# **Instructions for Exercise 3: Data-Driven Computing Architectures**

**Deadline:** Thursday 20.02.2025 23:59

**Submission:** Submissions can be made individually or in groups of two. If you are submitting as a group, remember to register your group in Moodle.

#### • Access the Environment:

- o Open the Noppe PySpark Environment. (https://noppe.2.rahtiapp.fi/main/catalog)
- o Login to the environment using your Haka credentials.
- o Click "Join workspace" and use the joining code: dat-vke5xyaw.
- o After joining, go to "My Workspaces" and enter the PySpark environment. This will direct you to the Jupyter notebook interface.

## • Copy the Notebook:

- o Locate the notebook titled **Exercise3** in the **shared** folder.
- o Copy the notebook to your personal workspace in Noppe, in the **my-work folder**.
- Open the copied notebook from your workspace.

### • Complete the Notebook:

- o Build a medallion architecture pipeline using Delta Lake to clean, structure, and analyze the provided datasets.
- o Include comments where you describe what you have done and why
- o Follow the tasks outlined in the notebook.
- o We will be using datasets located in the **shared** folder.

### • Export Your Completed Notebook:

- Once you have completed all tasks and questions, export your notebook as a .pdf file
- o Save the file with your name included in the filename (e.g., Exercise3 YourNameOrGroup.pdf) and submit it in Moodle.

# • Additional Notes:

- O Double-check that all cells in your notebook have been executed, and the outputs are visible.
- o If you encounter issues with the notebook or dataset, contact the teaching team for assistance.

### Good luck!