**Theory: OpenWeatherMap API Integration**

**Introduction to OpenWeatherMap API**

OpenWeatherMap is a popular API that provides weather data, including current conditions, forecasts, and historical data. You can use this API to get weather information based on a location such as a city name, city ID, or geographic coordinates (latitude and longitude). The data returned includes temperature, humidity, wind speed, pressure, and more.

**Key Concepts:**

* **API Key**: To access the OpenWeatherMap API, you need to sign up and get an API key. This key is used to authenticate your requests to the API.
* **Endpoints**: OpenWeatherMap offers several endpoints, but the most commonly used one is the **current weather** endpoint, which provides current weather data for a specified location.