**CSCB20 Assignment 3 Report**

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For this assignment, we were asked to extend the website we have created for Assignment 2, by creating a login system which differentiates student and instructor users and presents them with different views and functionalities made specific for them. We have managed to implement all the features required by the handout for this assignment and will explain their functionality in detail in this report.

We designed our login system so that the user is first greeted with a page summarizing the contents of the course, along with options to log in with an existing account, sign up for a new account or log out of the current session. If the user selects the option to sign up for a new account, they are given the option to sign up as either an instructor or a student, and are asked to provide their UTORid, email and a password to create an account. If the user selects the option to log in with their existing account, they are asked to choose their account type, as well as provide their UTORid and password in order to access the contents of the page. For both login and sign up, the default user type is set to student, since there are generally more students than instructors, in order to reduce the number of clicks made by the average user.

Once logged in, the users are given access to all contents of the website. In this updated version of the website, there is an added functionality of sending feedback, viewing grades, and requesting remarks or viewing feedback, adding grades, and responding to feedback, depending on whether the user is a student or an instructor, respectively.

Regarding the feedback functionality, from the student view, the users are prompted with a form where they are required to choose the instructor that they want their feedback sent to, as well as 4 questions that they need to respond to in order to submit their feedback. Once done with completing the form, students are required to press a submit button, which will redirect them to a success page, indicating that their feedback has been submitted successfully. If the feedback hasn’t been sent, they aren’t redirected. From the instructor view, the users are presented with a table, which displays anonymous feedback along with the date when it was sent. The user is only presented with the feedback that was meant for them and are not presented with the feedback that was meant for other instructors.

Regarding the Marks page and remark functionality, from the student view, the users can see their marks in a table format, as well as send remark requests to their instructors using the remark form located next to the question that the form is referring to. From the instructor view, the users can submit marks for their students, change their students’ marks or respond to their remark requests. Changing and viewing marks was combined into one interface to increase usability. When viewing a mark, an instructor can directly edit it in the table and click a Confirm Change button next to each mark for the change to be reflected in the database. All changes through the user interface are reflected in the database, and all database changes are reflected across the website upon page reload. In terms of remarks, student are able to submit requests and see the status of sent requests. Instructors can also view these requests and can choose to close said requests with or without changing student marks directly in the remark requests interface. If a student submits a request for an assignment they’ve already submitted a request for, the old request is overwritten.

For usability purposes, we decided to remove the MarkUs and Piazza elements from the navbar that were required in A2 and moved them into the resources page. As students are likely to be able to access MarkUs and Quercus themselves after a few visits to our website and to other courses that also use these services, we felt that it was more necessary to make space for new links – such as Marks – instead of keeping the old links there.

We were also able to deploy the website to Heroku, which was generally successful and without issues. There were a few bugs originally, but these were caused by how sensitive the Heroku system is to slight errors or inconsistencies. For example, some of the pdf’s no longer loaded when accessed through the deployed website since the file names are case-sensitive on Heroku but still opened normally with wrong capitalization locally. Furthermore, some issues were caused by having extra whitespace in the Procfile, which we originally had trouble identifying. Since we were already working on this assignment and A2 in GitHub, linking everything together was otherwise relatively painless.

In terms of splitting the workload, we tried splitting the workload into equal parts in an effort to complete this assignment in the most efficient manner. Everyone was responsible for about a third of the workload (33%), with Arailym working on the Marks and Remarks pages, Katarina working on the Feedback page and Dmitriy working on the login system and being responsible for deploying the website onto Heroku. Likewise, general bug-fixing and style changes were a joint effort, with each member checking through each other’s work and helping/making fixes were needed. All team members also contributed to this report.

Overall, we implemented all functionality required for this assignment, while splitting work equally and sticking to the stylistic theme we established in A2.