

# Folium - Codealong ¶

## Introduction

In this codealong, we'll take a look at how to create an interactive map using the Folium package. From there, we'll return to APIs in the final lab for the day where you'll make an interactive map from your requests to the API!

## Objectives

You will be able to:

- Create maps using Folium

## Creating a Basemap

Here we'll take a look at creating a basemap over the London region!

```
In [1]: import folium

lat = 51.51
long = -0.14

#Create a map of the area
base_map = folium.Map([lat, long], zoom_start=13)
base_map
```

Out[1]:



## Adding Markers to the Map

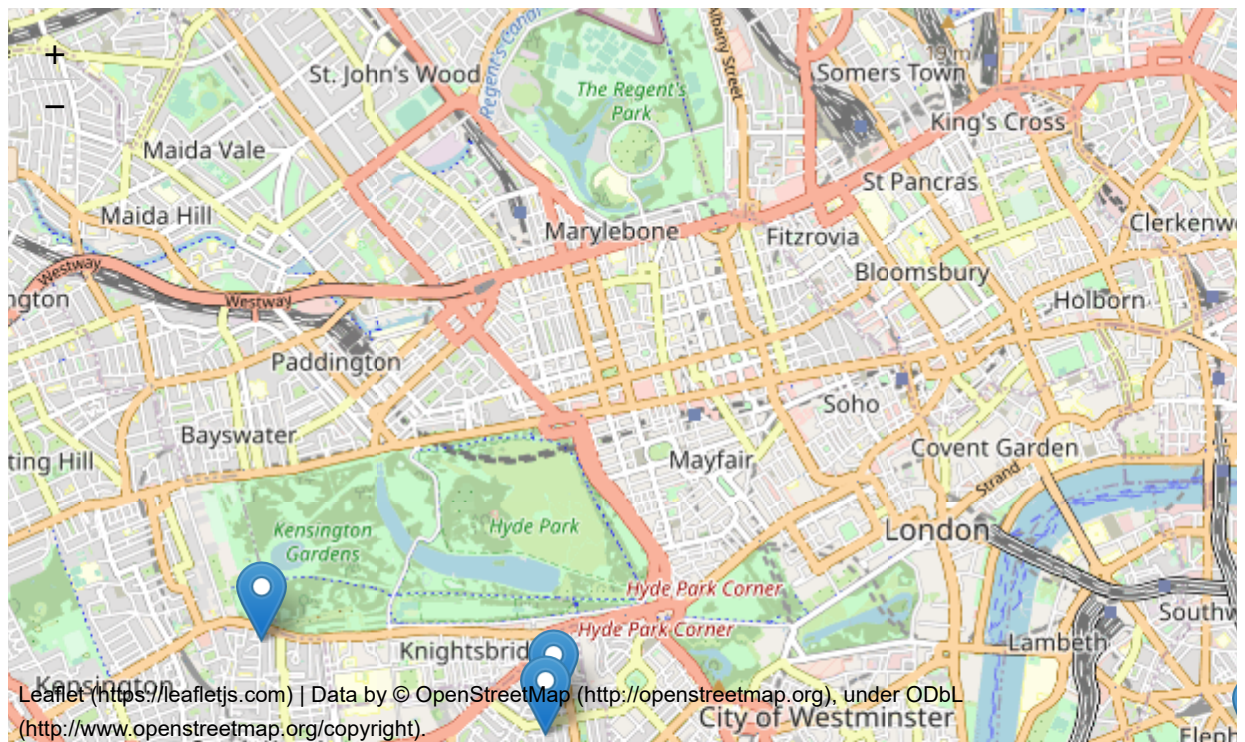
Great! Now let's take a look at adding little markers to our map!

**Note:** you may have to zoom out to see all of the markers!

```
In [2]: import numpy as np

#Generate some random locations to add to our map
x = [lat + np.random.uniform(-.1,.1) for i in range(20)]
y = [long + np.random.uniform(-.1,.1) for i in range(20)]
points = list(zip(x, y))
for p in points:
    lat = p[0]
    long = p[1]
    marker = folium.Marker(location=[lat, long])
    marker.add_to(base_map)
base_map
```

Out[2]:



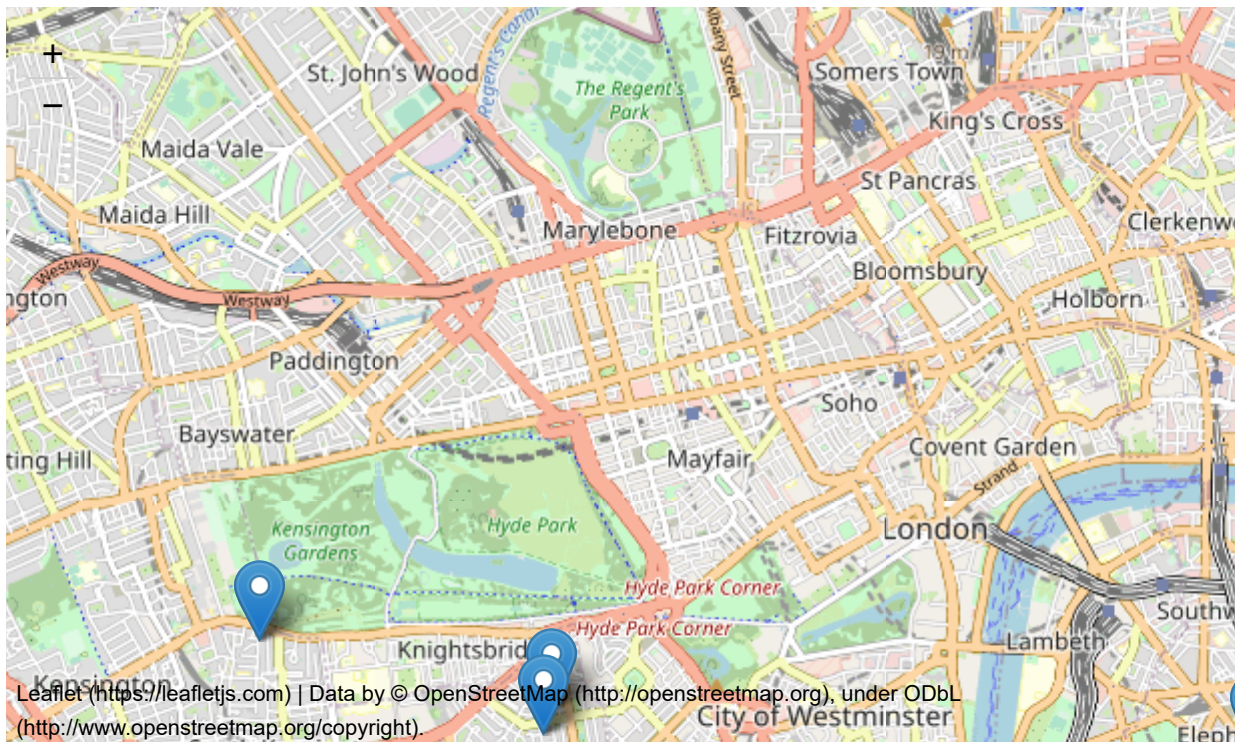
## Adding Pop-up Boxes to Our Markers

Often we may wish to not only place markers on the map, but to create interactive pop-ups which display information to that location. To do this, we can add a popup to our markers when adding them to the map!



```
In [3]: for p in points:
        lat = p[0]
        long = p[1]
        popup_text = "Latitude: {}, Longitude: {}".format(lat, long)
        popup = folium.Popup(popup_text, parse_html=True)
        marker = folium.Marker(location=[lat, long], popup=popup)
        marker.add_to(base_map)
base_map
```

Out[3]:



Now, if you click on the map markers, you should see a little information box pop up!

## Summary

In this codealong, we learned how to use Folium to create some cool interactive maps with only a few lines of Python code!