



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

IV YEAR / VII SEMESTER (ODD)

BATCH: 2019-2023

ACADEMIC YEAR 2022-2023

ASSIGNMENT - II

TEAM ID : PNT2022TMID48721

TITLE OF THE PROJECT : SIGNS WITH SMART CONNECTIVITY FOR BETTER ROAD SAFETY

DOMIN : INTERNET OF THINGS (IOT)

TEAM LEAD : AYYAPPAN S

TEAM MEMBER : VIGNESH K

TEAM MEMBER : PARTHIBAN M

TEAM MEMBER : JABAR SATHIK S

INDUSTRY MENTOR : MENTOR 11

FACULTY MENTOR(S) NAME : M GEETHAPRIYA

The screenshot shows the IBM Career Education Smart Internz workspace for a guided project. The browser address bar shows the URL: careereducation.smartinternz.com/Student/guided_project_workspace/43614. The interface includes a sidebar with navigation options: Profile, Dashboard, Projects (selected), Change Password, Support, Orientation Sessions, and Training Calendar. The main content area is titled "Guided Project" and "Project Workspace". It displays the Project Title: "Signs With Smart Connectivity for Better Road Safety", the Team: "A V P JS", the Industry Mentor(s) Name: "Mentor 11", and the Faculty Mentor(s) Name: "M GEETHAPRIYA". Two progress indicators show "Overall Project Progress" and "Assigned Tasks Progress" at 50%. Below this, there is a "GENERAL INSTRUCTION" section with a "SHOW" button. A row of buttons includes "Git Repo", "Project Doc", "Demo Link", "View Mentor Comments", "View Industry Mentor Comments", and "Assign Task". A note states: "Note: Use password SsPuOgK to access project Doc". At the bottom, there are tabs for "PROJECT DETAILS", "TASK & PROGRESS", and "MENTOR REVIEW". The "PROJECT DETAILS" tab is active, showing the project title and a status of "INTERMEDIATE". The system tray at the bottom shows the date and time as 02:40 PM on 26-10-2022.

ASSIGNMENT -II

PYTHON CODE FOR DETECTING TEMPERATURE

Code:

```
import tkinter as tk
import random
import datetime
import numpy as np
import time

import threading
import Adafruit_DHT

pin = 4
sensor = Adafruit_DHT.DHT22

def tick():

    time2=time.strftime('%H:%M:%S')
    clock.config(text=time2)
    clock.after(200,tick)

def get_data():

    threading.Timer(5, get_data).start()

    humidity, temperature = Adafruit_DHT.read_retry(sensor, pin)

    if humidity is not None and temperature is not None:
        print('Temp={0:0.1f}*C Humidity={1:0.1f}%'.format(temperature, humidity))
    l_display.config(text = temperature)
    else:
        print('Failed')

    return temperature

mainwindow = tk.Tk()
mainwindow.geometry('640x340')
mainwindow.title("Sensor Data Live Feed ")

clock=tk.Label(mainwindow,font=("Arial",30), bg='green',fg="white")
clock.grid(row=0, column=0, padx=10, pady=10, sticky="nsew")

l_m=tk.Label(mainwindow,text="Sensor Data ",font=("Arial",30),fg="Black")
l_m.grid(row=0,column=1, padx=10, pady=10, sticky="nsew")

l_t=tk.Label(mainwindow, text="Temperature C",font=("Arial",25))
```

```
l_t.grid(row=1,column=0, padx=10, pady=10, sticky="nsew")
```

```
l_display=tk.Label(mainwindow,font=("Arial",25),fg="red")
```

```
l_display.grid(row=1,column=1, padx=10, pady=10, sticky="nsew")
```

```
tick()
```

```
get_data()
```

```
mainwindow.mainloop()
```