

MarkR Project: Phase 2

Functional requirements

For the second phase, I will firstly focus on completing the first feature: Recording exam results in a database. This was started in the first phase and should not require much work. Then, the features centred around calculating grades and further processing data will be started.

Use case

A typical use case for these features would be a teacher who has entered the marks for their classes' exam. They would like to know how each student went, assign a grade and give each student personalised feedback on how they went, both by topic and by difficulty level.

Features

Feature 1: Configuring exams

To enable calculation of results and personalised feedback, more data is required for the exams. These include:

- Marks allocated for each question
- The topic of each question
- The difficulty of each question
- The cut-offs for each grade boundary

These are entered on the one page for each exam.

Feature 2: Marking exams

Exams are marked by pressing "Mark" next to an exam in the "Exam list". The marker sees a page that looks like a spreadsheet, and they can fill in the marks for each question for each student. They can "Save and update" at any time.

Feature 3: Student summary

From the marking page, the teacher can see the marks awarded, percentage overall and grade for each student. If they want more details, they can press "Summary" next to that student to see a more details overview of that student's performance. This includes results for each topic and difficulty as well as their overall marks.

Feature 4: Tab to go to next student

Most teachers will mark the same question for each student, before moving on to the next question. Hence, it is convenient if the tab key moves down an input field, and not to the right. This feature will be added in by adding a "tabindex" to each input field in the desired order.

Feature 5: Class summary

The teacher will also be able to see an overview of how their class went. This will include the average percentage, grade and how the class went with each topic and difficulty level. This page is accessed from the marking page by pressing "Class summary".