Iteration 3 Report
EECE 2560: Fundamentals of Engineering Algorithms
Student Registration System

Kyle Preger
Department of Electrical and Computer Engineering
Northeastern University
`preger.k@northeastern.edu`

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Important: Each student must submit individually, even though the project is completed as a team. Prepare this report in **Overleaf** and export it as a **PDF** for submission.

GitHub Link: `https://github.com/leoleocantyousee/Computing_Fund_Final_Project`

Contents

1   Summary of Team Progress and Development Updates

Provide a brief overview (1–2 paragraphs) of your team's progress during Iteration 3 of the Student Registration System. Include:

- We aimed to have a functional website by the end of this iteration that could simulate all the functionality of our final project. While Rafi and Leo focused on producing this functional prototype, I focused on setting up the SQL database and started working on how to integrate the SQL into the Python and html.

- Currently, we have the working prototype in place. We have set up the website and the relevant python code to interact with it to check out, return and add books, and validate users. We achieved this largely through dictionaries, and added a feature to store data on text files for consistency between sessions. For the next iteration, we will work on finding a clean way to integrate the SQL database into the existing website and python code.

2   Implemented Core Features

Describe the main features developed during Iteration 3. For each feature, provide:

- **User Management** We did this by creating dictionaries that are then stored in text files to retain user information. The html side then integrates with the python code, which will check if the username and password are correct before logging in. We tested this by creating test users and logging into the website with correct or incorrect user information.

- **Book Management:** This was also done through python functions integrated into the html. We added functionality such as add book, checkout and return. This was tested through running the python code, simulating these actions, and checking inventory. They all worked as intended.

3   Challenges and Resolutions

Briefly discuss the main technical or organizational challenges faced during Iteration 3 and how they were resolved.

- **Challenge 1:** Maintaining information between sessions in Python **Resolution:** To resolve this, stored data on text files locally that are then loaded into the program when it runs.

- **Challenge 2:** Figuring out how to incorporate HTML into python database.
  Resolution: To resolve this, we had python generate the html. This works well for demonstration purposes and allowed us to test the html integration effectively.

4   Leadership Rotation and Team Contributions

Summarize leadership rotation and contributions of each team member during Iteration 3. Even though this is a team project, each student must describe their *individual role and contribution* here.

Leadership Summary

Week/Span	Leader	Responsibilities	Key Outcomes
Week 1	Leonardo Fernandes	HTML and UI design	Created functional UI
Week 2	Rafi Bachir	Addition of Python	Python Integration and Functions (Checkout, Return, Add Book, User Validation)

Individual Contributions

Team Member	Contributions (Technical / Documentation)	Hours
Kyle Preger	Helped integrate html and python, set up SQL database and started work on integration	6 hrs
Rafi Bachir	Integrated Python into HTML, worked on functions	7 hrs
Leonardo Fernandes	Designed working HTML UI	5 hrs

Statement by the Individual Submitter

I, **Kyle Preger**, confirm that the above table accurately reflects my personal contributions during Iteration 3.