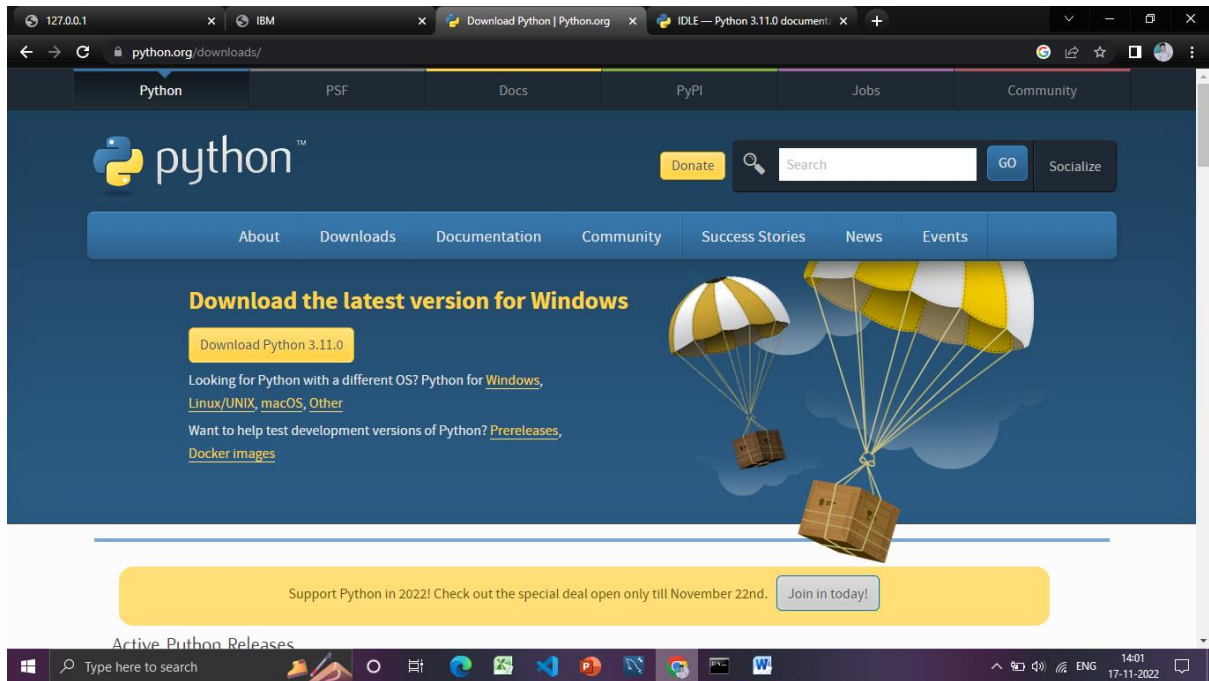


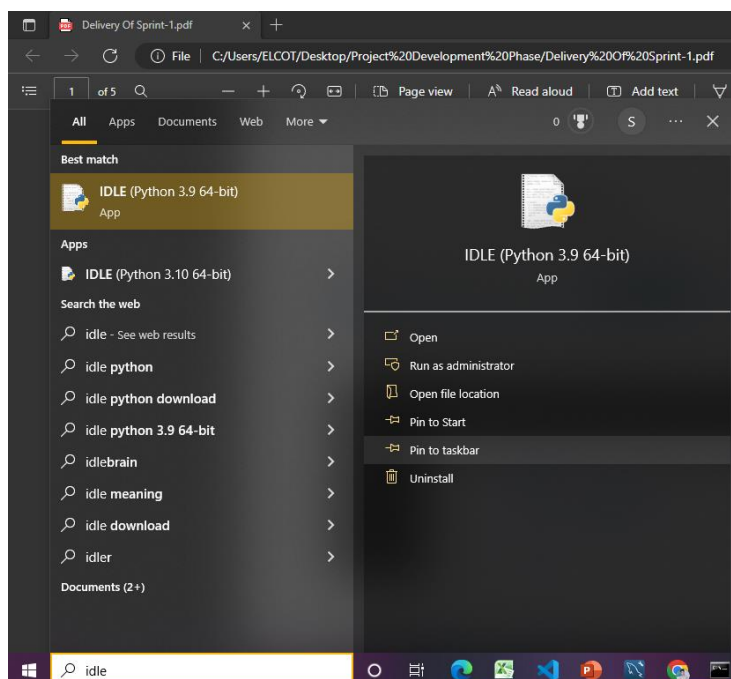
## PREREQUISITES-SOFTWARE

PROJECT NAME	SMART SOLUTION FOR RAILWAYS
TEAM ID	PNT2022TMID38325
DATE	NOVEMBER 2022

### Step 1 Installing Python Software



### Step 2



## Step 3 Installation of Packages

```
Command Prompt
Microsoft Windows [Version 10.0.19042.1706]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ELCOT>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (2022.5)
Requirement already satisfied: pyyaml>=3.13 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests-toolbelt>=0.0.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (0.10.0)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.26.12)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2.1.1)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>
```

```
Command Prompt
Microsoft Windows [Version 10.0.19042.1706]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ELCOT>pip install wiotp-sdk
Requirement already satisfied: wiotp-sdk in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (0.11.0)
Requirement already satisfied: iso8601>=0.1.12 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (1.1.0)
Requirement already satisfied: pytz>=2018.9 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (2022.5)
Requirement already satisfied: pyyaml>=3.13 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (6.0)
Requirement already satisfied: paho-mqtt>=1.5.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (1.6.1)
Requirement already satisfied: requests>=2.21.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests-toolbelt>=0.0.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (0.10.0)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.26.12)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2.1.1)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>pip install ibmcloudant
ERROR: Could not find a version that satisfies the requirement ibmcloudant (from versions: none)
ERROR: No matching distribution found for ibmcloudant
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>pip install ibmcloudant
Requirement already satisfied: ibmcloudant in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (0.2.1)
Requirement already satisfied: ibm_cloud_sdk_core==3.16.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.20 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.28.1)
Requirement already satisfied: python_dateutil<3.0.0,>=2.5.3 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.8.2)
Requirement already satisfied: PyJWT<3.0.0,>=2.0.1 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.6.0)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibm_cloud_sdk_core==3.16.0->ibmcloudant) (1.26.12)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2.1.1)
Requirement already satisfied: six>=1.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from python_dateutil<3.0.0,>=2.5.3->ibmcloudant) (1.16.0)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>
```

```
Command Prompt
Requirement already satisfied: requests>=2.21.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (2.28.1)
Requirement already satisfied: requests-toolbelt>=0.8.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from wiotp-sdk) (0.10.0)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (1.26.12)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests>=2.21.0->wiotp-sdk) (2.1.1)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>pip install ibmcloudant
ERROR: Could not find a version that satisfies the requirement ibmcloudant (from versions: none)
ERROR: No matching distribution found for ibmcloudant
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>pip install ibmcloudant
Requirement already satisfied: ibmcloudant in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (0.2.1)
Requirement already satisfied: ibm_cloud_sdk_core==3.16.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (3.16.0)
Requirement already satisfied: requests<3.0,>=2.20 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.28.1)
Requirement already satisfied: python-dateutil<3.0.0,>=2.5.3 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.8.2)
Requirement already satisfied: PyJWT<3.0.0,>=2.0.1 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibmcloudant) (2.6.0)
Requirement already satisfied: urllib3<2.0.0,>=1.26.0 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from ibm_cloud_sdk_core==3.16.0->ibmcloudant) (1.26.12)
Requirement already satisfied: certifi>=2017.4.17 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2022.9.24)
Requirement already satisfied: idna<4,>=2.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (3.4)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from requests<3.0,>=2.20->ibmcloudant) (2.1.1)
Requirement already satisfied: six>=1.5 in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from python-dateutil<3.0.0,>=2.5.3->ibmcloudant) (1.16.0)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>pip install opencv-python
Requirement already satisfied: opencv-python in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (4.6.0.66)
Requirement already satisfied: numpy>=1.14.5; python_version >= "3.7" in c:\users\elcot\appdata\local\programs\python\python39\lib\site-packages (from opencv-python) (1.23.4)
WARNING: You are using pip version 20.2.3; however, version 22.3.1 is available.
You should consider upgrading via the 'c:\users\elcot\appdata\local\programs\python\python39\python.exe -m pip install --upgrade pip' command.

C:\Users\ELCOT>
```