1 . Name of the project and team members

Columbus,Ohio Weather in Practice

Team Member: Yao Lin

2 . What problem are you trying to solve?

Over the past 2–3 months in Columbus, how hot did it get, how cold did it feel, and how often did it rain? I want a simple, decision-ready view so non-technical stakeholders can plan around heat, rain, and windy days instead of guessing.

3 . How will you collect data and from where?

I'll use the Open-Meteo public API to pull hourly data for Columbus at 39.9612, −82.9988: temperature (°C), precipitation (mm), relative humidity (%), and wind speed (m/s). Data comes in via Python requests, is saved as CSV in data raw, then cleaned and aggregated with pandas into daily tables in data processed.

4 . What analysis will you do and what visualizations will you create?

The analysis I will be using is Hour→day rollups: average / max / min temperature, total precipitation, average wind; simple flags for hot days (max ≥ 30 °C) and rainy days (preciption ≥ 1 mm); descriptive stats and a first-half vs. second-half comparison to spot short-term shifts.

I will be using daily average temperature line chart, precipitation histogram plus a count of rainy days, max vs. min temperature and wind speed distribution