Assignment #4

General Instructions:

1. Use Anacondo Python 3.7
    - https://www.anaconda.com/distribution/

2. All of your source code must be clearly documented and functional; **ZERO credit will be given to the submission that is spaghetti code**.

3. Submit your **IPYNB** script, your **HTML** document for your **IPYNB** script and live video of your run that has your code and your output.

Requirements:

Use **Python** 3.7 to implement the following features

1) Use **Python/GitHub API** to retrieve information of the past **2 years** for the following repositories:
    i. https://github.com/angular/angular
    ii. https://github.com/angular/material
    iii. https://github.com/angular/angular-cli
    iv. https://github.com/SebastianM/angular-google-maps
    v. https://github.com/d3/d3

2) A Line Chart to plot the issues for every Repo
3) A Bar Chart to plot the issues created for every month for every Repo
4) A Bar Chart to plot the forks for every Repo
5) A Bar Chart to plot the issues closed for every week for every Repo
6) A Stacked-Bar Chart to plot the created and closed issues for every Repo

Assignment Deliverables:

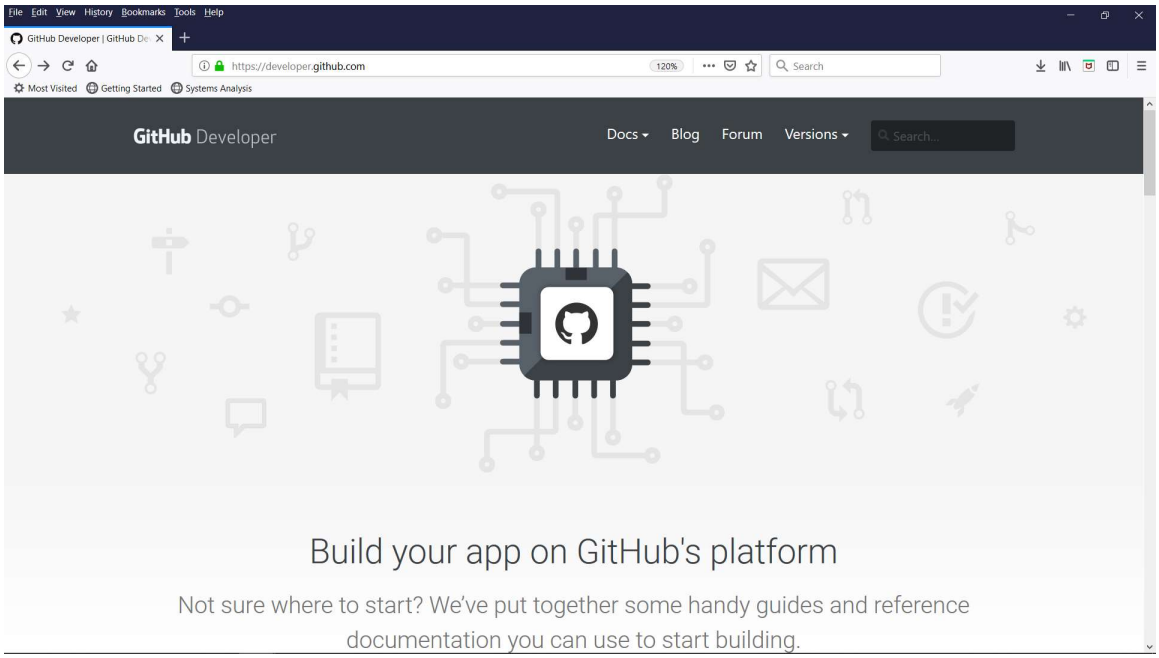
You are required to submit a SINGLE Zip file that has the following deliverables are:

1. Your IPYNB script
2. Your HTML document for your IPYNB script
3. All of your source code
4. Output report that has ALL captured screen-shots of your assignment run saved in OUTPUT.pdf
5. Video recording of 10 minutes as a demo for the run of your assignment using https://screencast-o-matic.com/

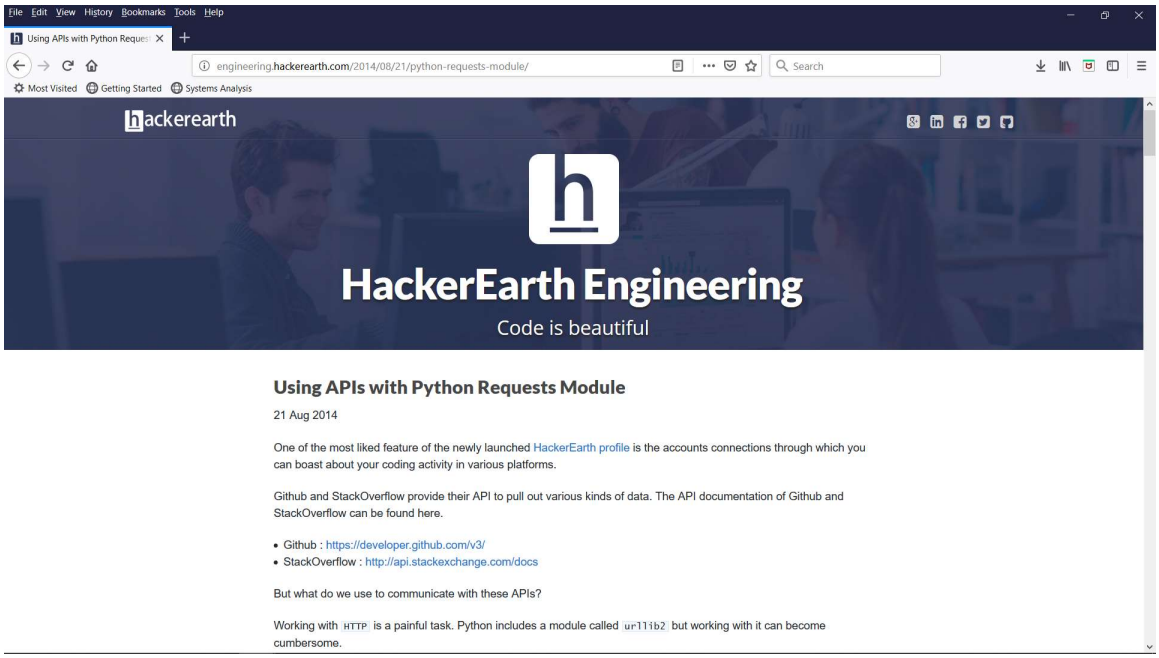
Post your assignment as a SINGLE ZIP on Blackboard.

Appendix A : Resources & Websites:

https://developer.github.com/



A very old link but still useful: http://engineering.hackerearth.com/2014/08/21/python-requests-module/



You could use your browser to send a simple query to GitHub about certain repo. Here is an example:

https://api.github.com/search/issues?q=repo:angular/material