

Assignment 3 Report

1. Features Implemented:

I completed the entire assignment on my own, which proved to be quite challenging and time-consuming. However, I managed to implement all the required features, including:

- a) Login Page Creation: I created a login page for CSCB20, allowing only registered users to access the course materials such as lecture notes, lab materials, course team information, etc. Additionally, there is an option to register new users, whether they are students or instructors.
- b) Homepage Redesign: To accommodate the login functionality, I redesigned the homepage of the website to allow new users to create accounts easily.
- c) Password Hashing: I ensured that passwords stored in the database are hashed for security purposes.
- d) User-specific Content Access: Both students and instructors have access to specific content on the website, such as grades and feedback forms.
- e) Grade Display and Submission: Students can view their current scores for assignments, midterms, labs, and final exams. They can also request regrading by submitting a request form.
- f) Anonymous Feedback: I implemented a special page where students can submit anonymous feedback to instructors regarding teaching methods, lab experiences, etc.
- g) Instructor Grade Viewing and Feedback: Instructors can view the grades of all students and access anonymous feedback submitted by students. They can also view and respond to grade review requests.

2. Team Member Contribution:

I worked independently on this assignment, contributing 100% of the work.

3. Challenges Faced:

Despite successfully completing the assignment, I encountered several challenges along the way:

- a) Difficulty Accessing Files in VS Code: Initially, I struggled to open files using `url_for` links in VS Code because the website had to be accessed through the localhost server, which caused inconvenience compared to the local file access in Assignment 2.
- b) Database Structure Oversight: I overlooked including student names in the database structure initially, which caused complications later when I wanted to add this feature and had to modify the database structure.

- c) Handling Empty Grade Fields: I faced issues when trying to input student grades, as leaving some fields empty resulted in errors due to null values. I resolved this by setting empty grades to None.
- d) Duplicate Grade Records: I inadvertently recorded duplicate grade records in the database, causing repetition when displaying grades to instructors. I solved this issue using SQLAlchemy.

Despite these challenges, I persevered and successfully completed the assignment. Overall, it was a difficult task, but completing it was a rewarding experience. I am grateful to the professor for providing me with this practicing opportunity.