Project 3: Web Based Interface for PSAT using Streamlit (https://streamlit.io/) Library

Mayank Agarwal

Python 3.8.10 Install Instruction https://pastebin.com/nvibxmjw

Deadline: 30th Nov, 2022. 23:59. All of your git repos shall be pulled after that. That will be the version which will be checked.

Warning: Sharing is Caring is good for cat videos. Sharing of program may lead to plagiarism and would effect in 0 to both.

Pull This Git Repo - https://github.com/Cs3842022/CS384_2022 and copy the proj3 to your repo folder.

Git Requirements: At least 5 git commits should be there with meaningful comments (at least 4 words)

The entire code must be into multiple try, except block: Multiple Try Except should be the part of the code, so that if there is an error in a new file, the program throws the exception and does not stop. Also the number of rows should be read such that files bigger/smaller than this should be able to run by your code.

In this project, I have given you a working module and you need to develop the GUI version of it. You can run the code with the sample values: These values should be asked by the user in the Streamlit interface.
Correlation 70
SNR 15
Acceleration 1.5
Shear Velocity 2.6

Similarly you need to ask user for the starting options (7 choices that come)

Rest of the outputs are automatically generated. Ensure that the output folder is renamed:
input_file_name_Correlation(XX)SNR(XX)Acceleration(XX)mod(user_input)_yyyy-mm-dd-hh-mm-ss

So, in this project its only developing the GUI which you shall learn in Proj 2 and apply here. There should be an option for bulk conversion too. Wherein the path to the folder is specified. All the xlsx files in that dir is then computed and renamed as above.

Usage of Streamlit https://streamlit.io/ Library is mandatory.

Any additional feature that you can think of. If the feature seems worthy it shall have bonus marking.

It needs to be implemented in a group of two students as mentioned.

You can use online resources. But you should be able to explain your code when you will show the project demo.