DOWNLOADING / INSTALLING PREREQUISITES (CLI)

You can also view the list of dependencies by looking at the 'dependencies.docx' file.

Be sure to have the latest version of Python 3 installed. You can find the download and installation instructions here: <https://www.python.org/downloads/>

Be sure to have the latest upgraded version of pip installed. E.g. for Windows type the following command in shell / cmd prompt: 'python -m pip install --upgrade pip' If you don't have pip installed you can view installation instructions here: <https://pip.pypa.io/en/stable/installation/>

In order to run the files please first consult the list of dependencies; necessary python modules to download. They are the following.

1. requests ('pip install requests' in shell / cmd prompt, if you are using PyCharm ensure module in installed by hovering over the import statement and pressing Alt+Shift+Enter)
2. matplotlib ('pip install matplotlib' in shell / cmd prompt, if you are using PyCharm ensure module in installed by hovering over the import statement and pressing Alt+Shift+Enter)
3. pytest ('pip install pytest' in shell / cmd prompt, if you are using PyCharm ensure module in installed by hovering over the import statement and pressing Alt+Shift+Enter)

Please ensure you check your Python Interpreter/path to see if the installed prerequisites are included. If you are using PyCharm you can go to: File -> Settings -> [project\_name (e.g. 'interacting\_with\_apis'] -> Python Interpreter

Please also ensure the .py files are contained within a single folder / project. The test module will be unable to funtion properly otherwise.

An internet connection is required to access artist and song information, allowing the .py files to function.

RUNNING THE TEST MODULE (CLI)

To run the test module 'test\_interacting\_with\_apis.py', cd / change directory to the location of the .py file in shell / cmd prompt, e.g. for Windows: 'cd C:\Users[User]\PycharmProjects\interacting\_with\_apis'

Then run the tests with the following command, the tests will run automatically: 'pytest test\_interacting\_with\_apis.py'

Please note that you can also use the following command and follow the displayed instructions to see examples of mocked input as part of the testing: 'pytest test\_interacting\_with\_apis.pys -s'

Please allow a moment or two for test results to be calculated and displayed.

Press ctrl+c to abort at any time.

RUNNING THE PROGRAM INTERACTING WITH APIS: MEAN LYRICS CALCULATOR (CLI)

To run the program 'interacting\_with\_apis.py', cd / change directory to the location of the .py file in shell / cmd prompt, e.g. for Windows: 'cd C:\Users[User]\PycharmProjects\interacting\_with\_apis'

Then run the .py file with the following command: 'python interacting\_with\_apis.py'

Follow the instructions displayed to interact with the program. Basic sequence of instructions should be: Enter artist name -> Enter number of a displayed artist result -> Enter number of songs to average across -> (After results are displayed) Enter 'y' to search again.

Please allow a moment or two for test results to be calculated and displayed. Results should include a plotted bar graph, please close ('x') this graph when done reading to continue with CLI program.

Press ctrl+c to abort at any time.