

15 functional requirements:

- The System shall provide lecturers with the ability to register quiz questions in the form of single choice, multiple choice, open questions, picture puzzles and surveys, and may allow for later addition of other types of questions.
- The System should provide lecturers with the ability to search for specific previously registered questions.
- The System should provide lecturers with the ability to group registered questions into teaching subject areas.
- The System shall provide lecturers with the ability to compile a quiz made from previously registered questions in a predefined order by weighted points.
- The System should provide lecturers with the ability to repeat previous quizzes.
- The System should provide lecturers with the ability to compare quizzes of the same questions.
- The System shall provide lecturers with the ability to set a specific date, time and duration for completion of the quiz as well as choosing a setting for the order of the questions between the choices of sequential and random.
- The System shall block students from starting the quiz outside the specified date and time or entering answers after the test duration has expired.
- The System shall collect all quizzes at the end of the test duration and process the answers by comparing them to the sample answer in all question formats except open question and surveys.
- The System shall plot the resulting point values of the different quizzes into a histogram which should be available to be viewed the lecturer alongside a report generated from a model.
- The System shall provide up to 50 students with the ability to complete the quiz on different devices at once.
- The System will allow raising limit of students taking a test simultaneously up to 200 students or even higher in a later version.
- The System should provide students with the ability to log in to complete a quiz in the allocated timeslot.
- The System shall allow only one instance of a specific student to view the test at once.
- The System may allow reentry into the test after a disconnection of the device from the system if the timeslot is not over yet.

3 quality requirements:

- The software shall be developed BBD style.
- The System shall provide students with the ability to complete the quiz from desktop computers, tablets or mobile phones.
- The System should be easily accessible even on small screens.

2 boundary conditions:

- The System shall be available in 3 quarter 2026 at the latest.
- The System should be available even from outside of the university network.

