Project Development Phase

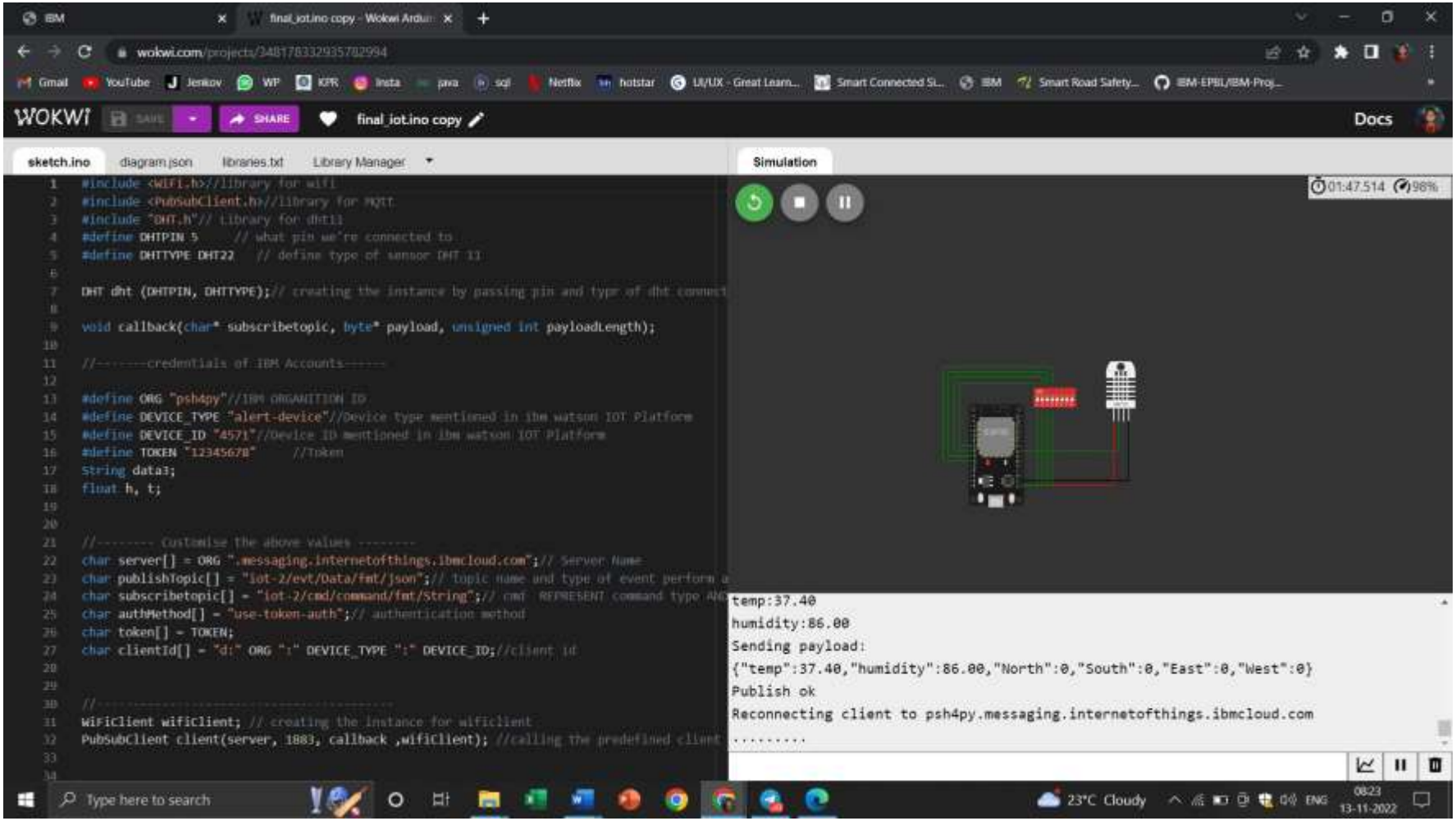
Sprint I

Date	13 November 2022
Team ID	PNT2022TMID41867
Project Name	Signs with Smart Connectivity for better road safety

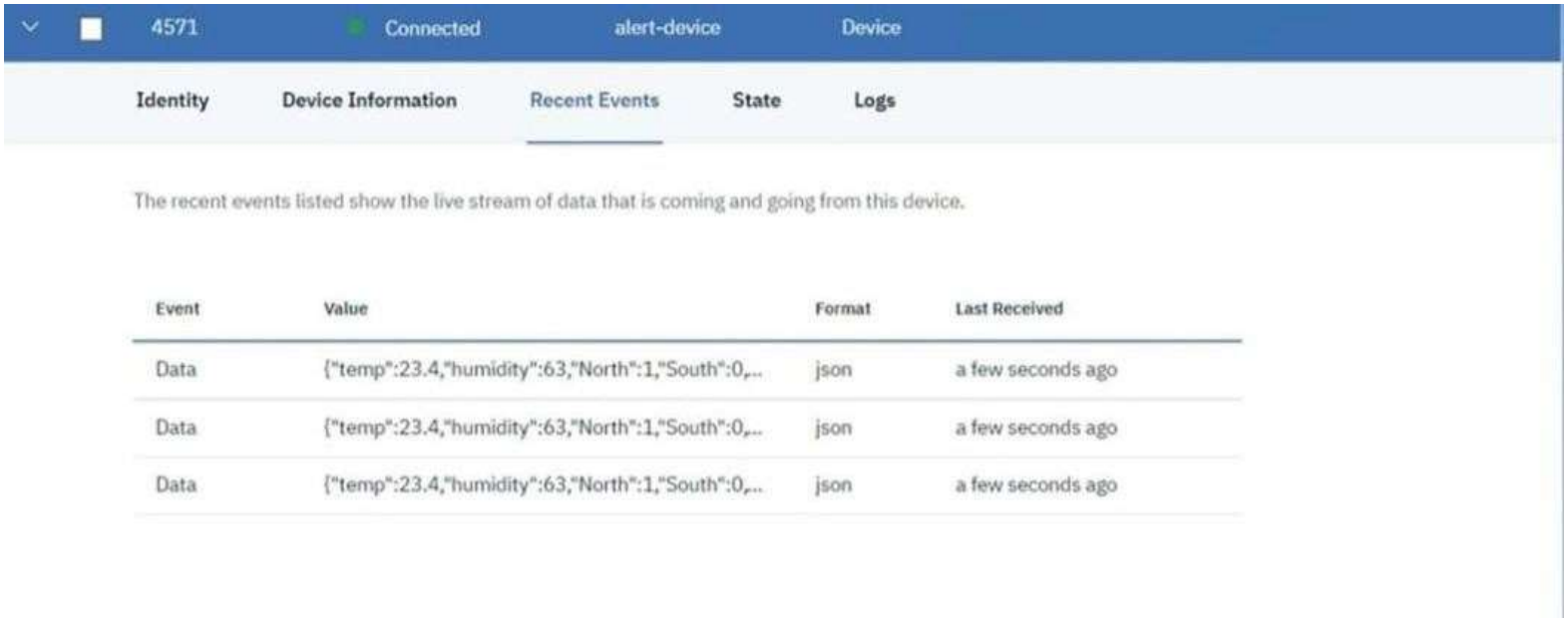
SPRINT TARGETS:

Sprint	Functional Requirement (Epic)	UserStory Number	UserStory / Task	Story Points	Priority	Team Members
Sprint-1	Dynamic Speed Limit	USN-1	As a traveller , It is Essential form to know the speed limit	10	High	Saranya Sandhiya Santhiya Sathikala Kariyaraman
Sprint-1	Priority Vehicle	USN-2	Simulating the circuits and experimenting	2	High	Saranya Sandhiya Santhiya Sakthikala Kariyaraman
Sprint-1	Weather Speed Limit	USN-3	As a user ,I should be aware of weather influence on speed limit for safer ride		Medium	Saranya Sandhiya Santhiya Sakthikala Kariyaraman

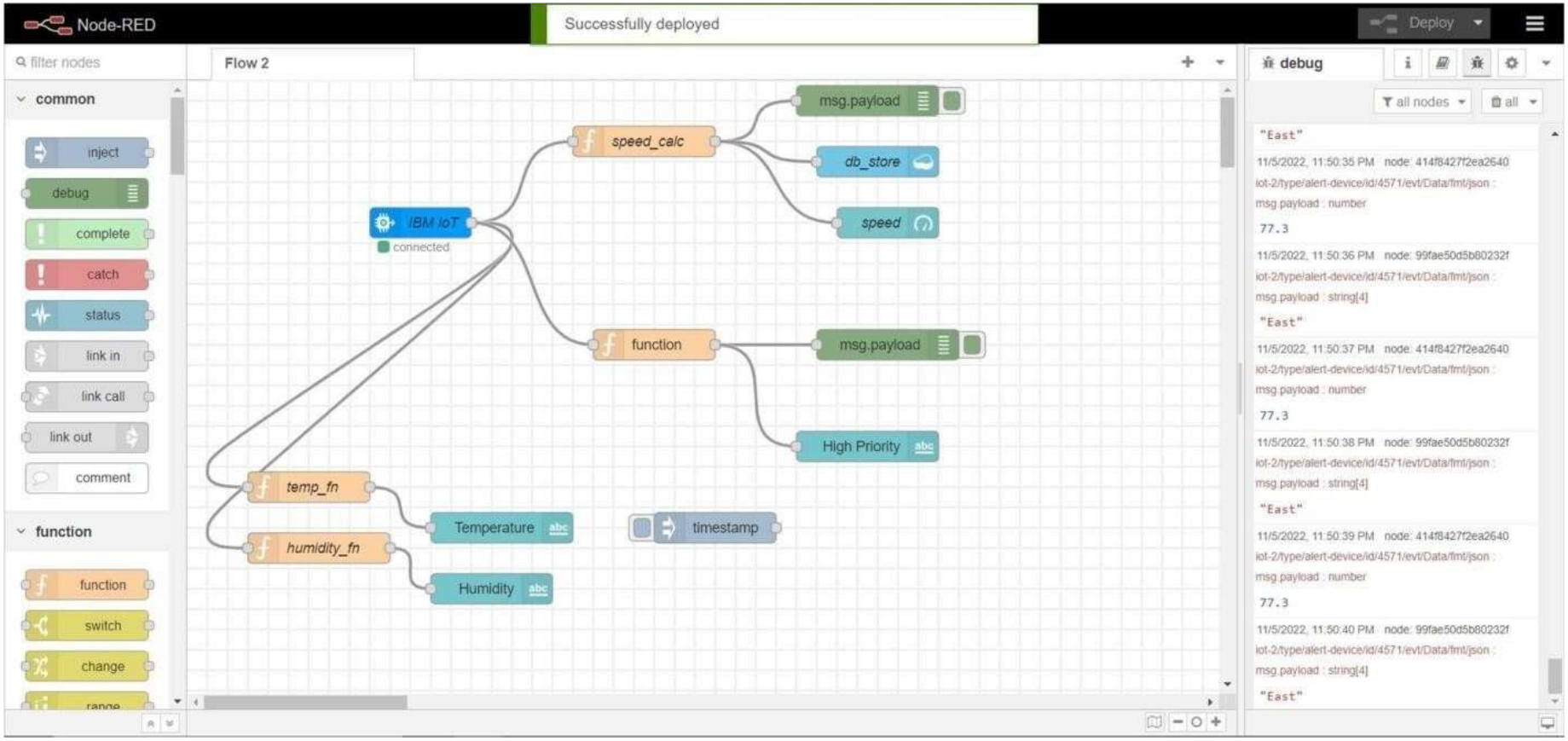
Wokwi Simulation: https://wokwi.com/projects/348178332935782994



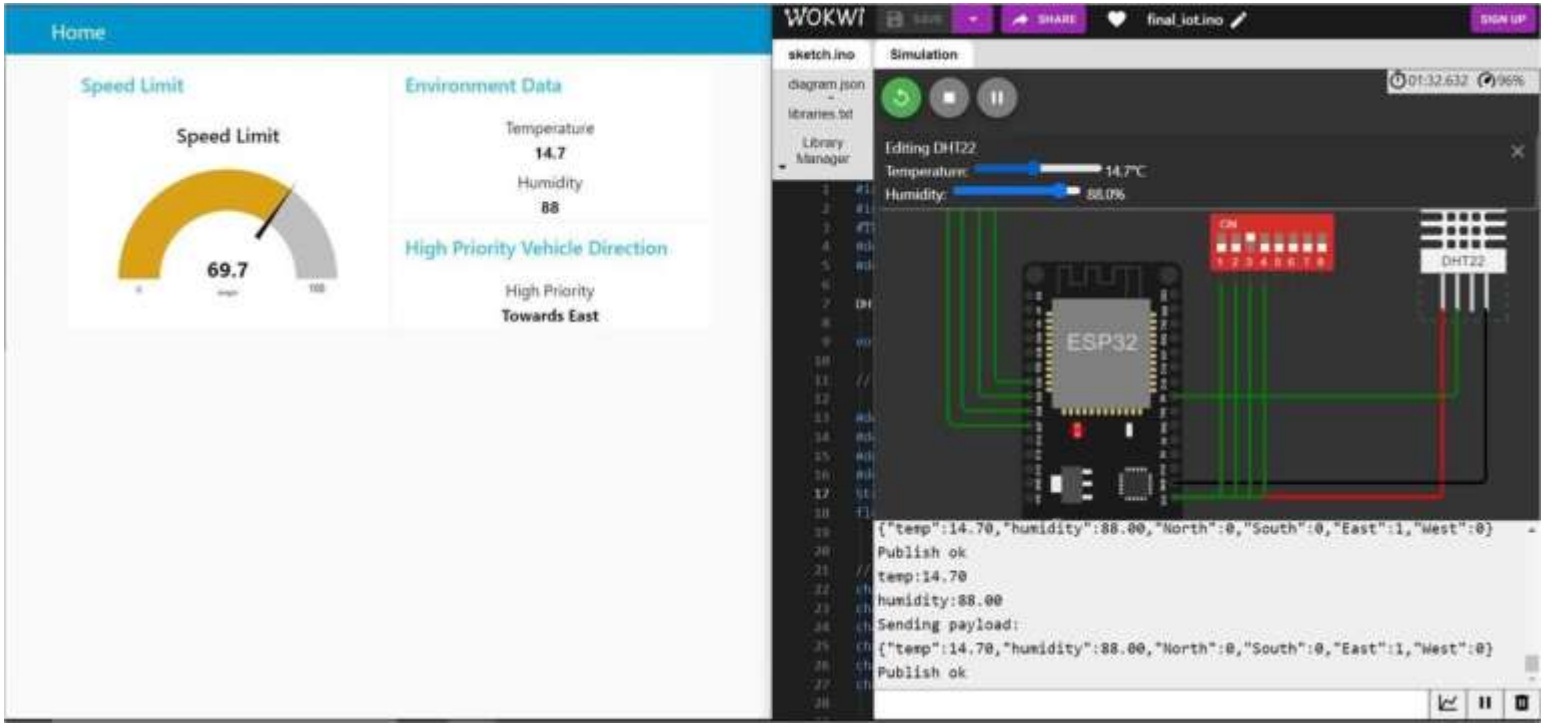
IoT Device – IoT Platform

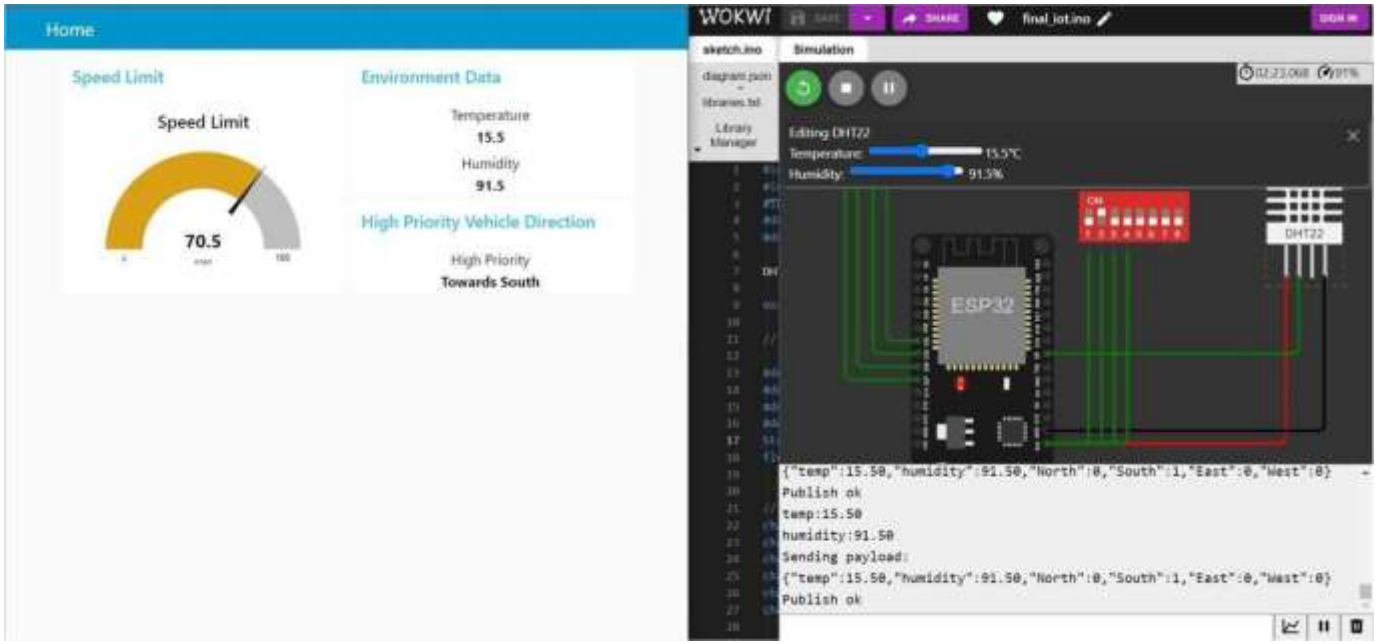


Node Red


Node-RED
Successfully deployed
Deploy
filter nodes
Flow 2
common
inject
debug
complete
catch
status
link in
link call
link out
comment
function
function
switch
change
range
msg.payload
speed_calc
db_store
speed
IBM IoT
connected
function
msg.payload
High Priority
temp_fn
humidity_fn
Temperature
Humidity
timestamp
debug
all nodes
all
"East"
11/5/2022, 11:50:35 PM node: 414f8427f2ea2640
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : number
77.3
11/5/2022, 11:50:36 PM node: 99fae50d5b80232f
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : string[4]
"East"
11/5/2022, 11:50:37 PM node: 414f8427f2ea2640
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : number
77.3
11/5/2022, 11:50:38 PM node: 99fae50d5b80232f
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : string[4]
"East"
11/5/2022, 11:50:39 PM node: 414f8427f2ea2640
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : number
77.3
11/5/2022, 11:50:40 PM node: 99fae50d5b80232f
iot-2/type/alert-device/id/4571/evt/Data/fmt/json :
msg.payload : string[4]
"East"

Node Red Web UI




Home
Speed Limit
Speed Limit
70.5
Environment Data
Temperature
15.5
Humidity
91.5
High Priority Vehicle Direction
High Priority
Towards South
WOKWI
final_iot.ino
sketch.ino
Simulation
Editing DHT22
Temperature: 15.5°C
Humidity: 91.5%
ESP32
DHT22
{"temp":15.50,"humidity":91.50,"North":0,"South":1,"East":0,"West":0}
Publish ok
temp:15.50
humidity:91.50
Sending payload:
{"temp":15.50,"humidity":91.50,"North":0,"South":1,"East":0,"West":0}
Publish ok

Cloudant Database