In [2]:
```
pip install basemap
```

```
Looking in indexes: https://pypi.org/simple, (https://pypi.org/simple,)
https://us-python.pkg.dev/colab-wheels/public/simple/ (https://us-pytho
n.pkg.dev/colab-wheels/public/simple/)
Collecting basemap
  Downloading basemap-1.3.6-cp39-cp39-manylinux1_x86_64.whl (864 kB)
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a 0:00:00
Requirement already satisfied: numpy<1.24,>=1.22 in /usr/local/lib/pyth
on3.9/dist-packages (from basemap) (1.22.4)
Collecting pyproj<3.5.0,>=1.9.3
  Downloading pyproj-3.4.1-cp39-cp39-manylinux_2_17_x86_64.manylinux201
4_x86_64.whl (7.7 MB)
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Collecting pyshp<2.4,>=1.2
  Downloading pyshp-2.3.1-py2.py3-none-any.whl (46 kB)
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Collecting basemap-data<1.4,>=1.3.2
  Downloading basemap_data-1.3.2-py2.py3-none-any.whl (30.5 MB)
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Collecting matplotlib<3.7,>=1.5
  Downloading matplotlib-3.6.3-cp39-cp39-manylinux_2_17_x86_64.manylinu
x2014_x86_64.whl (11.8 MB)
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a 0:00:00
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python
3.9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (23.0)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.
9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (0.11.0)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/pytho
n3.9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (1.0.7)
Requirement already satisfied: pyparsing>=2.2.1 in /usr/local/lib/pytho
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Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/pyth
on3.9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (1.4.4)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/pyth
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Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/p
ython3.9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (2.8.2)
Requirement already satisfied: pillow>=6.2.0 in /usr/local/lib/python3.
9/dist-packages (from matplotlib<3.7,>=1.5->basemap) (8.4.0)
Requirement already satisfied: certifi in /usr/local/lib/python3.9/dist
-packages (from pyproj<3.5.0,>=1.9.3->basemap) (2022.12.7)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.9/dis
t-packages (from python-dateutil>=2.7->matplotlib<3.7,>=1.5->basemap)
(1.16.0)
Installing collected packages: pyshp, pyproj, basemap-data, matplotlib,
basemap
  Attempting uninstall: matplotlib
    Found existing installation: matplotlib 3.7.1
    Uninstalling matplotlib-3.7.1:
      Successfully uninstalled matplotlib-3.7.1
Successfully installed basemap-1.3.6 basemap-data-1.3.2 matplotlib-3.6.
3 pyproj-3.4.1 pyshp-2.3.1
```

In [1]:
```
import requests
import json
import matplotlib.pyplot as plt
from mpl_toolkits.basemap import Basemap
import time

#Creating  a figure with size 10/10
fig = plt.figure(figsize=(10, 10))

#Creating two lists for longitude and latitude
longitude_list = []
latitude_list = []

#Creating a basemap for projecting and choosing longitude as 0
m = Basemap(projection='mill', lon_0=0)

#Plotting the title
plt.title('Live Space Station Tracking Map')

#Adding the ur;
url = 'http://api.open-notify.org/iss-now.json'

# Set the starting time for the data streaming
starting_time = time.time()

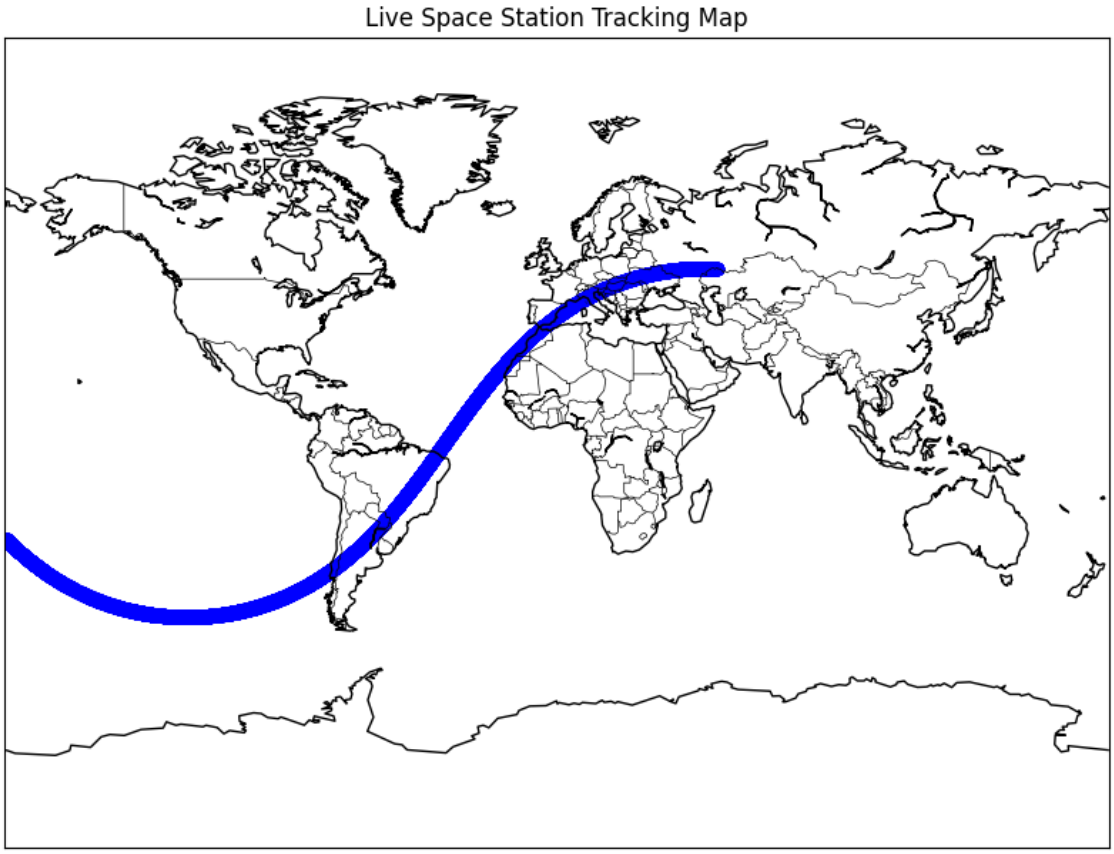
#Using a while loop for running almost 3600
while time.time() - starting_time < 3600:
    response = requests.get(url).json()
    # Get the longitude of the map
    long = float(response['iss_position']['longitude'])
     # Get the latitude of the map
    lat = float(response['iss_position']['latitude'])

    #Adding the extra list to the existing longitude list
    longitude_list.append(long)
     #Adding the extra list to the existing latitude list
    latitude_list.append(lat)

x, y = m(longitude_list, latitude_list)
m.plot(x, y, 'bo', markersize=6)

# Draw the coastlines and the countries
m.drawcoastlines()
m.drawcountries()

# Save the plot as an image file
plt.show()
plt.savefig('iss2_location.png')
plt.pause(0.001)
time.sleep(5)
```




```
<Figure size 640x480 with 0 Axes>
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