IMPERIAL

Machine Learning for Imaging

Coursework Introduction

Coursework: Masked Auto-Encoder

The coursework is divided into four parts:

- **Part A:** Create a dataset and a data module to handle the PneumoniaMNIST dataset.
- **Part B:** Implement MAE utility functions.
- **Part C:** Implement and train a full MAE model.
- **Part D:** Inspect the trained model.

Important:

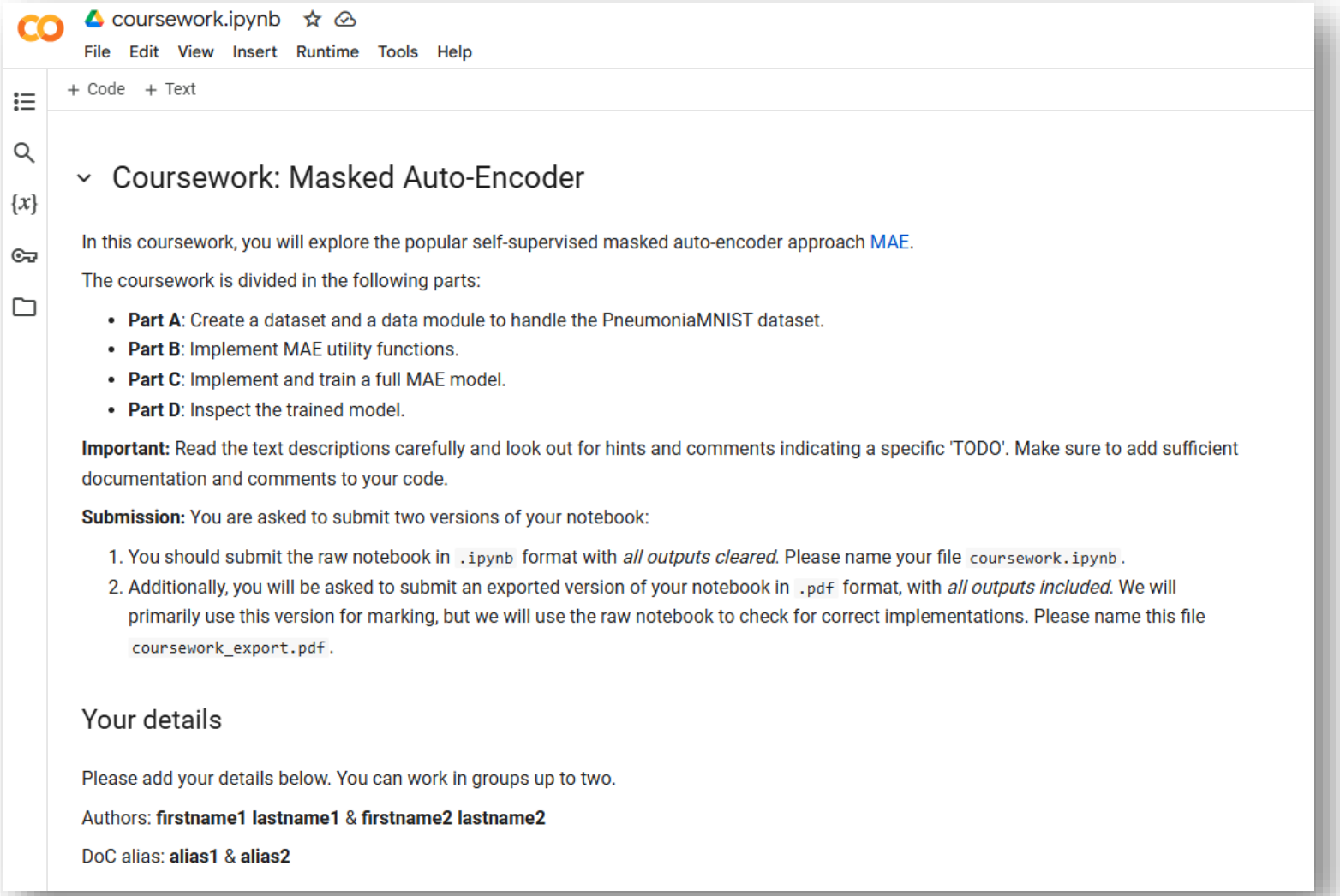
- Read the text descriptions carefully and look out for hints and comments indicating a specific ‘TODO’.
- Make sure to add sufficient documentation to your code.

Submission: You are asked to submit two versions of your notebook:

1. Submit the raw notebook in `.ipynb` format with *all outputs cleared*.
   Please name your file `coursework.ipynb`.
2. Submit an exported version of your notebook in `.pdf` format, with *all outputs included*.
   Please name this file `coursework_export.pdf`.

Coursework notebook

Available on Scientia



Coursework submission

Deadline

Thursday, 27 February, 19:00