Python HTTPTennis Tutorials

Read/Watch the required knowledge, and complete each section’s activity

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# 1: Postman Fun: Manual HTTP Calls

**Required Knowledge:**  
Install postman (the best http request engine ever)

<https://www.postman.com/>

Watch the postman tutorial (it’ll show you how to use it!)

<https://www.youtube.com/watch?v=FjgYtQK_zLE>

Register for a free openweather api key

<https://openweathermap.org/price>

Read up on openweather’s free api

<https://openweathermap.org/current>

<https://openweathermap.org/api/weathermaps>

**Activities:**

Using postman, manually hit the current weather data to see the weather in London, explore the api provided by openweather

Hint: GET api call requires a header called “Content-Type” with value “application/json”

# 2: HTTP 101 : Weatherman GPS Lookup Service

**Required Knowledge:**

Register for a free openweather api key

<https://openweathermap.org/price>

Read up on openweather’s free api

<https://openweathermap.org/current>

<https://openweathermap.org/api/weathermaps>

**Activities:**

build python app that accepts “lat / lon” arguments and return the weather at that location  
  
*./weatherman.py --lat "55" --lon "-3"  
The weather in Grenta GB, pop 2692, the weather is X degrees*  
Use the open weather <https://openweathermap.org/current> api to find weather

# 3: HTTP + JSON : Weatherman City Lookup Service

**Required Knowledge:**

Register for a free openweather api key

<https://openweathermap.org/price>

Read up on openweather’s free api

<https://openweathermap.org/current>

<https://openweathermap.org/api/weathermaps>

**Activities:**

build python app accept “place” argument, app will load a external json file (attached below), lookup the lat/long of the place given, and use the weather service to return the weather of that lat/long  
 *./weatherman.py --place "Edinburgh"  
The weather in xxx GB, pop xxx, the weather is X degrees*  
  
**Steps:**  
- Use the open weather <https://openweathermap.org/current> api to find weather

- Find place by loading in attached json file of UK places to find the lat/lon of that place  
 (ps if place doesn’t exist in json, give a nice message)

Data File: UK.json  
  
{

"name": "UK Locations",

"places": [

{

"name": "Edinburgh",

"x": 55.953251,

"y": -3.188267

},

{

"name": "York",

"x": 53.958332,

"y": -1.080278

},

{

"name": "Salford",

"x": 53.483002,

"y": -2.293100

},

{

"name": "Perth",

"x": 56.396999,

"y": -3.437000

},

{

"name": "Newcastle",

"x": 54.966667,

"y": -1.600000

},

{

"name": "Dundee",

"x": 56.462002,

"y": -2.970700

},

{

"name": "Liverpool",

"x": 53.400002,

"y": -2.983333

},

{

"name": "Glasgow",

"x": 55.860916,

"y": -4.251433

},

{

"name": "Oxford",

"x": 51.752022,

"y": -1.257677

},

{

"name": "London",

"x": 51.509865,

"y": -0.118092

},

{

"name": "Aberdeen",

"x": 57.149651,

"y": -2.099075

},

{

"name": "Manchester",

"x": 53.483959,

"y": -2.244644

},

{

"name": "Inverness",

"x": 57.477772,

"y": -4.224721

}

]

}