pm node: debug 1
msg.payload: string[26]
"Child safe inside geofence"
17/11/2022, 9:10:47 pm node: msg payload
lot-2/type/WokwId/012345/evt/status/fmt/json : msg.payload : Object
▶ { name: "Child", lat: 12.9043576, lon: 80.185586,
  bcheck: true }
17/11/2022, 9:10:47 pm node: debug 1
msg.payload: string[26]
"Child safe inside geofence"
```

ENG IN 21:10 17-11-2022