CSC 436: Web Applications

Lab 5

Goal:

Replace your json-server backend implementation with a Node.js backend implementation. Reference our in-class example code + end of Week 7 lecture, Week 8 Youtube lecture videos, and beginning of Week 9's lecture for guidance.

You may re-use portions of in-class example code and update as necessary.

Do not commit your MongoDB Atlas credentials to your git repository.
Do not commit your private keys to your repository.

1. Implement proper authentication using **bCrypt** to store credentials securely and authorize user requests using **jsonwebtoken**.
    a. When a user registers, passwords should be hashed using bCrypt.hash() before inserting into the database.
    b. When a user logs in, their plaintext password should be compared to the stored hash using bCrypt.compare(), if comparison returns true, a body containing an access_token should be returned. The payload should be the user's database ID.

2. Creating, toggling, or deleting a Todo require an Authorization token to be passed and a user should only be able to perform these operations on their own todos. Store the Authorization access_token in your React application and send it as a header when issuing these requests.
    a. You can reference the Post Express Router we built in class when working on this, but you will need to:
        i. Update the POST route handler to deal with `complete` and `dateCompleted` property.
        ii. Add a DELETE route handler + implement logic to delete a todo.
        iii. Add a PUT or PATCH route handler for toggling a todo's complete property

Submission

1. Add and push commits containing changes for lab 5 to your last lab's repo. No need to worry if you have not yet received a grade for lab 3-4 prior to pushing, I will look at your commit history if need be.
2. Submit the link to your git repo to the lab 3 dropbox folder. This will indicate to me that your repo is ready for grading.

Do not upload your connection URI or DB credentials to GitHub, replace this value with an empty string.
Do not upload your private key to GitHub, replace these value(s) with an empty string.