Team ID	PNT2022TMID08724
Project Name	Signs with Smart Connectivity for Better Road Safety

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                                                                                                                                                                                                                                                                                                                        brain.py - Sprint1 - Visual Studio Code
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    ◆ brain.py > ⊕ processConditions
    1 import weather
    2 from datetime import datetime as dt

                       ∨ SPRINT1
                              > _pycache_
                           brain.py
                                                                                                                                                                                                   # UTILITY LOGIC SECTION STARTS
def processConditions(myLocation,APIKEY,localityInfo):
| weatherData = weather.get(myLocation,APIKEY)
| finalSpeed = localityInfo["usualSpeedLimit"] if "rain" not in weatherData else localityInfo["usualSpeedLimit"]
| finalSpeed = finalSpeed if weatherData("visibility")>35 else finalSpeed/2
| if(localityInfo["hospitalsNearby"]):
| # hzone of the hospital | debettlethe = Turne | Tur
                                                                                                                                                                                                              t hzone of the hosp
doNotHonk = True
                                                                                                                                                                                                        ise:
   if(localityInfo["schools"]["schoolZone"]==False):
# neither hospital zone nor school
                                                                                                                                                                                                              f neither hospital zone nor
doNotHonk = False
                                                                                                                                                                                                       | else:

* school zone

| now = [dt.now().hour,dt.now().minute]

| activeTime = [list(map(int,_.split(":"))) for _ in localityInfo["schools"]["activeTime"]]

| doNotHonk - activeTime[0][0]<-now[0]<-activeTime[1][0] | and activeTime[0][1]</br>
| return({

"speed" : finalSpeed,

"doNotHonk" : doNotHonk
                                                                                                                                                                            PROBLEMS OUTPUT TERMINAL JUPYTER DEBUG CONSOLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ≥ Python
≥ Python
                                                                                                                                                                                  code = compile(f.read(), fname, 'exec')
file "e:\Sprint1\temp.py", line 22
client = wiotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)client.connect()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         > OUTLINE
> TIMELINE
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main.py ×
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      ∨ SPRINT1
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                                                        main.py
                                                              Intylmo : {
    "schools" : {
        "schoolZone" : True,
        "activeTime" : ["7:00","17:30"] # schools active from 7 AM till 5:30 PM
                                                             },
"hospitalsNearby" : False,
"usualSpeedLimit" : 40 # in km/hr
                                                              print(brain.processConditions(myLocation,APIKEY,localityInfo))
                                                  PROBLEMS OUTPUT TERMINAL JUPYTER DEBUG CONSOLE
                                                   code = compile(f.read(), fname, 'exec')
File "e:\Sprint1\temp.py", line 22
client = wlotp.sdk.device.DeviceClient(config=myConfig, logHandlers=None)client.connect()
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weather.py × 

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                                            다 타 이 회 • weather.py > 숙 get
1 port requests as reqs
         ∨ SPRINT1
         > _pycache_
> venv
• brain.py
                                                                               f get(myLocation,APIKEY):
aptURL = "https://api.openweathermap.org/data/2.5/weather?q={myLocation}&appid={APIKEY}"
responseJSON = (reqs.get(apiURL)).json()
returnObject = {
    "temperature": responseJSON['main']['temp'] - 273.15,
    "weather': [responseJSON['weather'][_]['main'].lower() for _ in range(len(responseJSON['weather'])]],
    "visibility": responseJSON['visibility']/100,
          temp.pyweather.py
                                                                                   }
if("rain" in responseJSON):
    returnObject["rain"] = [responseJSON["rain"][key] for key in responseJSON["rain"]]
return(returnObject)
                                                                      PROBLEMS OUTPUT TERMINAL JUPYTER DEBUG CONSOLE
                                                                                                                                                                                                                                                                                        ≥ Python
≥ Python
                                                                         code = compile(f.read(), fname, 'exec')
File "e:\Sprintl\temp.py", line 22
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                                                                                                                                                                                                        Ln 8, Col 1 Spaces: 4 UTF-8 CRLF () Python 3.8.5 (venv': venv) R Q
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OUTPUT:

```
{
"Temperature": 20.05,
}
```