Deployment Document

App Description:

1. We have two apps, one is Bush Optimization app, another is Data adding app.
2. Bush optimization app uses the data from previous iterations of testing and gives the first-time right solution for finalizing the bush parameters.
3. On the other hand, Data adding app can be helpful in making the Bush optimization app more robust by providing the service to add more data to the database on which the Bush optimization app was trained.

App Pre-requisites:

1. Apps are purely constructed using python environments and libraries.
2. Primarily it leverages the streamlit library's functionality.
3. To run the application, one must have python installed in their system.
4. Python should be accessible globally from anywhere in the PC(This can be done by editing the environment variables of your PC and add the bin folder as one the environment variable).
5. After we can access the python environment from anywhere, create a txt file: requirements.txt. In that, type the following libraries: -

   streamlit
   numpy
   pandas
   scikit-learn
   xgboost
   scikit-optimize

6. Save the txt file. Open command prompt in the same folder where requirements.txt is saved and run the following command: -
   pip install -r requirements.txt
7. This will install all the libraries we need to run our apps.
8. To access the code and supporting files, go to following directory:-
   G:\General\CEH\EXCAVATOR_RELATED\Cushioning\Cushioning_APP

Running the App:

1. Save the “App” folder on your Desktop or anywhere you like.
2. Open command prompt and open the directory of the “App”, example: - C:\Users\SA40166095\Desktop\INTERN\App
3. Type the following command to run the Bush Optimization app: -
    a. **streamlit run app.py**
    And you will be all set to use the Bush Optimization app (It will open in your browser after few seconds of running the command)
    b. This app will run on: -
        i. Local URL: http://localhost:8501
        ii. Network URL: http://10.121.10.48:8501
4. To open the data adding app, run the following command: -
    a. **streamlit run add_data.py**
    b. This app will run on: -
        i. Local URL: http://localhost:8502
        ii. Network URL: http://10.121.10.48:8502