

# Typography of Technical Document

## Semestral Project Assignment

### Summer Semester 2024/2025

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## Revision history

April 6, 2025 Initial version

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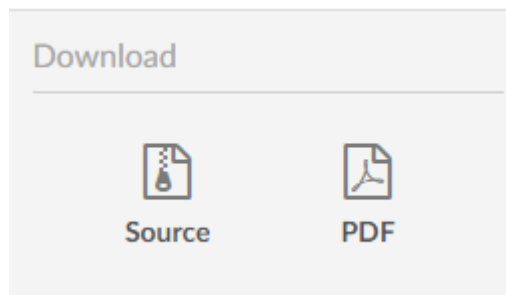
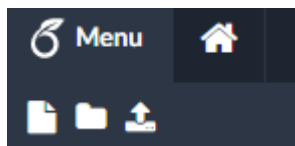
Submit your project solutions by May 18, 2025 23:59 to the following URL

<https://www.dropbox.com/request/QDYD9wKFTfU87sdQ5GHK>.

# 1 Semestral project

## 1.1 What to submit?

All documents are to be submitted, including the source code in  $\text{\LaTeX}$ , embedded images, and other relevant files, in order to facilitate the recompilation of the document in question. There is no requirement to submit the translated PDF document or the sample document. Submissions should be submitted as a zip archive. It is imperative that the archive name corresponds to the login name. The zip archive can be downloaded directly from the Overleaf environment using the Menu option, which is located in the upper left corner of the browser, followed by the Source icon.



## 1.2 How to submit?

Project solutions are submitted via Dropbox to the URL

<https://www.dropbox.com/request/QDYD9wKFTfU87sdQ5GHK>.

## 1.3 When to submit?

The deadline for submission is **May 18, 2025 23:59**.

## 1.4 How will the project defence take place?

The defence of the project will take place in person only if there is a serious doubt about the authorship of the project or if there are major inconsistencies and ambiguities in the submitted project, for example, half of the text is missing, all the headings are missing, etc. In these cases, it will be necessary to clarify the situation with the student in person. In other cases, a personal defense will not take place.

## 1.5 Project materials

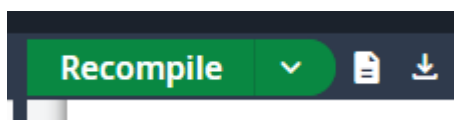
In the attached archive you will find two “main” directories **CommonFiles** and **Student**. In the **CommonFiles** directory you will find additional directories with bibliography, images and Python source code to include in your projects. In the **Student** directory, there are other subdirectories named by student Ids. Each student should find his or

her own directory<sup>1</sup>, in which he or she will find two files. The first file, `main.pdf`, contains a sample document. The second file, `plain_text.txt`, contains the plain text of file `main.pdf`, so there is no need to rewrite the text itself. From the plain text in the `plain_text.txt` file, by adding the  $\text{\LaTeX}$  correct macros, inserting images and other elements, you should create a PDF document that will match the document in the `main.pdf` file. That's all.

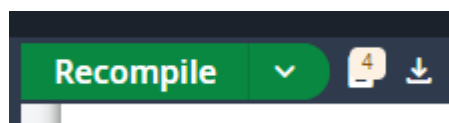
## 2 Overleaf – compilation errors

Submitted source code must be compilable without errors or at most with warnings. Compilation that has taken place

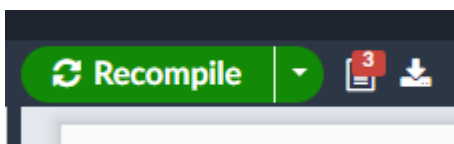
- without errors – the document icon is unmodified,



- with warnings – the document icon is overlaid with a rectangle with a number indicating the number of warnings,



- with errors – the document icon is overlaid with a red rectangle with a number indicating the number of errors.



Projects with compilation errors will automatically be scored 0 points.

## 3 General parameters of the semester project typography

First, two remarks:

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<sup>1</sup>Each student has his or her own unique assignment.

1. Although the specification of the required semester project typography may seem complicated, don't look for anything complicated behind it – no tricky constructions, no secret macro packages with even stranger settings<sup>2</sup> were used. All the macro packages used, and their settings, are described in this section. Similarly, the document was typeset using only the macros described in the literature on this subject.
2. Images and tables are so-called *floating objects*. Their location in your document may not exactly match their location in the document source code. Their placement is decided by L<sup>A</sup>T<sub>E</sub>X itself based on internal rules. Therefore, often a slight difference between your source code and the source code used to typeset the sample document is enough to “move” a table or image somewhere else. This difference is not crucial – what is crucial is that, for example, the table has all columns and rows formatted correctly, it has the correct border, it has the correct label, it is listed in the list of table, it has the macro `\label` in the source code so that it can be referenced, etc.

### 3.1 Detailed settings

To create a semester project, use pdfL<sup>A</sup>T<sub>E</sub>X with the following document class, macro packages and appropriate parameters.

- Set the document class to `article`.
- The default font size is 11 points.
- The base font of the document is Latin Modern, package `lmodern`.
- Set the input encoding to UTF-8, package `inputenc`.
- Paper size is the usual A4, single-sided document, margin settings: left 20 mm, right 30 mm, top 30 mm and bottom 35 mm. It is recommended to use the macro package `geometry`.
- The Python's source code listing is handled by the `listings` package using this setting:
  - language – Python,
  - base font for source code typesetting – typewriter,
  - keywords are additionally set in blue, identifiers in cyan, comments in black, strings in red,
  - the background color of the source code listing is set to light gray, and
  - line-breaking of long lines is enabled.

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<sup>2</sup>The design principle **KISS**, [https://en.wikipedia.org/wiki/KISS\\_principle](https://en.wikipedia.org/wiki/KISS_principle), was followed as much as possible when creating the assignment.

- Use Bib $\text{\LaTeX}$  to process the bibliography. The source data for typesetting the bibliography is stored in the file `SampleBib.bib`. For citations, use the standard `numeric` style. Bib $\text{\LaTeX}$  requires the `csquotes` package to work for correct typesetting of quotes.
- Furthermore, the following macro packages `graphicx`, `cmap` and the `fontenc` package with the `T1` option were inserted into the document.

Documentation for all the above mentioned packages can be found on the [ctan.org](http://ctan.org) website.