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Final Project Report

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CSC 4610

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Introduction

For my final project, I decided to make an online assignment tracker that allows the user to create an account, and input assignments as a to-do list to keep track of them. I have always had trouble keeping up with assignments, especially in college, because they happen so often. The first thing I did when I started at LSU was find some sort of tracker to keep up with my important assignment dates. I decided to make the UI like a to-do list because I know how satisfying it is to finally cross that big assignment off the list when you are done with it. I hope you enjoy my website. I know it is not the best looking one, but I put in a lot of time and effort to make it work. Thank you.

System Overview

As requested, I created my website using the three-tier web application design. The application was deployed across two Amazon EC2 instances, one containing the presentation layer (UI) and the other containing the server side and data layers. The first instance runs the Apache Web Server hosting the static web content. The second instance runs Apache Tomcat server containing the Java servlets and MySQL database. Each servlet is assigned to a different path and completes a specific action.

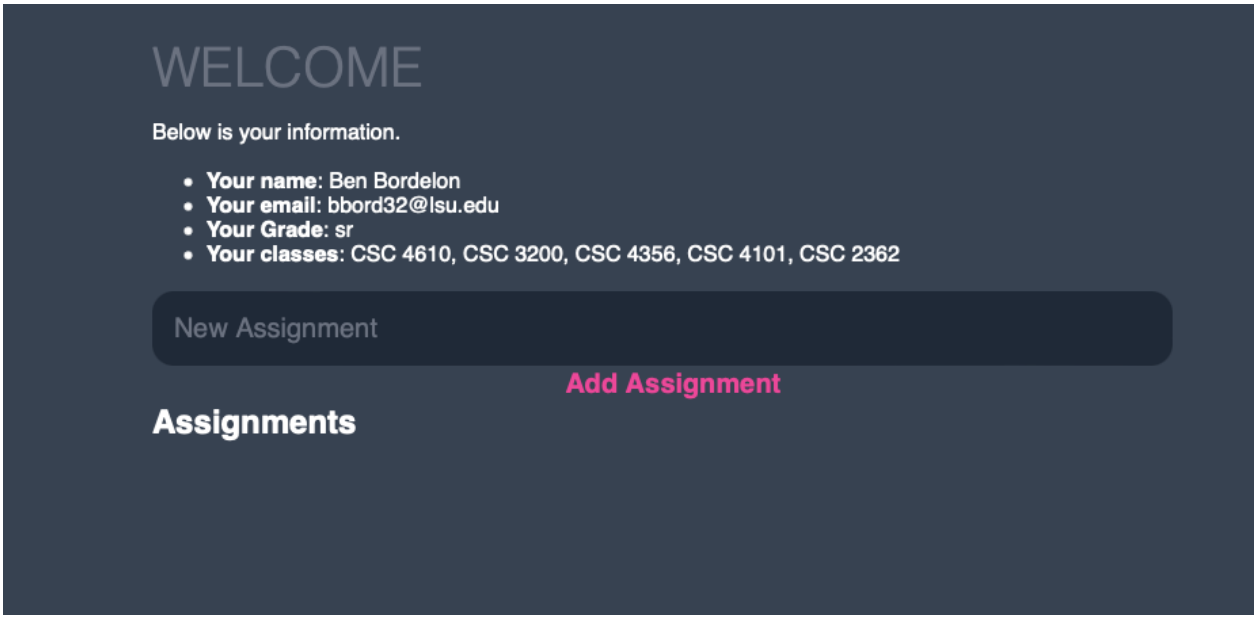
Design Overview

I used many different HTML, CSS, and JS files to create the website functionality and UI design. Each webpage has its own HTML and CSS, and the post-login and post-signup pages both use the same JS file. This is because they both preform the same functionality, with a few minor detail changes that I fixed on the servlet files. The login servlet uses the data from the login HTML and presents it to the user after they login with their created username and

password. The user is then able to add assignments as needed to keep track of them. The signup servlet also performs the same actions but instead pulls the information inputted by the signup page to present the data. After the signup is completed, the user's data is stored into the MySQL database and is pulled whenever the user logs in. If the user provides an incorrect password, they are informed that their password is incorrect and brought back to the login page. The way that the user data is stored in MySQL is shown below.

Name	Email	Password	Grade	Classes
Ben	Bbord32@lsu.edu	******	SR	*Inputted classes*

Also below are the servlet results of the successful signup and login attempts.



Conclusion

The final implementation of my Final Project is a fully functioning three-tier web application hosted on multiple EC2 instances and able to track user data and provide a successful online assignment tracker. The service is relatively free of bugs and given more time I would be able to make it even more user friendly and add extra services that allow for better tracking of assignments, classes, and other items. As a graduating senior I am glad that I got to experience developing a full web application and cannot wait to use these skills further in my career.