The following libraries are needed with python3.7 installed on your device to run the tool successfully.

- tkinter
- numpy
- pandas
- matplotlib
- json
- requests
- sqlite3

For running the first part of tool (generating data-set according to topic and input parameters),

- 1. Go to folder \uiBackEnd.
- 2. There are 6 files temp.json, temp1.json, temp2.json, temp3.json, temp4.json, temp5.json
- 3. Each of the json files has 2 empty entries, username and password.
- 4. Take 6 github account usernames and their personal access tokens and store them in each of the files. To generate access code for your account, follow this <u>link</u> (https://help.github.com/en/github/authenticating-to-github/creating-a-personal-access-token-for-the-command-line). Alternatively, you can also use your github password in place of using a personal access token, but that is not a recommended practise and should be avoided.
- 5. Run the tool using the command: python ui.py
- 6. Input all the needed inputs and run the script.

For running the second and third part of tool (generating single repository analysis or generating data about a single user),

- 1. Run the tool using the command: python ui.py
- 2. Select the option (Single Repository or Single User) and input username and personal access token.
- 3. Choose if you want to include private repositories.