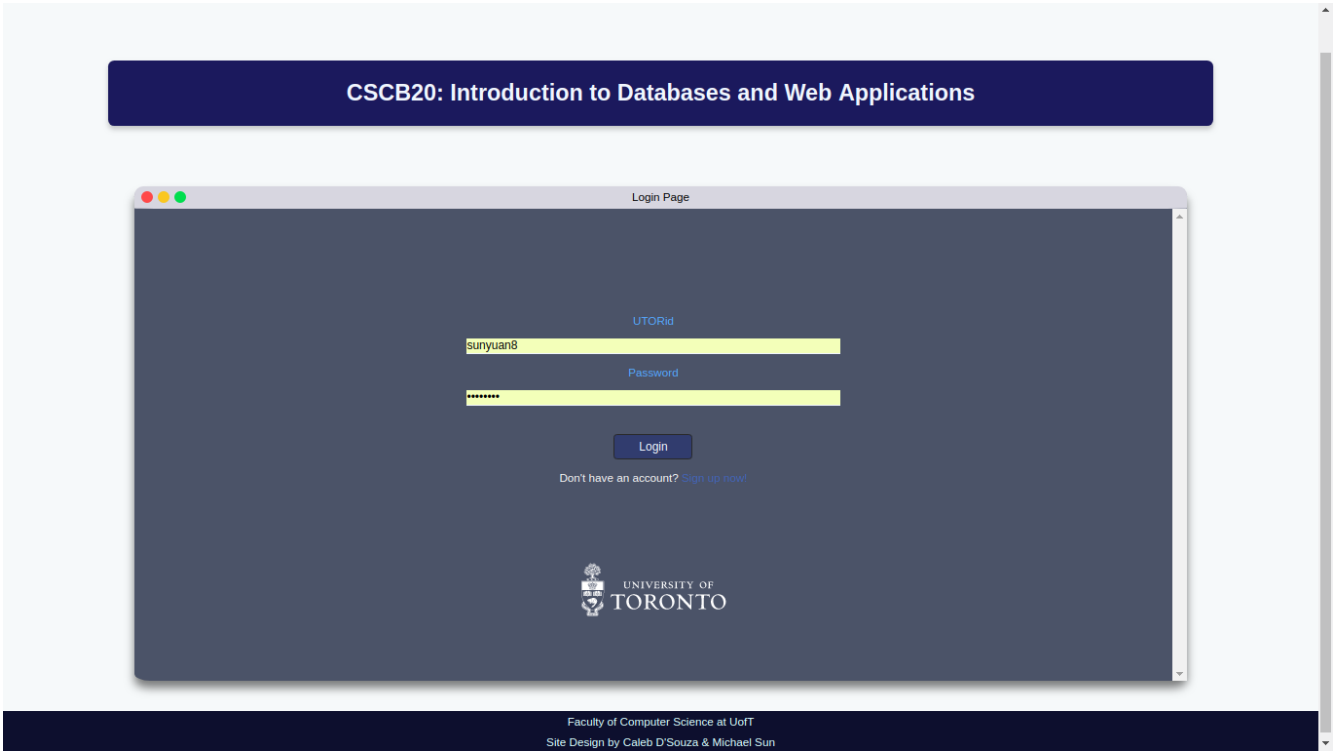
CSCB20 Assignment 3

Web URL: https://mathlab.utsc.utoronto.ca/cscb20/dsouz229/Course-Website-Redesign/login.php

This assignment was built off of the website we created in assignment 2 but also combines what we learned about databases and setting up the backend for our website to store all types of user info. It combines what we learned about user experience and storing data to make the website functional.

Right off the bat we realized we needed a login page for all the users who have affiliated accounts and to prevent access from everyone else. This was the start to our database and we decided to have a Login table that stores ID's, UTORids, passwords, and the user type (instructor, TA, student). Every other table in the database contains the ID column that is a primary key for their respective tables and is a foreign key that references the ID column in the Login table. To prevent any user from accessing the website by typing the URL to a different page we started taking advantage of session variables and if the session is invalid then we redirect the user back to the Login page. Below is a screenshot of the new login page.

Image 1: Where all the pages on the website redirect to if the user is not logged in.



Of course there are new requirements for the website where different users have access to different parts to the website. The instructors and TA's now need to be able to enter marks invidually for students and adjust accordingly as they also have access to the Remarks page. The instructor also needs to be the only person with access to the anonymous feedback page. We had to have several variable checks for each php file to make sure the appropriate links are being shown in the navigation bar for the user.

Image 2: Below is the feedback page for the instructor and the altered side bar as the instrucor has special privileges.

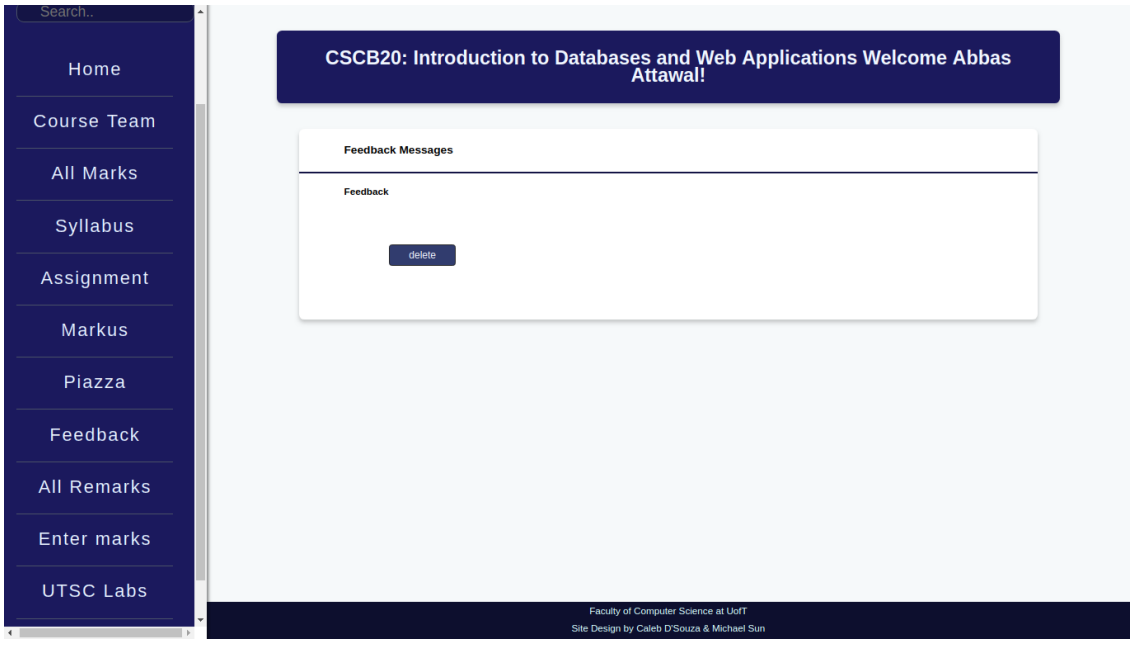


Image 3: Below is the Feedback page that the student user sees.

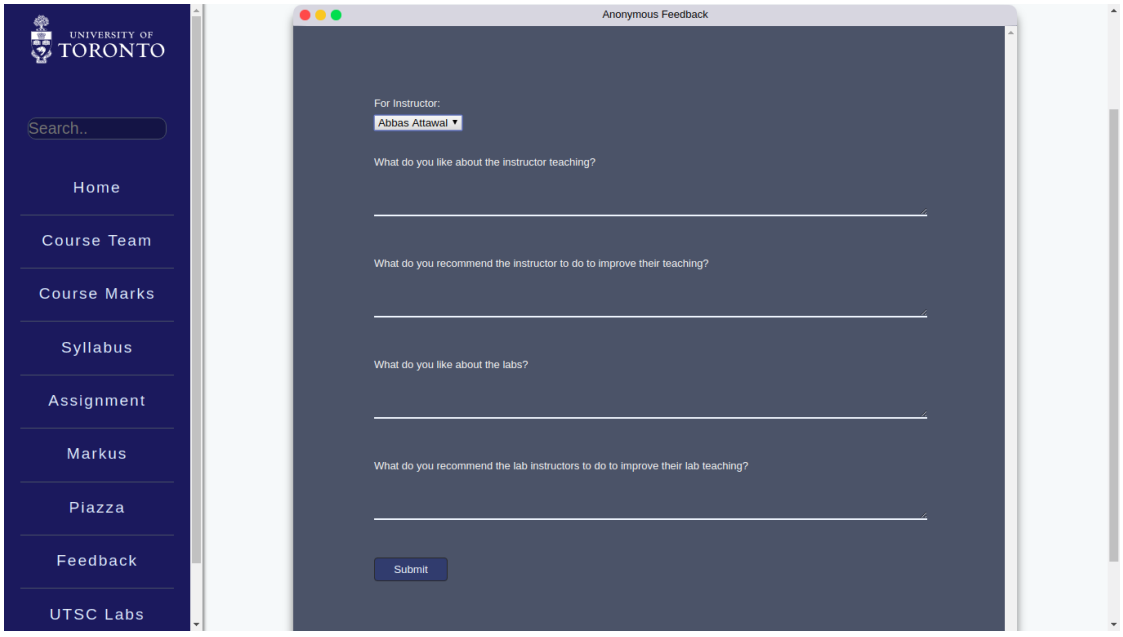
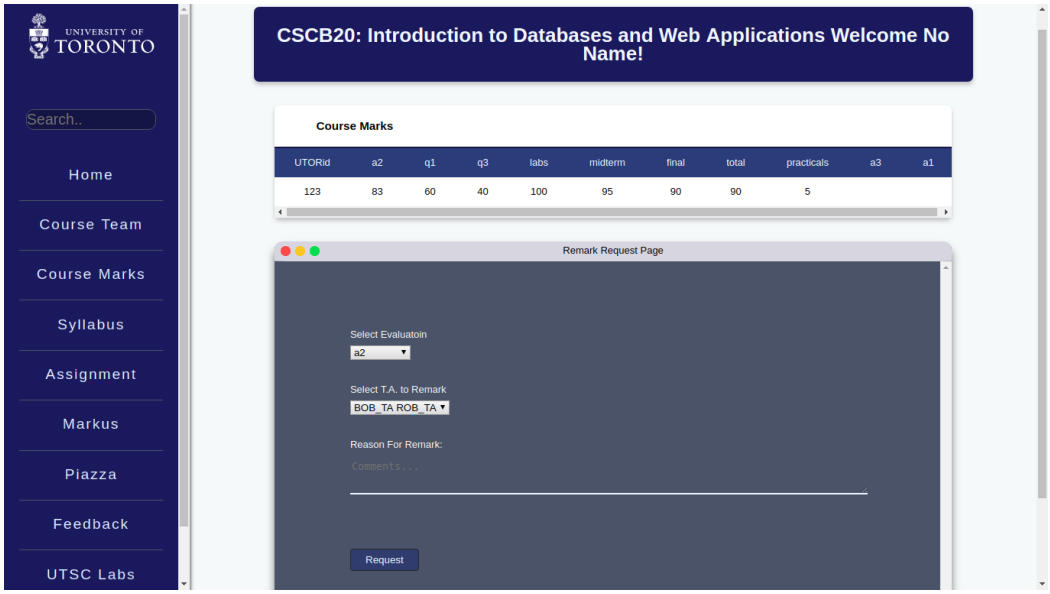


Image 4: Below is Course Marks page that a student user sees.



This assignment was very interesting because we learned how to connect our website to a database and store useful user information. The website essentially functions as a course website and markus at the same time with all the marks being stored and the instructors and TA's can alter a student's mark. The course marks page shows all of the students current marks and they can enter a remark request right here. As suggested as a bonus option the students can direct to a specific TA.

We also gave the instructor the ability to enter announcements on a seperate page as while being able to see how it shows up as it would under the home page.

Image 5: Here is the Announcements page that only the instructor has access to

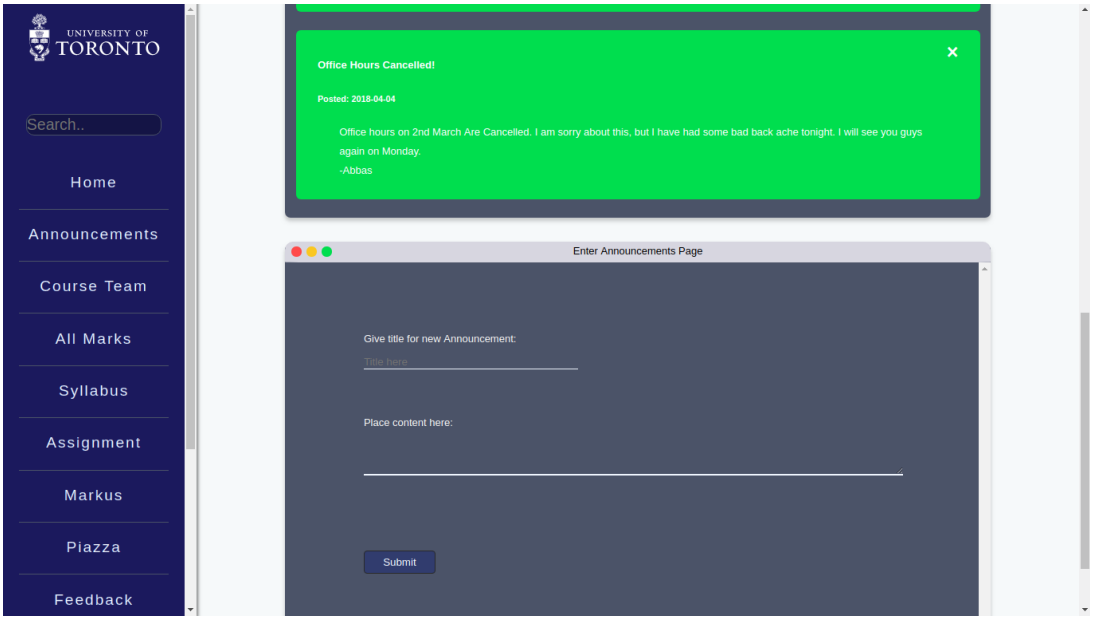
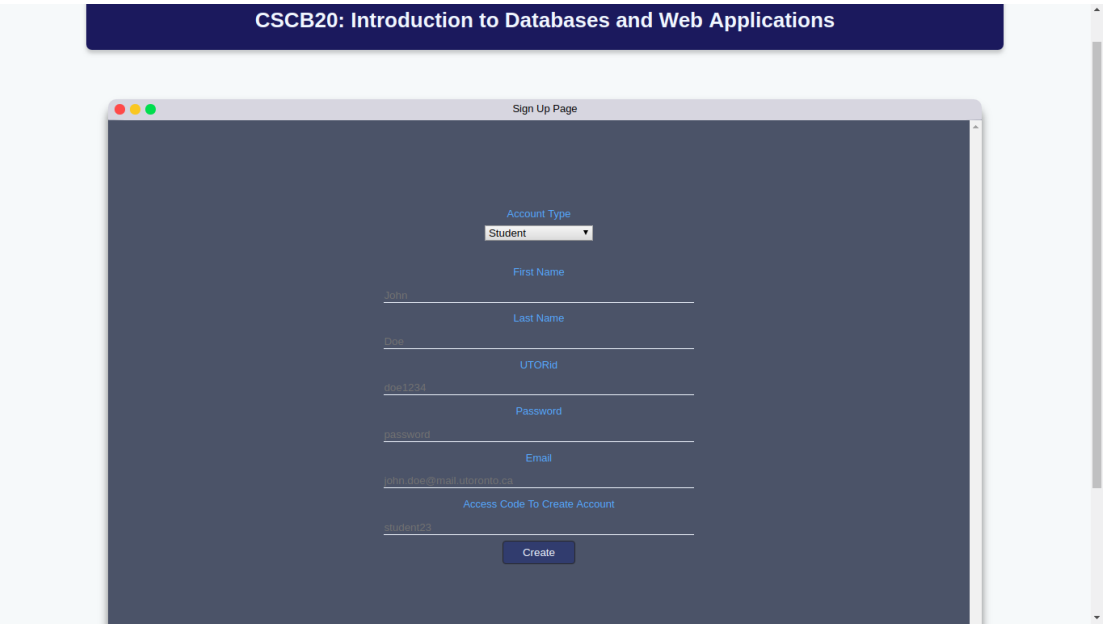


Image 6: Here is the Signup page for new users to the website



Currently there is no accountability for security so anybody can create any type of account to gain access of the website. This will insert data into the Login table and either the Student, TA, or Instructor table. This makes it much easier to insert users into the database rather than inserting into the Login table and an additional table.

From this assignment it became very apparent that setting up the back end to work synchronously with the frontend for a website requires very careful planning in designing the database and what on the website needs to be stored. Good design will also make debugging easier and implementing new features will make things run more smoothly.

There were challenges with managing our database and when we were testing our PHP and wanted to make changes to our data it would be very difficult changing the structure of our tables.
Again, this just enforces the idea of good design and having the foresight of what type of data you need.