

Project Structure

Date	18 November 2022
Team ID	PNT2022TMID21508
Project Name	Exploratory Analysis of Rainfall Data in India for Agriculture
Maximum Marks	4 Marks

The image shows a VS Code editor window with a Python file named 'app.py'. The code is a Flask application designed to interact with the IBM Cloud API for machine learning. It includes imports for various libraries like pyexpat, numpy, pickle, sklearn, pandas, Flask, request, jsonify, render_template, redirect, and url_for. The application defines a Flask app with a route for /requests that interacts with the IBM Cloud API to retrieve an ML token and predict using a pre-trained model. The terminal shows the command 'python -m flask run' and the output of the application, including the ML token and a prediction result. The interface also shows the Explorer sidebar with files like .pycache_, .venv, Screenshots, static, template, chance.html, contact.html, help.html, home.html, index.html, noChance.html, app.py, encoder.pkl, impter.pkl, rainfall_prediction.ipyn, and scale.pkl. The bottom status bar indicates the file is at line 18, column 1, with 4 spaces, UTF-8 encoding, CRLF line endings, and a Python interpreter at 3.9.7 64-bit.

The image shows a Visual Studio Code editor window titled "Rainfall_Prediction". The Explorer sidebar on the left displays the project structure under "RAINFALL_PREDICTION", including files like `home.html`, `chance.html`, `app.py`, `noChance.html`, `__pycache__`, `.venv`, `Screenshots`, `static`, `template`, `chance.html`, `contact.html`, `help.html`, `home.html`, `index.html`, `noChance.html`, `app.py`, `Rainfall_prediction.ipynb`, `rainfall.pkl`, `scale.pkl`, and `weatherAUS.csv`. The editor window shows the `app.py` file with the following code:

```
1 #from crypt import methods
2 from pyexpat import features, model
3 import numpy as np
4 import pickle
5 #import joblib
6 #import matplotlib
7 #import matplotlib.pyplot as plt
8 #import time
9 import pandas
10 #import os
11 from flask import Flask, request, jsonify, render_template, redirect, url_for
12
13
14
```

The terminal window at the bottom shows the execution of the application in a PowerShell environment. The output includes the activation of the virtual environment, the running of the Flask application, and several warnings from scikit-learn regarding estimator versions. The application is running on `http://127.0.0.1:5000`.

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS D:\Rainfall_Prediction> & d:/Rainfall_Prediction/.venv/Scripts/Activate.ps1
(.venv) PS D:\Rainfall_Prediction> .venv\scripts\activate
(.venv) PS D:\Rainfall_Prediction> python -m flask run
D:\Rainfall_Prediction\venv\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator DecisionTreeClassifier from version 0.24.2 when using version 1.1.3
. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
D:\Rainfall_Prediction\venv\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator RandomForestClassifier from version 0.24.2 when using version 1.1.3
. This might lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
D:\Rainfall_Prediction\venv\lib\site-packages\sklearn\base.py:329: UserWarning: Trying to unpickle estimator MinMaxScaler from version 0.24.2 when using version 1.1.3. This might
lead to breaking code or invalid results. Use at your own risk. For more info please refer to:
https://scikit-learn.org/stable/model_persistence.html#security-maintainability-limitations
warnings.warn(
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [18/Nov/2022 12:45:39] "GET / HTTP/1.1" 200 -
```