EE/CprE/SE 491 Weekly Report 2

September 20 to September 26, 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, we focused on analyzing the code that Dr. Mitra shared with us from previous groups that have attempted this project. By analyzing the code, we were able to identify which segments of code we are going to recycle, which segments we will have to formulate, and which segments could be beneficial with some modifications. We also set up our project repository on GitLab so we can share access to all project files for better collaboration. We started updates on our capstone website, including individual profiles and project overviews. We were also able to acquire our VM for the database to run through. With these milestones completed, we researched the differences in a few databases to get a better idea for our project. We also researched and worked through our project separation (frontend, backend, security, etc.) in order to have a better scope of planning out what we will need to accomplish in the next few weeks. Below is a snippet from our website, showing our team members, their role in the project, and their majors!

Team Members

Bradley Gaines	Breckin Bartels	Kat Christofferson	Ria Patel	Thomas Payton	Varun Jain
Component Design, Cross-Component Integration	Component Design, Testing	Component Design	Project Manager, Team Organization and Documentation	Component Design, Testing	Client Interaction, Component Design, Cross-Component Integration
Major: Computer Engineering	Major: Software Engineering	Major: Cybersecurity Engineering	Major: Electrical Engineering Emphasis: Computer Engineering	Major: Software Engineering Minor: Cybersecurity Engineering	Major: Computer Engineering

Past Week Accomplishments

Bradley Gaines:

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

Breckin Bartels:

- Helped set up project repository on git lab.
- Cloned repository to local machine.
- Helped set up preferences on VM.
- Picked apart old code:

- o Identified what works and what doesn't.
- o Identified what pieces can be utilized by our group.
- o Identified what possible modules and libraries could be of use to us based on previous teams' documents.
  - Researched the difference between a couple different databases.

Kat Christofferson:

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

Ria Patel:

- Picked apart old code:
  - o Identified what works and what doesn't.
  - o Identified what pieces can be utilized by our group.
  - o Identified what possible modules and libraries could be of use to us based on previous teams' documents.
- Helped set up preferences on VM.
- Worked on a preliminary mockup for what our website could look like and made necessary updates.

Thomas Payton:

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

Varun Jain:

- Picked apart old code:
  - o Identified what works and what doesn't.
  - o Identified what pieces can be utilized by our group.

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  - - o Identified what possible modules and libraries could be of use to us based on previous teams' documents.
- Added software to the VM as would be required of our preliminary stack design.
- Worked on some improvements to the extracted code.

Pending Issues: None

Individual Contributions

Name	Individual Contributions	Hours This Week	Hours Cumulative
Bradley Gaines	Picked apart old code.	3	5
Breckin Bartels	Picked apart old code. Research. Set up GitLab and VM.	2	4
Kat Christofferson	Picked apart old code.	2	4
Ria Patel	Picked apart old code. Worked on website.	3	5
Thomas Payton	Picked apart old code. Stack research. Set up GitLab.	2	4
Varun Jain	Picked apart old code. Set up VM.	2	4

Plans For the Upcoming Week

Bradley Gaines:

- Assist with revamping 2023 front end for usability.
- Help map out relations and database layout.
- Figure out front end needs and organization.

Breckin Bartels:

- Assist with Figma mockup.
- Assist with putting together a database structure with objects and relations.
- Set up MySQL database on server.
- Look into starting milestone and issues in GitLab. (Maybe hold off on this)

Kat Christofferson:

- Discuss the backend Data structure with a teammate.
- Download the necessary technology needed for backend development.

- Start to implement the MySQL database.

Ria Patel:

- Update our website:
  - Status reports.
  - Documents.
  - Sketches.
  - Project overview/explanation.
- Figure out organization for frontend, backend, etc.

Thomas Payton:

- Finalize what stack we'll use.
- Create a diagram/sketch of the project architecture.
- Start a Figma for how the website could look.

Varun Jain:

- Assist with putting together a MySQL database structure.
- Figure out FERPA compliance for Canvas Grades
- **Look into technologies for OCR via existing frameworks or for self-development.**

Weekly Advisor Meeting Summary

- Extended wants:
  - Dr. Mitra would like to scan in weekly assignments and gather attendance through that.
  - Dr. Mitra would like to upload pdf of images and names of students, and assign these to teams.
  - CATME data will come from a CSV file that Mitra wants to upload to the website.
    - Parse this data and display it nicely.
  - Look at FERPA compliance for canvas grades.
    - Where do we fail, where do we pass.
    - What do we need to do to be fully FERPA compliant.
  - Have some sort of quick search for looking up students.
- Deliverables for next meeting (two weeks):
  - Have a database structure with objects and relation ready to present to him.
  - Have some sort of frontend architecture diagram ready to present.

- - Possibly have a figma mockup for a couple pages.
- Other:
  - He was pleased with us getting the other groups projects running for him!
  - We probably need to start development here shortly.