## Submission Guidelines for Jupyter Notebooks in HTML format for the courses of the Faculty of Applied Mathematics and Data Mining

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Version: 21 February 2023

Jupyter Notebooks are a very flexible format and can be used to embedded code, accompanied by images and markdown text. Since it is very powerful, people tend to misuse this format for plain code execution. This document shall provide some hints on how to work with them properly for the courses within our department.

## Hints

- The concept is to utilize Jupyter as a format to create a document that is intended to be read. Avoid submitting an unrefined computation session due to the format.
- It's crucial to strive for clarity in your explanations, with the mindset that a classmate (or even yourself, in a few weeks!) is the intended audience. Provide sufficient context to enable reasonable understanding without requiring extensive recall of class-specific details.
- Split up the code into separate cells so that each cell only does a specific task. Putting everything into one cell is to be considered misuse of this format.
- Use Code- and Text-Cells in combination. Each Code-Cell shall be described with text. Tell a story!
- Markdown is a very versatile Markup Language used to render plain text documents, that can include formatting, images, equations, etc. For a resource on how to format Markdown accordingly, be referred to this link.
- Do not leave any unused code cells within your notebook.
- Do not leave any commented code (a minor number of lines are ok) within your notebook.
- If there is code that you consider irrelevant to the story, you may conceal it in a separate .py file and include it in your notebook. Similarly, for routine by-hand calculations relative to the overall problem difficulty, you may skim over them. This

will necessitate some judgement calls on your part, but exercising such judgement is beneficial.

- Your notebook must be executable from top to bottom without any errors. Never submit any non-working or erroneous code.
- For lengthy cell output, it should be truncated or omitted by adding a semicolon at the end of the last line in the cell.

## **Submission Guidelines**

Before the submission of a Jupyter Notebook, a few steps have to be considered.

- Reset the Kernel (Tab Kernel  $\rightarrow$  Restart, or  $\circlearrowright$  in Toolbar)
- Run all code cells from scratch (Tab Cell → Run All) Here, all code cells shall have a continuing numbering (in the brackets next to the cell, e.g. In [3]: after In [2]:). The number of executions (number of execution of the last cell) must correspond to the number of code cells.
- Export your Notebook in an HTML format. For the download use Tab File  $\rightarrow$  Download as  $\triangleright \rightarrow$  HTML (.html).

A Not following these guidelines is own your own risk. Not following can result in point deduction or not accepting your submission.