

2025/26 Homework assignment 1: Requirements

Send the required deliverables to Jana.Kosticova@fmph.uniba.sk with the subject **PTS2 HW1**.

The deadline is **29.10.2025 23:59:59**.

The university plans to upgrade its current Academic Information System (AIS2) to a new version, AIS3. Business requirements for AIS3 have already been defined, see "Business Requirement Document: AIS3", PTS2_HW1_BRD.pdf. However, due to limited documentation of the existing system, it is necessary to analyze the current solution to identify which new business requirements (BRs) are already fulfilled (and to what extent) and which remain unimplemented.

Deliverable (single file / PDF):

1. Glossary

- Common explanation for the domain concepts used in the rest of your deliverable
- **Format** — write a short definition (1-2 sentences) for each concept

2. Requirements

- **Implemented requirements** — list **5 functional requirements (FRs)** and **3 existing non-functional requirements (NFRs)** that are implemented in the *student interface* of AIS2 and can be traced to AIS3 BRs.
 - Each **FR** must be a different type (examples: *display* / *add* / *choose* / *set* / *save* / *submit* / *send*). Do not reuse the same type twice.
 - Each **NFR** must be a different NFR type (usability, performance, security, availability, maintainability, etc.). Do not reuse the same type twice.
 - For each requirement provide evidence it is implemented in AIS2 (a screenshot if possible, otherwise a short reproduction of the steps).
- **Missing requirements** — list **2 solution requirements** (FR or NFR) that are *not* implemented in AIS2 but would help meet one or more AIS3 BRs.
- **Trace and reason** — for **every** solution requirement listed (implemented + missing) provide:
 - Full traceability chain to each BR that is (directly or indirectly) supported by the solution requirement:
 - **FR/NFR → → higher-level requirements → → BR**
 - Use 2-5 intermediate steps. Avoid unclear steps!
 - Provide description of traceability chain. Explain exactly how the given solution requirement supports the related BRs, and whether it does so directly (the requirement itself has an effect) or indirectly (as part of a broader process), providing reasoning.
 - If relevant, state assumptions or dependencies
- **Format** — write a separate entry for each FR/NFR. Keep it concise (max ~200 words of reasoning each).

Other conditions:

- Write all requirements in **shall** form (e.g., "*The system shall display ...*").
- The listed requirements must be at the solution level (e.g., describe in detail what is / shall be implemented),
- The requirements listed must meet the "Quality characteristics" of requirements mentioned in the lecture.
- Do not write any requirements related to authentication.
- This is each student's own and independent work. Collaboration between students and the generation of content by AI tools are not allowed. Violation of this rule may result in zero points for this homework assignment and referral of the case to the disciplinary committee of FMFI UK.