Document Analysis: Computational Methods Prerequisites

April 10th, 2025

1.1 Exercises

The first exercise can be found on ILIAS as ex00.zip. It contains this file, a requirements.txt file, the actual assignment ex00_assignment.ipynb and some data and resource files.

1.2 Organization and Setup

For the practical assignments in this course, we will use Python 3.9. Assignments will be provided as Juypter Notebooks. You will directly write your solutions and answers within those notebooks. To complete the assignments, you have to set up the python environment. We recommend using Anaconda to install Python and manage virtual environments.

The remaining setup is relatively straightforward:

• Install Anaconda and follow the instructions for your operating system. Please make sure to check the box to add Anaconda to your PAT during installation.

If you want to install Jupyter Notebook without Anaconda, use pip install jupyter notebook

- Create a new folder where you will store your future assignments (e.g. ~/studies/docana/exercises)
- Download the archive which contains the first assignment, extract it and put all files into a subfolder within this new assignment folder (e.g. ~/studies/docana/exercises/ex00/ex00_assignment.ipynb)
- Then start a Jupyter notebook from this folder. To accomplish this, open a terminal in the cloned folder, and execute the following command

jupyter notebook

- A browser should open up. If it doesn't, open your web browser, enter localhost:8888 in the URL bar.
- There you can select the notebook file ex00_assignment.ipynb to open the notebook. The remaining introduction and the first assignment can be found in this notebook!

1.3 Python Basics

Please familiarize yourself with Jupyter notebook, if you're not already: https://jupyter.readthedocs.org/en/latest/.

There are also plenty of tutorials online, such as this one.

1.4 Submissions

Assignments are not graded, but you can submit them to get some feedback. Please only submit the parts of the assignment that you need feedback on. To do so, upload the ex00_assignment.ipynb file to ILIAS. If you reference any other files (e.g. images not included), you have to submit all files bundled as a zip or rar archive.

Note: Please check that your code is complete and can be run in one go! To check, you can reset the kernel and execute all code again.