

Sprint 01

Signs with Smart Connectivity for Better Road

SafetyTeam ID - PNT2022TMID17220

Python code:

```
# IMPORT SECTION STARTS
```

```
import weather
```

```
from datetime import datetime as dt
```

```
# IMPORT SECTION ENDS
```

```
# -----
```

```
# 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"]/2
```

```
    finalSpeed = finalSpeed if weatherData["visibility"]>35 else finalSpeed/2
```

```
if(localityInfo["hospitalsNearby"]):
```

```
    # hospital zone
```

```
    doNotHonk = True
```

```
else:

    if(localityInfo["schools"]["schoolZone"]==False):

        # neither school nor hospital zone

        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]<=now[1]<=activeTime[1][1]


    return({

        "speed" : finalSpeed,

        "doNotHonk" : doNotHonk

    })
```