mapping_adventures

May 20, 2020

1 Mapping Adventures

It's time to plan an expedition for Harold's birthday! All he has told you so far is that he wants to go to NYC. Using the places of interest geospatial data, get a sense of the general location for places of interest. Use this as a guide for determining which boroughs/places you should hit for Harold's birthday adventure!

```
[1]: import pandas as pd
import plotly.express as px
import os
from pathlib import Path
from dotenv import load_dotenv
```

1.0.1 Prep Mapbox API Credentials

```
[2]: # Read the Mapbox API key
load_dotenv()
map_box_api = os.getenv("mapbox")

# Set the Mapbox API
px.set_mapbox_access_token(map_box_api)
```

1.0.2 Read in data

```
[3]: # Read in data
places_of_interest = pd.read_csv(
         Path("../../Resources/nyc_places_interest.csv")
).dropna()
places_of_interest.head()
```

```
[3]:
       Id Longitude
                        Latitude
                                                Name PlaceType Borough
      90 -73.888958
                       40.896210
                                  Van Cortlandt Park
                                                          Park
                                                                 Bronx
       95 -73.871651
                       40.889879
                                   Woodlawn Cemetery
                                                      Cemetery
                                                                 Bronx
     2
       81 -73.838642
                       40.886965
                                    Seton Falls Park
                                                          Park
                                                                 Bronx
     3
       69 -73.809802 40.877986
                                     Pelham Bay Park
                                                          Park
                                                                 Bronx
         8 -73.878308 40.864424
                                    Botanical Garden
                                                        Garden
                                                                 Bronx
```

1.0.3 Plot Data

Plot All Places of Interest

```
[4]: # Slice and plot data by name
map_1 = px.scatter_mapbox(
    places_of_interest,
    lat="Latitude",
    lon="Longitude",
    color="Name"
)
map_1.show()
```



Plot Places of Interest by Place Type

```
[5]: # Slice and plot data by place type
map_2 = px.scatter_mapbox(
    places_of_interest,
    lat="Latitude",
    lon="Longitude",
    color="PlaceType"
)
map_2.show()
```



Plot Places of Interest by Borough

```
[6]: # Slice and plot data by borough
map_3 = px.scatter_mapbox(
    places_of_interest,
    lat="Latitude",
    lon="Longitude",
    color="Borough"
)
map_3.show()
```

