P00 – Requirements for BI mini-project

Business Intelligence

Exercise

Winter Term 2025/2026

Bonus Points Concept - Recap

- In total 15 bonus points could be earned
  - 8 points for 8 bonus points relevant exercises
  - 7 points for an individual BI mini-project
- 8 selected exercises (8 bonus points)
  - 8 submitted solutions the table “BI Exercises”
- BI mini-project (7 bonus points)
  - Individual project that is only available on request via email (viktor.dmitriyev@uol.de)
    - ~~Start date will be announced additionally (in December)~~ see next slides
    - BI mini-project should typically include assignment and data
  - Important milestones for the BI mini-project
    - ~~To be announced~~ see next slides
  - Submission
    - BI mini-project should be presented in January/February
    - ~~To be announced~~ see next slides
  - **Important note:**
    - If you had no previous experience with some software tools (e.g., git, Docker, etc.), you could always contact your instructors for further help

Requirements (1/3) - Overview

- Requirements
  - It is an individual project and tasks will be issues upon request via email
  - Source code should be stored in a git repository
    - Your git commits are not be evaluated, only the final result
    - Create private (or public) repository
    - Use git service from the university: https://gitlab.uni-oldenburg.de/
  - Docker and Docker Compose should be used to automate the deployment process
  - Preferred technologies to be used in the BI mini-project
    - Python, SQL
    - PostgreSQL
    - Metabase
  - Every step should be automated and/or described in details. Please note the following:
    - You should provide enough details, so anyone with technical background could reproduce your ETL steps
    - Description of the steps, which are hard to automate, should provide sufficient information to recreated them
  - Language of the BI mini-project
    - English

Requirements (2/3) – Submission and Presentation

- Submission files
  - Source code from the git with your solution as an archive (data should NOT be included)
    - Should include README.md with detailed description on the BI-Project
      - README.md should be your technical report about the technical implementation
    - You could also submit a link to your git repository with your results
    - **Data should NOT be a part of a git repository**
      - Use *.gitignore* to exclude folders and files from commits
  - Data (if required) should be shared using a cloud link (e.g., next cloud from the university)
  - Slides covering the following agenda points
    - Goals and overview of the BI mini-project
    - Results of the BI mini-project
    - Lessons learn and feedback
- Presentation/demonstration of the solution
  - Presentation of the solution is a must (no presentation – no evaluation)
  - A deep dive into details of the solution is expected
  - Demonstration of the solution should take approximately 15 to 20 minutes (usually during BI classes on Friday)

Requirements (3/3) - Evaluation Strategy

- Evaluation strategy
  - You must be able to describe your solution in details
  - You must be able to justify your technical decisions made
  - You must be able to explain obtained results
  - Most of the steps should be automated, so that your results could be “re-created” on demand by anyone
  - You must submit required submission files (for further details see another section)
  - You must perform a final presentation of your solution to instructor
  - **You submitted solution will be only considered for evaluation, if you will respect majority of milestones**

Milestones and Deadlines

- 25.11.2025
  - Start of the subscription period for the BI mini-project
  - Subscribe/Request your project via email (viktor.dmitriyev@uol.de)
- 02.12.2025
  - End of the subscription for the BI mini-project
- 04.12.2025
  - Individual tasks and data are issues via e-mail
- 12.12.2025 (upon request)
  - Clarification of questions on tasks issues (during the usual class time-slot)
- 09.01.2026
  - Expected: git repository, database schema, first import and transformation steps
- 16.01.2026
  - Expected: ETL finalized, database schema finalized, start with dashboard and KPI
- 23.01.2026
  - Expected: automation of the solution using Docker and Docker Compose, dashboard and KPI, start with presentation
- **27.01.2026 + 30.01.2026**
  - **Presentation of your results (during the class). Should take approximately 10 to 15 minutes**
  - **You could also present your project earlier**
- 06.02.2026
  - Latest date to submit your work via e-mail (see submission part)