

PYTHON EXERCISE

DATA PROCESSOR

02 – PYQT5 FOR DATA STORAGE

Adapt the idea of the first two exercises as a graphical user interface. The following requirements should be fulfilled:

- Create a PyQt5 GUI
- On the main screen there should be an overview of all the uploaded files so far
- It should be possible to upload a new file to the system. The user should be able to select the file from the system. The allowed file types are the same like the first exercise, the checks you implemented the last time should also be performed.
- Implement a possibility to show a specific dataset. Insert the additional information to the corresponding window.
- Add the possibility to change a single value in the dataset.
- It should be possible to delete a) a specific dataset, b) a row in a dataset and c) a column in a dataset
- Add a possibility to store the data at your file system. The user should be able to select the output file format.

The structure of the graphical user interface should look like:

```
main_app (upload dataset, show dataset, delete dataset, store dataset)
    |_ dataset1 (change value, delete row, delete column)
    |_ dataset2 (...''....)
    |_ dataset3 (...''....)
```

Try to use the modules that were used in the previous lectures. If you have to use other modules describe in short words, why this is necessary.

A good documentation and useful test cases helps the lecturer to understand what you did and why and though helps you to get a better evaluation.

Files to be delivered:

- Source code
- Good documentation
- Test cases
- requirements.txt