Project 3 Report

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1 Team Details

Bhavya and I worked on this project together. You can find the netids above.

1.1 Collaboration

Bhavya worked on parts 3 and 7. I worked on 4 and 5. We both did 6. We discussed testcases with other colleagues, and used resources like stack overflow for troubleshooting purposes.

2 Implementation

We were able, to the best of our abilities, to test and verify our implementation works as intended.

3 Developement Process

Overall, the assignment helped us learn about the HTTP protocol and cookies. The given source code look nice, although it would've been better if there was an explicit main function.

- The first two steps was trivial, only needing to understand what the code was doing.

- The third step was also very straight forward. It was simply the matter of implementing a keyvalue table for the username and password, and the secret key.

- Step four was slightly challenging, but doable with the help of helper functions.

- Step five was alright, as it was simply the matter of sending a cookie.

- Step six was the most difficult part of this project.

- this was where we had to actually look up the cookie value, and return the correct page if it was correct.
- The hardest part was refactoring the script such that, if the cookie is found, we'd skip rendering the login page.
- It took both of us to implement it ,but we got it working.

- step 7 was nice and straight forward.

4 Reflection

This assignment was certainly difficult, but we learn quite a lot:

- We learned how http works at the TCP level. Specifically, what the header cointains, how what happens behind the scenes when we load a webpage

- We also learned about cookies, and how they work. Essentially, Cookies serve as a sort of save state for a webpage, and the server is responsible for reading the cookie, and returning the correct data to the client.