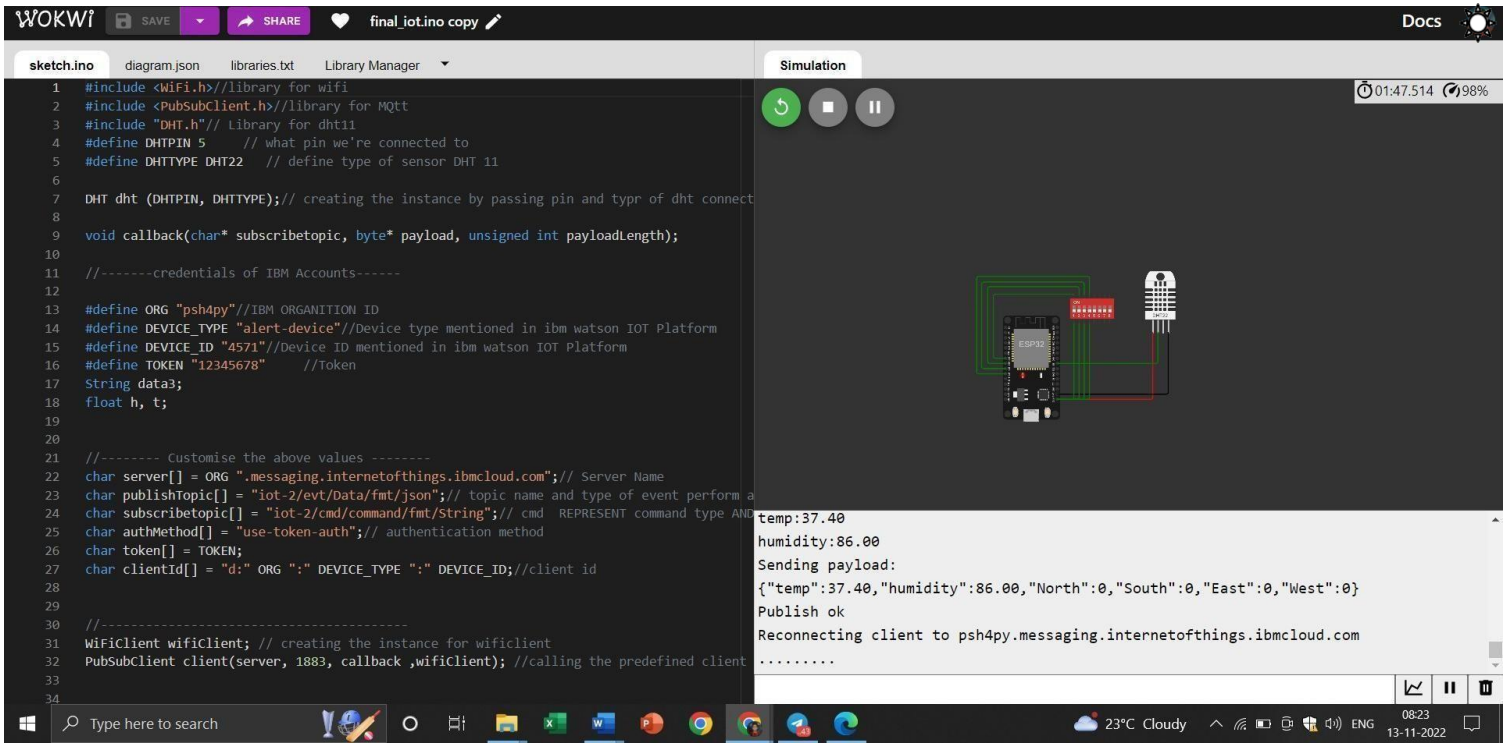
Project Development Phase
Sprint III

Team ID	PNT2022TMID30708
Project Name	Signs with Smart Connectivity for better road safety

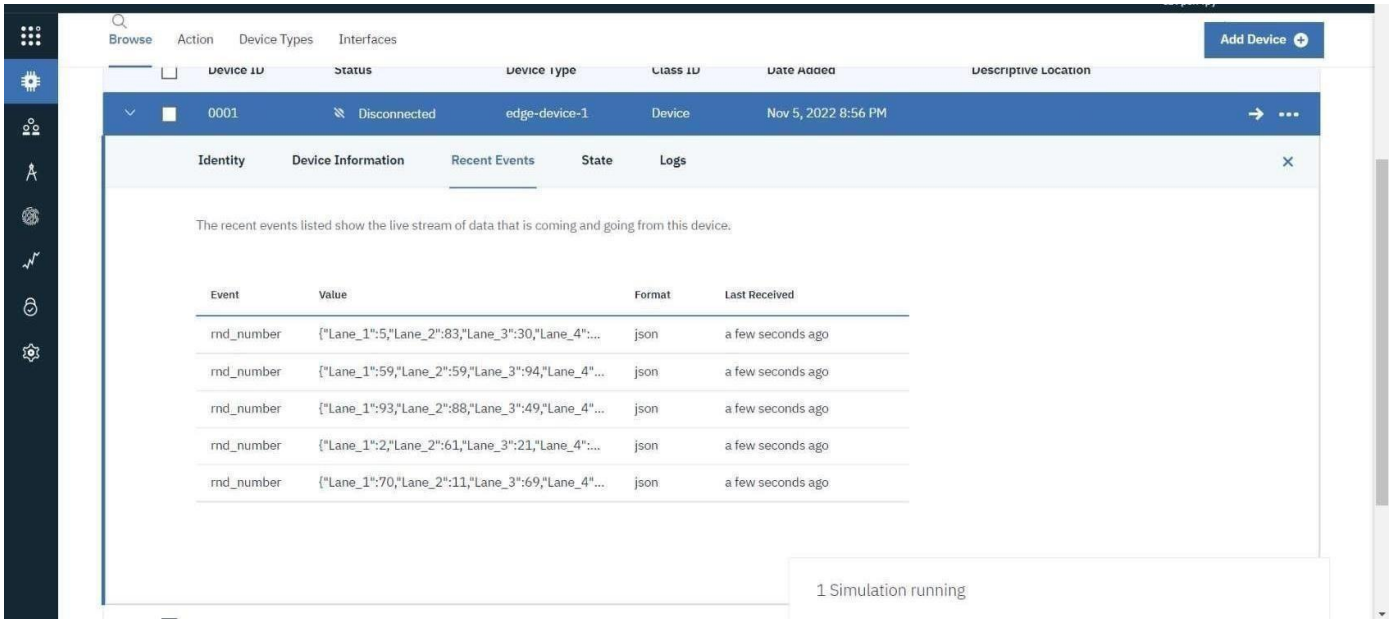
Sprint Targets:

Sprint	Functional Requirement (Epic)	User Story Number	User Story /Task	Story Points	Priority	Team Members
Sprint-3	Login	USN-5	I need a website account because I'm the administrator.	7	Low	Janani.S Preethi.S Mohanapriya.P Elavarasi.G
Sprint-3	Dashboard	USN-6SSS	I should be able to watch over and add sign nodes as an administrator.	13	Medium	Janani.S Preethi.S Mohanapriya.P Elavarasi.G

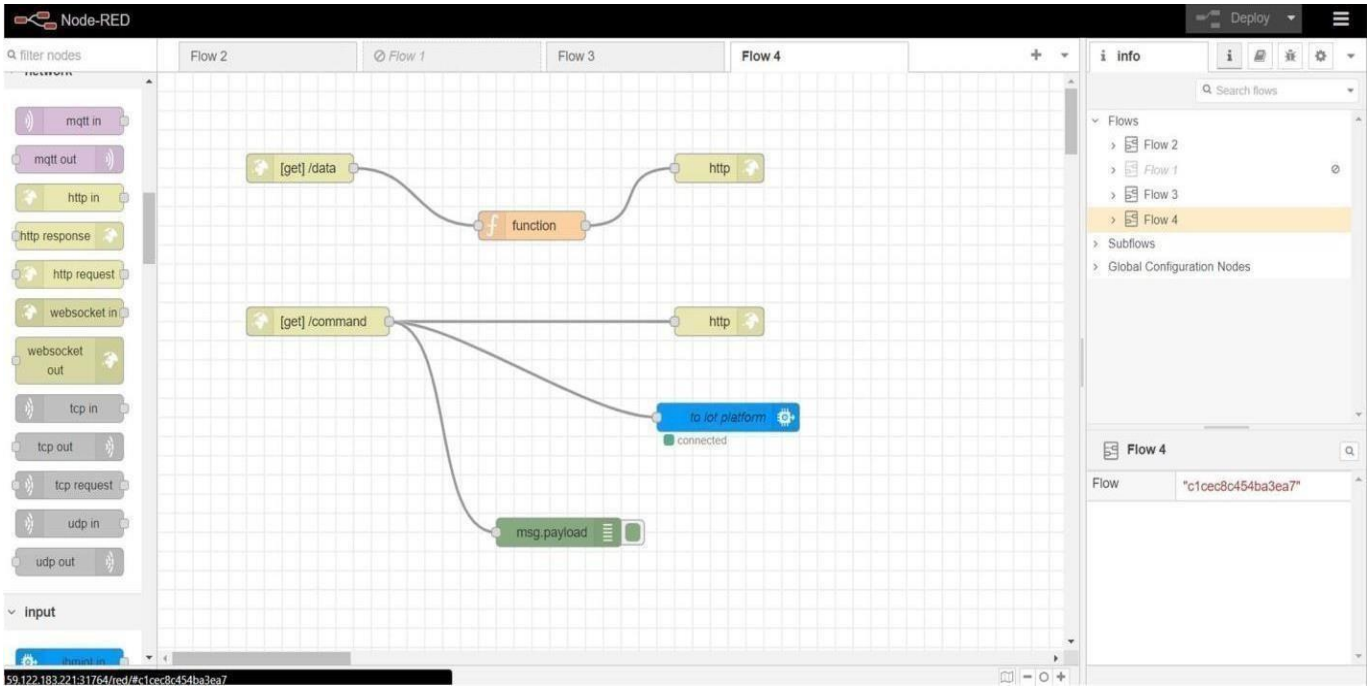
WOWKI Simulation:

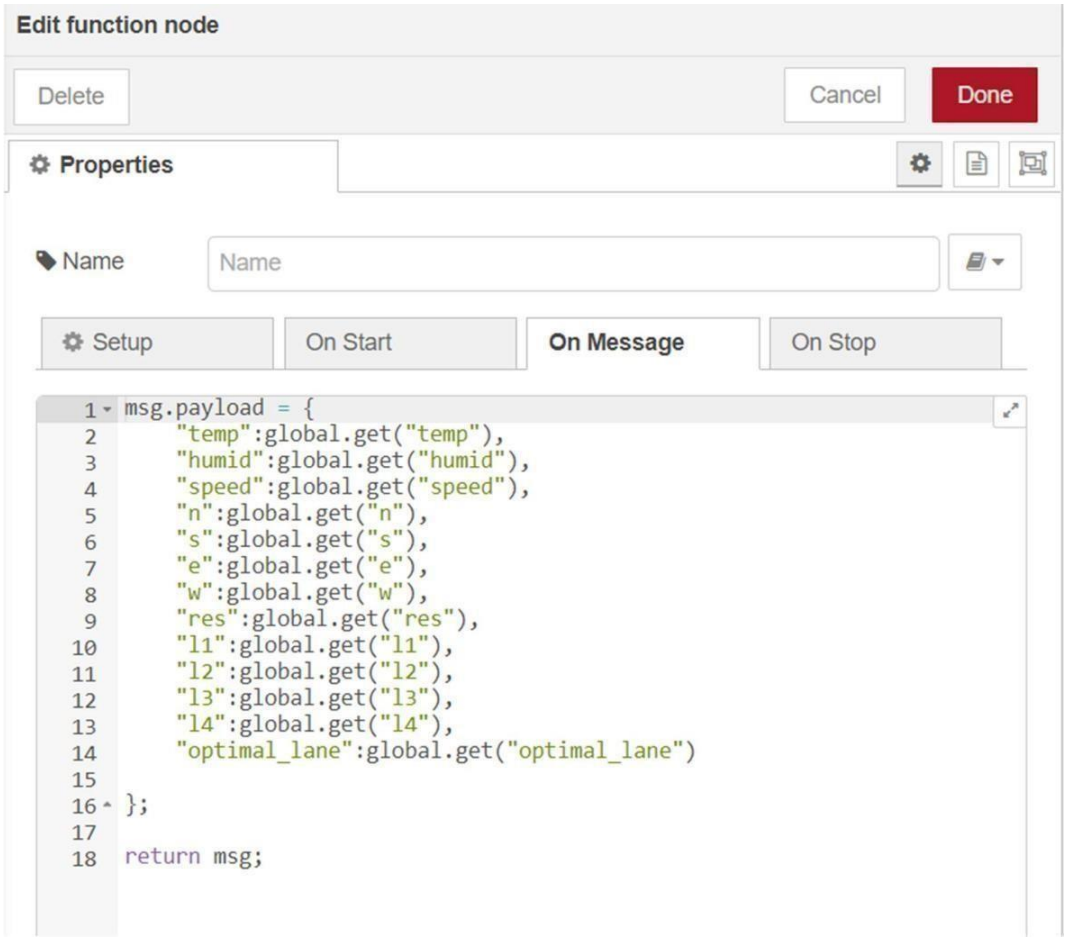


IoT Device – IoT Platform

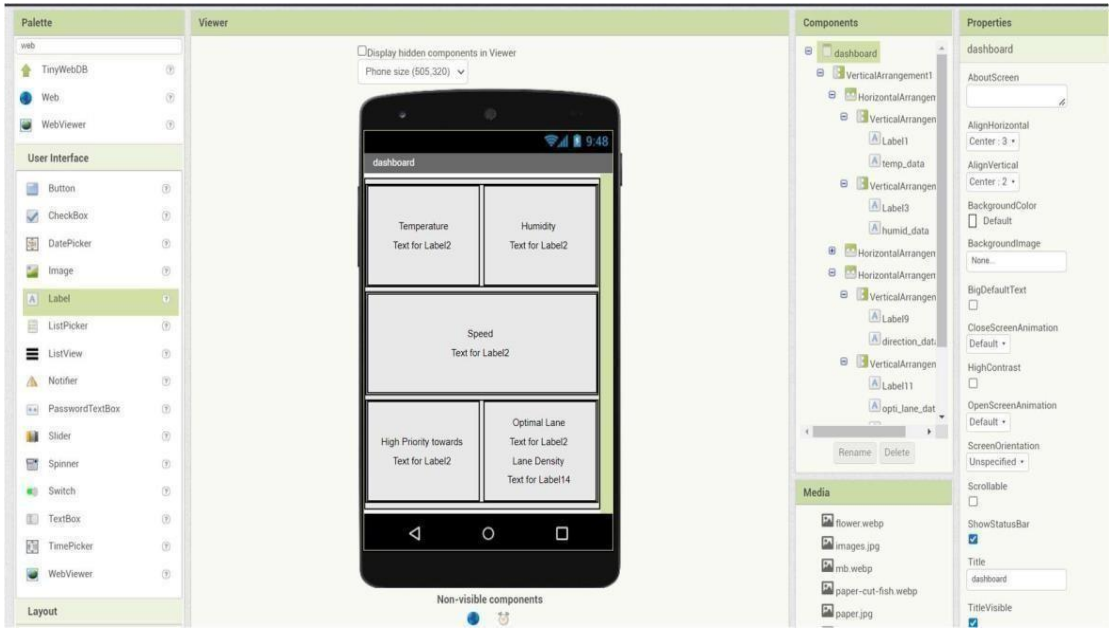


Node Red – Connect with MIT App Inventor:

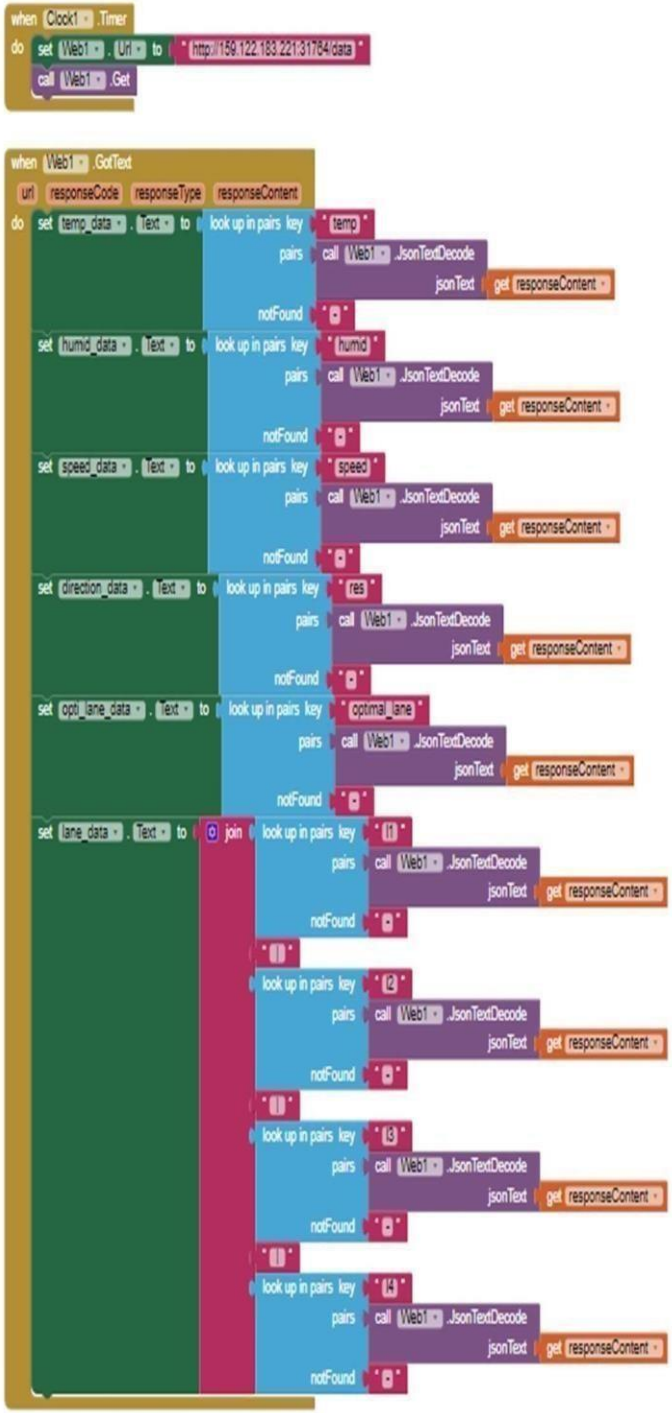

Node-RED
Deploy
filter nodes
Flow 2
Flow 1
Flow 3
Flow 4
info
Search flows
Flows
Flow 2
Flow 1
Flow 3
Flow 4
Subflows
Global Configuration Nodes
mqtt in
mqtt out
http in
http response
http request
websocket in
websocket out
tcp in
tcp out
tcp request
udp in
udp out
input
[get] /data
function
http
[get] /command
http
to iot platform
connected
msg.payload
Flow 4
Flow
"c1cec8c454ba3ea7"
59.122.183.221:31764/red/#c1cec8c454ba3ea7



MIT App Inventor UI design:



MIT App Inventor Backend design


when Clock1 .Timer
do set Web1 . Url to "http://159.122.183.221:31784/data"
call Web1 .Get
when Web1 .GotText
url responseCode responseType responseContent
do set temp_data . Text to look up in pairs key "temp"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "0"
set humid_data . Text to look up in pairs key "humid"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "0"
set speed_data . Text to look up in pairs key "speed"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "0"
set direction_data . Text to look up in pairs key "res"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "0"
set opti_lane_data . Text to look up in pairs key "optimal_lane"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "0"
set lane_data . Text to join look up in pairs key "[1]"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "-"
","
look up in pairs key "[2]"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "-"
","
look up in pairs key "[3]"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "-"
","
look up in pairs key "[4]"
pairs call Web1 .JsonTextDecode
jsonText get responseContent
notFound "-"

Sprint 3 delivery:

(OUTPUT) Display from MIT App: