**Pass task 9.1P: Clear text password and deprecated functions**

- To complete Task 9.1p even in innovative tasks such as creating an eMagazine, there is a methodical way of doing things for each procedure, thus it felt awkward to put it this way like I did in Task 9.1p, as a parenthesis. First of all for 9.1P I went through the source code and realized that the clear text password for the student account was replaced by the encoded password.

- As a target for this experiment, I wanted to perform the same action on the Google account of the lecturer and the administrator. In the second input task, I was to search for these accounts' definitions in the source code and focus on where passwords were stored.

- Afterwards, I employed bcrypt-generator to create passwords for the admin and lecturer's accounts, which of course, are encrypted. I then typed in the passwords I planned to use for each, showed the bcrypt version of each of the two and copied them.
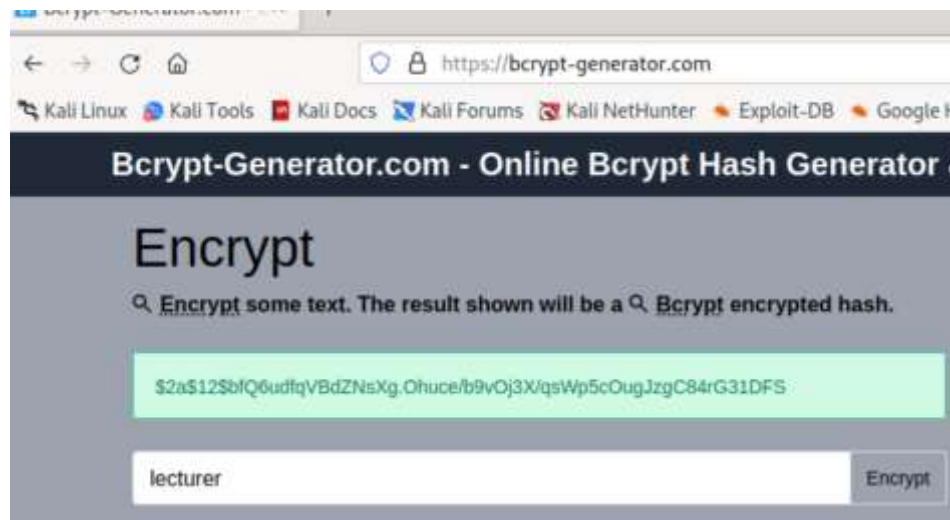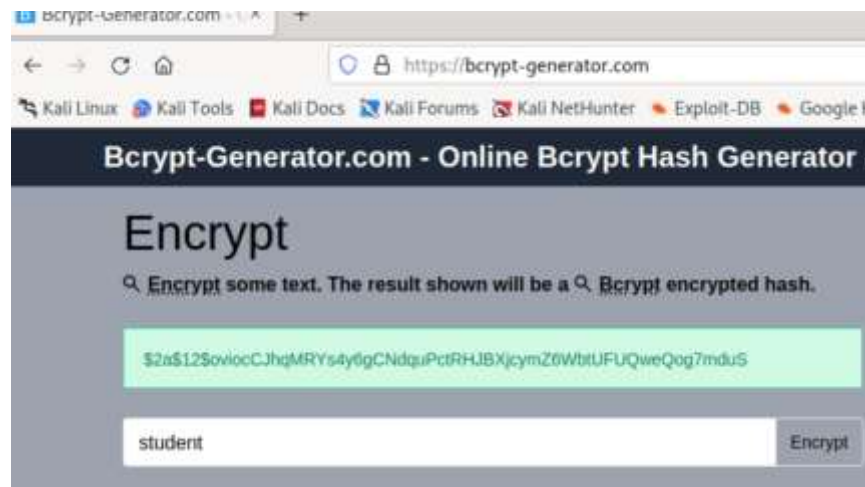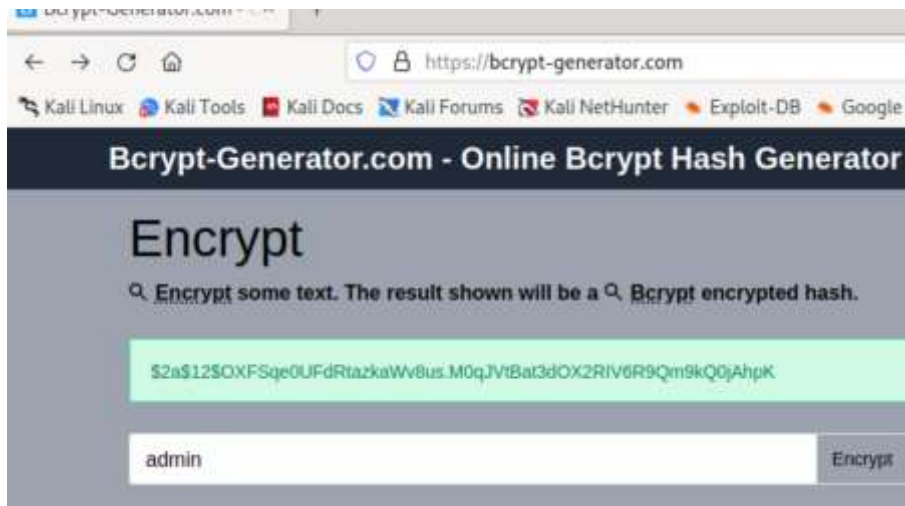
- To do so I modified the source code after the encrypted passwords were created to ensure that the developed program only uses the newly encrypted passwords and also exclude the admin and the professor's plain text passwords. To be more precise, I paid much attention to the fact that the code's password verification side should take it in the same manner as the student account did it. To ensure that the system is also able to allow for the lecturer and admin login if ever, I have provided any missing logic or variables as well.
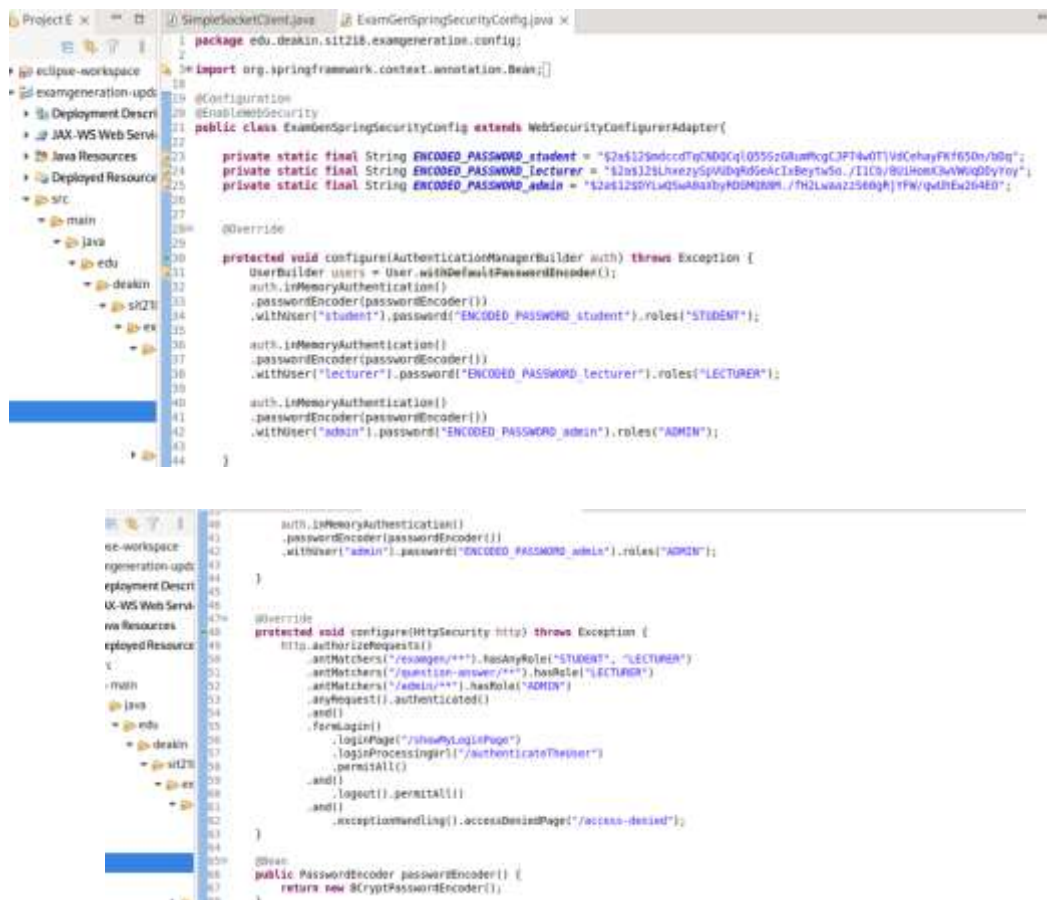
- The required code changes to the application of my portable computer were made before it was run from the local site. I also ensured that the admin and lecturer accounts were able to get to the exam generation web application home page by successfully typing in the newly encoded passwords. After the lecturer's and admin's accounts had logged in and displayed the home screen I took pictures of their accounts.
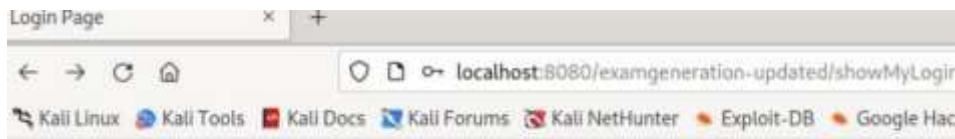
I used the student account to log in.
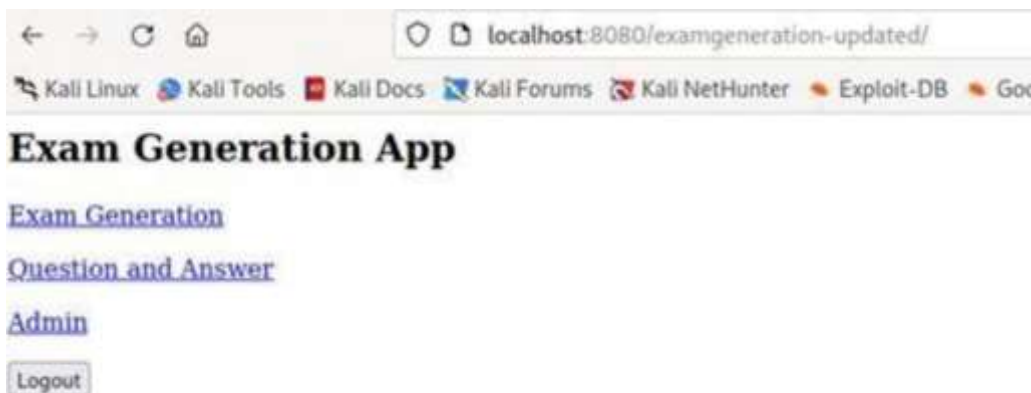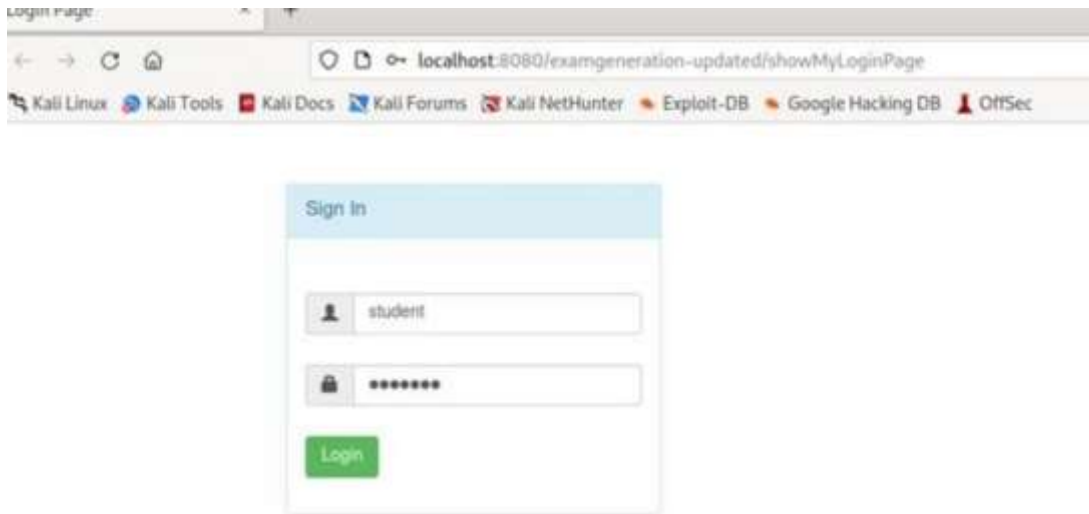
I used the lecturer account to log in.
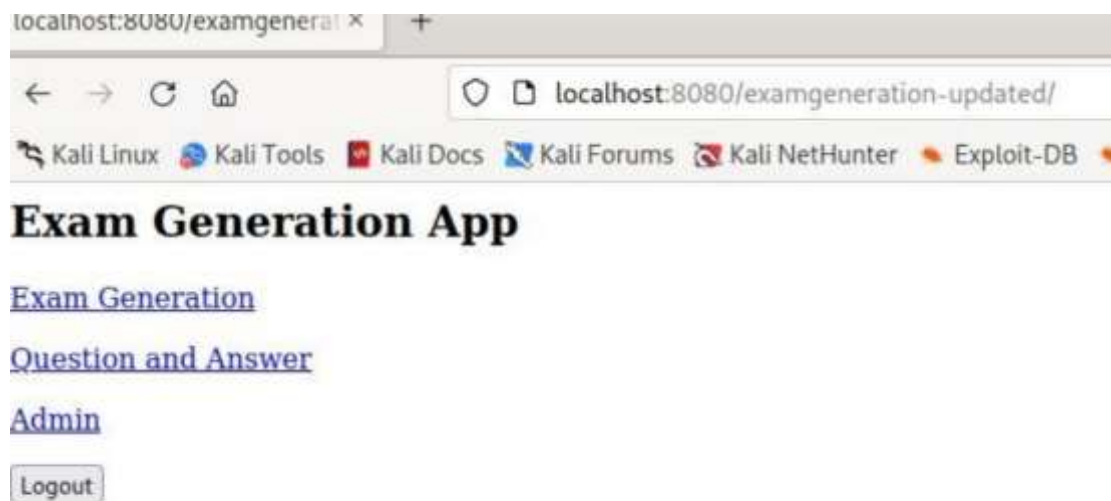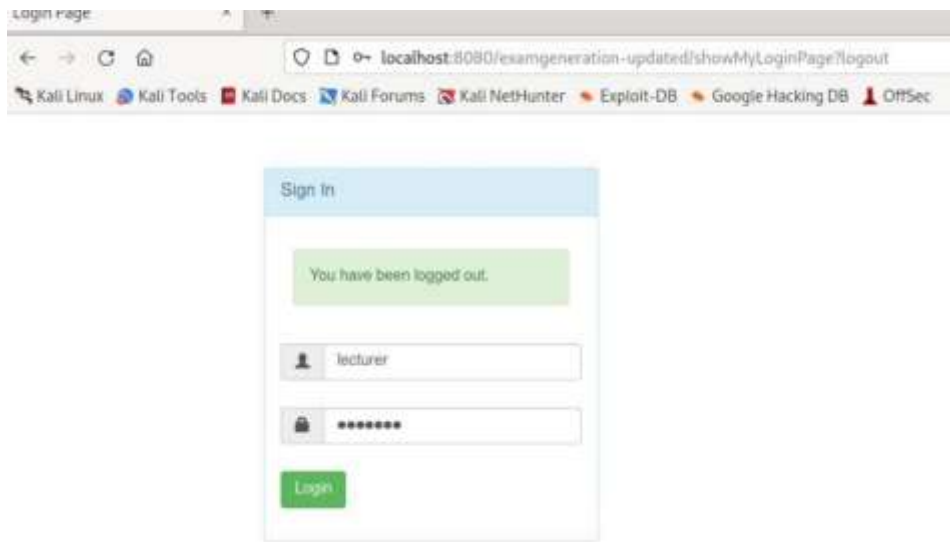
I used the admin account to log in.

- To address this, I altered the plaintext passwords of the professor and the admin of the source code into bcrypt forms. I checked that after modification, both accounts could view the home page of the exam generation web application with the revealed feature of the improved way of logging in to it.