

Assignment 1 – Weather App

Build an app that will report weather forecasts given a location. Interaction can be either CLI or GUI. You will demo your project during class.

Purpose

This project will demonstrate how you can improve and refactor code. While you are attempting this project you do not have to consider security requirements- we will revisit this project and refactor it later in the course.

Requirements

- Input is a five-digit ZIP
- Output is a three-day forecast
- Interface options
 - **GUI** should have at least 1 input for location
 - E.g. Enter ZIP code, click 'get forecast', display 3 day forecast
 - **CLI** must be usable from a command line and accept at least 1 input for location
 - E.g. \$ weather 17701
today is rainy with high of 38F
tonight clear with low of 22F
- A remote API(s) must be used to get weather data
 - <https://www.ncdc.noaa.gov/cdo-web/webservices/v2>
 - <https://openweathermap.org/api>
 - <https://docs.tomorrow.io/recipes>
- Projects will be pushed to Github account (and shared with me if private) for grading
 - Upload a screenshot of your code on Github to the assignment Dropbox.
- Your application will be presented to the class
 - Functionality demonstration
 - How did you gather the ZIP?
 - Which API did you choose and why?
 - How did you interact with the API?
 - How did you handle output?
 - Hardest/Easiest thing you dealt with?
- Use any language(s), dependencies, APIs, modules, databases, or frameworks to complete the project.
 - You may use anything you think is necessary to complete the requirements

Rubric

Requirement	20 points	15 points	10 points	5 points	0 points
GUI/CLI	Usable GUI/CLI	GUI/CLI is incomplete or unusable	GUI/CLI is unusable and has demonstratable bugs	An attempt was made, does not work	No attempt
Location input	Accepts ZIPs		Accepts most ZIPs	An attempt was made, does not work	No attempt
Remote API accessed	Retrieve and process remote data	Retrieve and incorrectly process remote data	Retrieve remote data	An attempt was made, does not work	No attempt
Three-day Forecast output	Three days forecast accurate	Forecast inaccurate		An attempt was made, does not work	No attempt
Available in Github	Code is visible on github repo		Code not visible on github	An attempt was made, does not work	No attempt