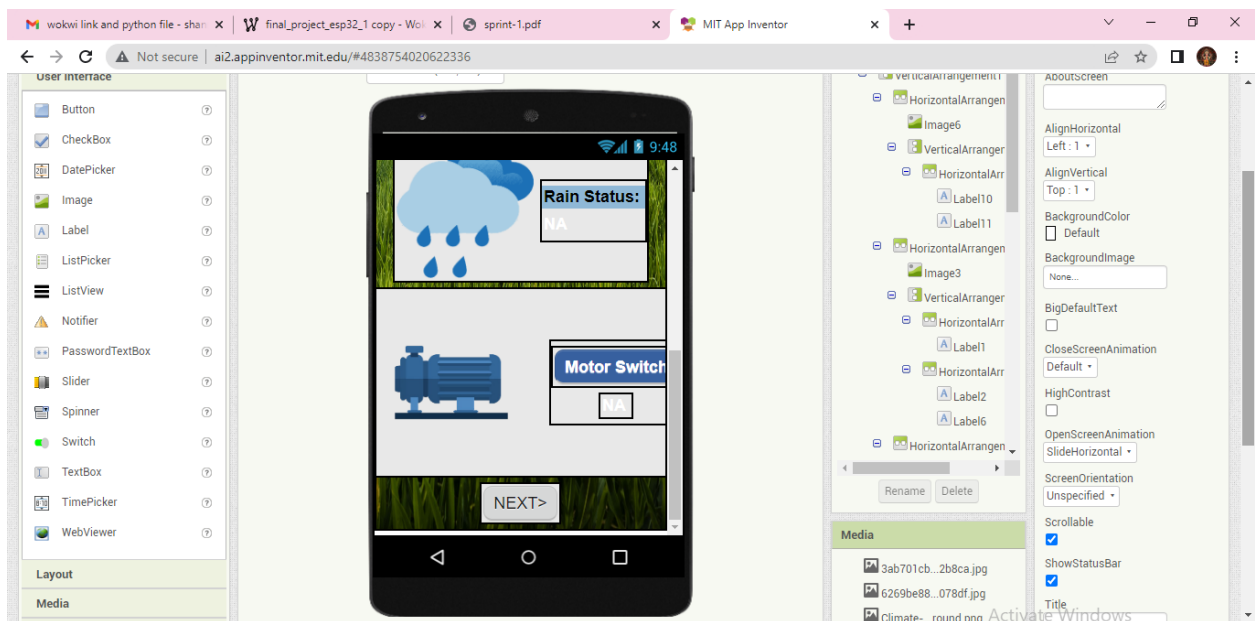


Sprint - 2

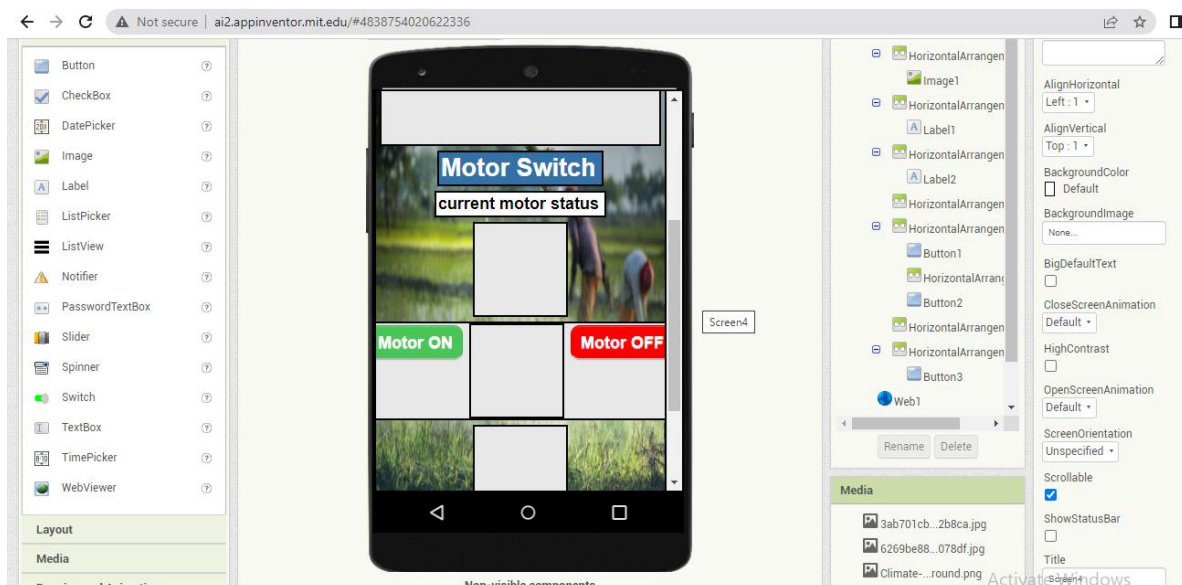
Date	04 Nov 2022
Team ID	PNT2022TMID47541
Project name	IoT Based Smart Crop Protection System for Agriculture

1.MIT App Design

Screen3

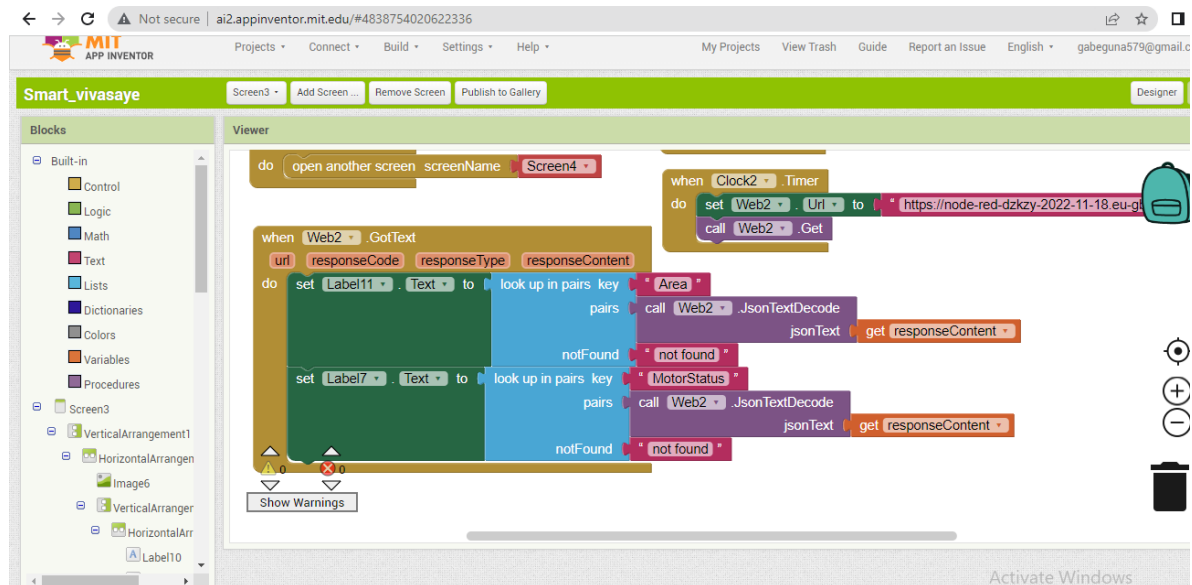


Screen 4

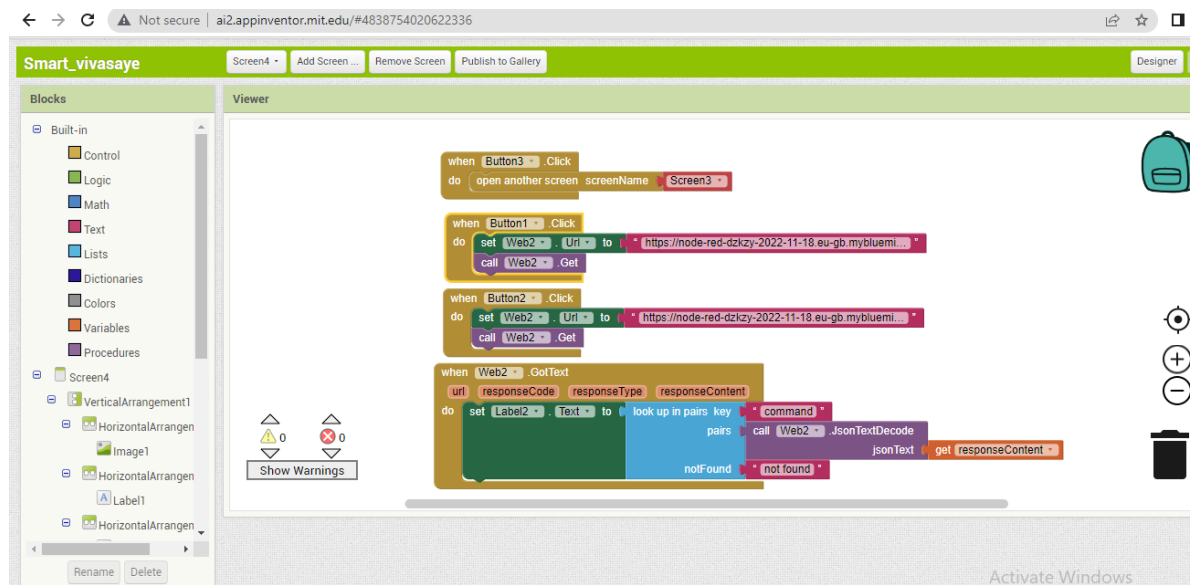


2.MIT App Inventor Blocks

Screen3



Screen4



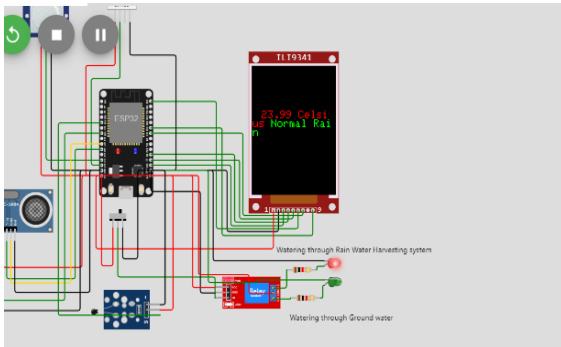
3.Python code to water the plant automatically

```
43 motorstatus = ""
44 waterlevel=random.randint(1,20)
45 Waterusing=""
46 if waterlevel < 2:
47     waterusing =str(waterlevel) + " feet Water Level Low"
48 else:
49     waterusing =str(waterlevel) + " feet Using rain water"
50
51 soilmoisture=random.randint(0,872)
52 if soilmoisture <200:
53     motorstatus="Motor on automatically"
54 else:
55     motorstatus="Motor off automatically"
56
57
```

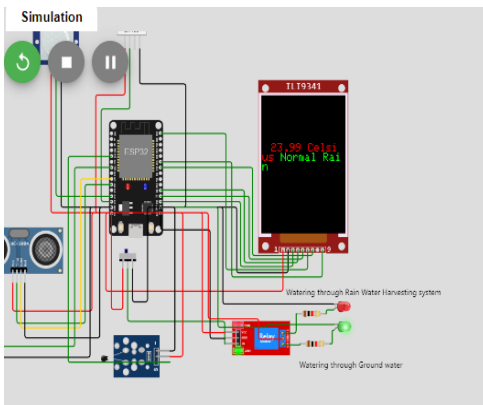
4. Python code to ON and OFF the motor using button

```
def myCommandCallback(cmd):
    print("Command received: %s" % cmd.data['command'])
    status=cmd.data['command']
    if status=="motoron":
        print ("Motor is on")
    elif status == "motoroff":
        print ("Motor is off")
    else :
        print ("Please send proper command")
```

5. Watering the plant through Rain Water Harvesting



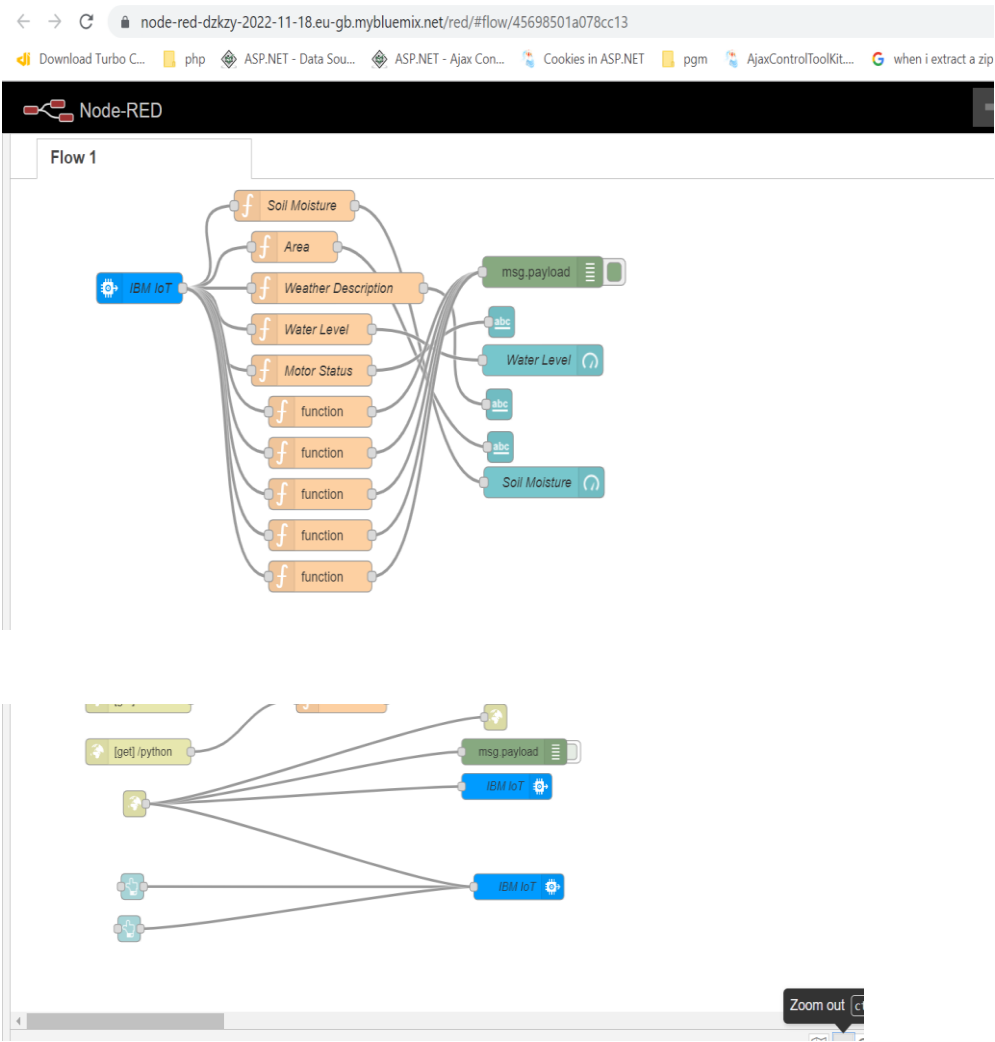
6. Watering the plant through Ground Water



7. Payload sent to IBM Watson IoT Platform

<

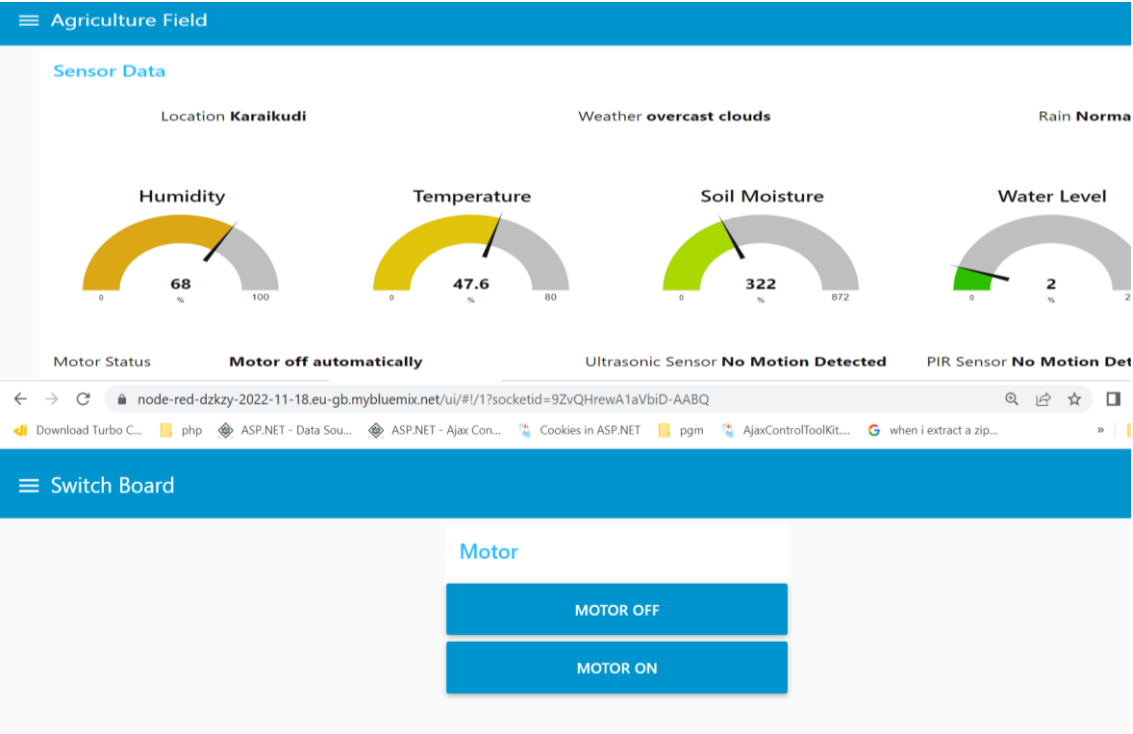
8. Node-Red flows



9. Payload sent from IBM Watson IoT Platform to Node-Red

```
{ "Soilmoisture":322,"Waterlevel":"2 feet Using rain water","MotorStatus":"Motor off automatically","Area":"Karaikudi","WeatherDescription":"overcast clouds" }
```

10.Node-Red Dashboard



11. App Screenshots

