

```
In [11]: 1 import requests  
2 import folium  
3 from datetime import datetime  
4 import time  
5 import threading  
6  
7  
8
```

```
In [12]: 1 start_time = datetime.now()  
2 start_time
```

Out[12]: `datetime.datetime(2023, 11, 7, 22, 27, 48, 64002)`

```
In [13]: 1 lat=0  
2 long=0  
3 def getdata():  
4  
5     api_link = "http://api.open-notify.org/iss-now.json"  
6     max_retries = 3  
7     retries = 0  
8  
9  
10    while retries < max_retries:  
11        response = requests.get(api_link)  
12        response.raise_for_status()  
13        data = response.json()  
14        time_stamp = data['timestamp']  
15        print(time_stamp)  
16        longitude = float(data['iss_position']['longitude'])  
17        latitude = float(data['iss_position']['latitude'])  
18        retries=retries+1  
19        lat=latitude  
20        long=longitude  
21    return time_stamp, longitude, latitude  
22  
23
```

```
In [14]: 1 # Function to update the map with markers  
2 def update_map():  
3     while not exit_event.is_set():  
4         data = getdata()  
5         time_stamp, longitude, latitude = data  
6         marker = folium.Marker([latitude, longitude], icon=None)  
7         marker.add_to(map)  
8         time.sleep(5)
```

```
In [15]: 1 map = folium.Map(location=[lat, long], zoom_start=2)
          2 map
```

Out[15]: Make this Notebook Trusted to load map: File -> Trust Notebook



```
In [16]: 1 exit_event = threading.Event()
          2
          3 # Start the update_map thread
          4 update_map_thread = threading.Thread(target=update_map)
          5 update_map_thread.start()
          6
          7 # Run the update_map function for 1 hour (3600 seconds)
          8 time.sleep(3600)
          9
          10 # Set the event to exit the update_map thread
          11 exit_event.set()
```

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```

```
In [17]: 1 update_map_thread.join()  
2
```

```
In [18]: 1  
2 # Optionally, save the map to an HTML file  
3 map
```

Out[18]: Make this Notebook Trusted to load map: File -> Trust Notebook



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In [ ]: 1
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In [ ]: 1
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