**Weather Forecast Application**

**Overview**

This is a Python application developed as part of the DSC 510 Week 12 assignment. The program interacts with a web service to obtain weather forecast data based on user input (zip code or city). The weather data includes temperature, humidity, pressure, and cloudiness.

**Author**

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**Initial work**

* [Portfolio Projects](https://github.com/Saron222/PortfolioProjects)

**Released on**

* GitHub

**My professional profile on LinkedIn**

* [My LinkedIn Profile](https://www.linkedin.com/in/saron-yaya/)

**Showcase**

This project was designed to demonstrate:

* Interaction with web services to fetch weather forecast data.
* Handling user input for city or zip code lookup.
* Making API requests to retrieve weather information based on zip code or city.
* Error handling for invalid input and network issues.
* Displaying weather forecast information in a readable format.

**Technologies Used**

* Python
* Requests library

**Usage Example**

To use this application, you need to obtain an API key from OpenWeatherMap. Follow the instructions below to generate your API key:

1. Visit the [OpenWeatherMap website](https://openweathermap.org/).
2. Sign up for an account or log in if you already have one.
3. After logging in, go to the API keys section in your account dashboard.
4. Generate a new API key.
5. Copy the generated API key.

Once you have obtained your API key, replace the **api\_key** variable in the **main.py** file with your generated API key.

**Installation**

1. Clone the repository: git clone [https:// https://github.com/Saron222/PortfolioProjects.git](https://github.com/saronyaya/DSC510.git)
2. Navigate to the project directory: **cd Weather API.py**

**Development Setup**

1. Ensure that you have installed the required dependencies by running**: pip install -r requirements.txt**
2. Run the tests: **python** **Weather Forecast Application.py**

**Running the Tests**

To run the application and obtain weather forecast data, execute the **Weather Forecast Application.py** file. You will be prompted to make a request by providing a zip code or city name.

**Built With**

* Python - Main programming language
* Requests library - For making HTTP requests to the weather API

**Release History**

* **0.2.1**
  + CHANGE: Update documentation
* **0.2.0**
  + CHANGE: Refactoring - Remove setAnyMethod()
  + ADD: Add print\_error()
* **0.1.1**
  + FIX: Crash when calling geo\_lookup\_by\_zip()
* **0.1.0**
  + The first proper release
* **0.0.1**
  + Initial work

**Contributing**

1. Fork the repository from [Saron222/PortfolioProjects](https://github.com/Saron222/PortfolioProjects/fork)
2. Create your feature branch: **git checkout -b feature/your-feature-name**
3. Commit your changes: **git commit -am 'Add your feature'**
4. Push to the branch: **git push origin feature/your-feature-name**
5. Create a new Pull Request in the original repository