About and Guidelines

This project is a web app to find details of a zip code provided in the csv file and locate that zip code on a world map. The app is purely and entirely made in python.

To create a UI, <u>Streamlit</u>, an open-source Python library, is used. Both front end and backend is coded in python.

At the backend the operations are carried out through different API calls. Modular programming and use of functions is the stratergy used.

How to run this app in your system.

There are some requirements needed, I will guide you through how to install all in ubuntu 18.04 LTS system.

- Open terminal or command line. (ctrl+alt+t)
- 2. Type the command: sudo apt install python3.7
- 3. Enter your password
- 4. check version by typing: python3.7 --version
- 5. Type the command to install pip3 (python package manager): sudo apt-get y install python3-pip
- 6. check version: pip3 --version
- 7. Next step is installing all the reuired packages and libraries.
- 8. Install pandas : pip3 install pandas
- 9. Install numpy : pip3 install numpy

- 10. Install <u>streamlit</u>: pip3 install streamlit
- 11. Install folium : pip3 install folium
- 12. Install pillow : pip3 install Pillow
- 13. Install matplotlib :pip3 install matplotlib
- 14. Install seaborn : pip3 install seaborn
- 15. Install streamlit folium : pip3 install streamlit-folium

Following steps are to be followed to run the app

- 1. Go to unzipped folder.
- 2. Inside the unzipped or extracted directory or folder navigate to scripts directory or folder.
- 3. Open terminal or commandline there.(Right click and select open in termina l)
- 4. Type the command : streamlit run assignment_app.py: and hit enter or return key.
- 5. Url with the port number will appear on the terminal, copy and paste it in your browser address bar, hit enter and the app starts.

 (Sometimes by default the browser is opened)
- 6. If find any difficulty, navigate to the bottom of the app and check watch tutorial. A video is attached on how it works.
- 7. Press ctrl+c to stop the app.

Streamlit app can be deployed in aws ec2 instance, heroku platform, google cloud as docker file, etc.

I have also done some analysis on the given data and it is in the notebook directory or folder.