EE/CprE/SE 491 Weekly Report 1

August 26 to September 19, 2024

Group number: 14

Project: Computer Science Course 309 Dashboard

Client/Advisor: Dr. Simanta Mitra

Team Members:

Bradley Gaines - Component Design, Cross-Component Integration

Breckin Bartels - Testing, Component Design

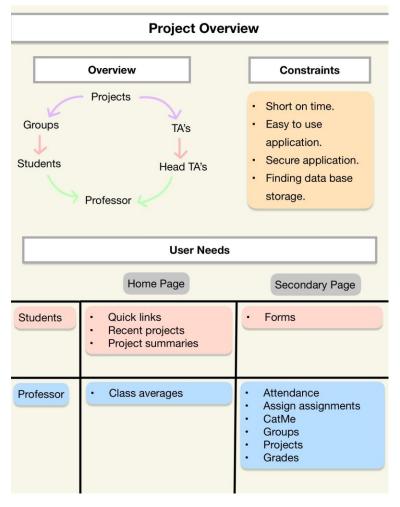
Kat Christofferson - Component Design

Ria Patel - Team Organization and Documentation, Project Manager

Thomas Payton - Component Design, Testing

Varun Jain - Client Interaction, Component Design, Cross-Component Integration

Weekly Summary



This week, our group's main objective was to create an outline for our project. As seen on the left, we brainstormed which groups are involved, initial constraints, and basic user needs. We were able to create this outline without client instruction due to several team members' experience with this course in previous semesters. After meeting with our client, Dr. Mitra, we were able to elaborate on our project overview and gain insight into the pain points of previous capstone groups that have attempted this project. Dr. Mitra was satisfied with the overview, and we talked about possible extensions to be added once the application is drafted.

Past Week Accomplishments

Bradley Gaines:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.

Breckin Bartels:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.

Kat Christofferson:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.

Ria Patel:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.

Thomas Payton:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.
- Set both previous group's code bases up and ran them on my local machine.

Varun Jain:

- Collaborated in making a project overview schematic.
- Discussed and reviewed previous project group's code and documents.
- Acquired a VM for testing and running our development server.

Pending Issues: None

Individual Contributions

Name	Individual Contributions	Hours	Hours
		This	Cumulativ
		Week	e
Bradley Gaines	Group conceptual thinking. Old code	2	2
	and document analysis.		
Breckin Bartels	Group conceptual thinking. Old code	2	2
	and document analysis.		
Kat Christofferson	Group conceptual thinking. Old code	2	2
	and document analysis. Set up my user		
	in out VM.		
Ria Patel	Group conceptual thinking. Old code	2	2
	and document analysis.		
Thomas Payton	Group conceptual thinking. Old code	2	2
	and document analysis. Environment		
	setup.		
Varun Jain	Group conceptual thinking. Old code	2	2
	and document analysis. VM		
	acquirement.		

Plans For the Upcoming Week

Bradley Gaines:

- Pick apart old code:
 - o Identify out what works and what doesn't.
 - o Identify what pieces can be utilized by our group.
 - Identify what possible modules and libraries could be of use to us based on previous teams' documents.

Breckin Bartels:

- Help set up project repository on git lab.
- Clone repository to local machine.
- Help set up preferences on VM.
- Pick apart old code:
 - o Identify out what works and what doesn't.
 - o Identify what pieces can be utilized by our group.
 - o Identify what possible modules and libraries could be of use to us based on previous teams' documents.
- Research the difference between a couple different databases.

Kat Christofferson:

- Pick apart old code:
 - o Identify out what works and what doesn't.
 - o Identify what pieces can be utilized by our group.
 - Identify what possible modules and libraries could be of use to us based on previous teams' documents.

Ria Patel:

- Pick apart old code:
 - o Identify out what works and what doesn't.
 - $\circ\quad$ Identify what pieces can be utilized by our group.
 - o Identify what possible modules and libraries could be of use to us based on previous teams' documents.
- Help set up preferences on VM.
- Work on a preliminary mockup for what our website could look like.

Thomas Payton:

- Pick apart old code:
 - o Identify out what works and what doesn't.
 - o Identify what pieces can be utilized by our group.
 - o Identify what possible modules and libraries could be of use to us based on previous teams' documents.
- Decide what our stack should look like (frontend, backend, DB, servers, etc.).
- Work on a preliminary mockup for what our website could look like.

Varun Jain:

- Pick apart old code:
 - o Identify out what works and what doesn't.
 - o Identify what pieces can be utilized by our group.
 - o Identify what possible modules and libraries could be of use to us based on previous teams' documents.
- Add software to the VM as would be required of our preliminary stack design.
- Work on some improvements to the extracted code.

Weekly Advisor Meeting Summary

Our group met with our client, Dr. Simanta Mitra, on September 12, 2024. After initial introductions, Dr. Mitra walked us through his proposal for the Computer Science 309 Dashboard project. Dr. Mitra informed us that two previous capstone groups have attempted this project, and were unsuccessful in completion. Our group was tasked with reviewing the code of previous groups to identify pain points and find guidance in the direction of the project. Dr. Mitra talked to us about his desired primary functions:

- Attendance:
 - o Image reader for hand written attendance sheets.
 - o Tracker for missed attendance trends.
 - o Images of students for identification purposes.
- Assignments:
 - o Breakdowns of assignment grades.
- Lab:
 - o Status of the next demo.
- Comments/Feedback:
 - o Information from the TA's.
- Overall grades:

- o Breakdown of overall grades with a color code.
- Team retrospectives after each sprint.
- Initial and final reports:
 - o Individual reports.

Dr. Mitra mentioned wanting to add on extension features once the application is drafted, including ABET data and AI help. We will elaborate when possible.