EE/CprE/SE 491 Weekly Report 6

October 19 to October 25, 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*

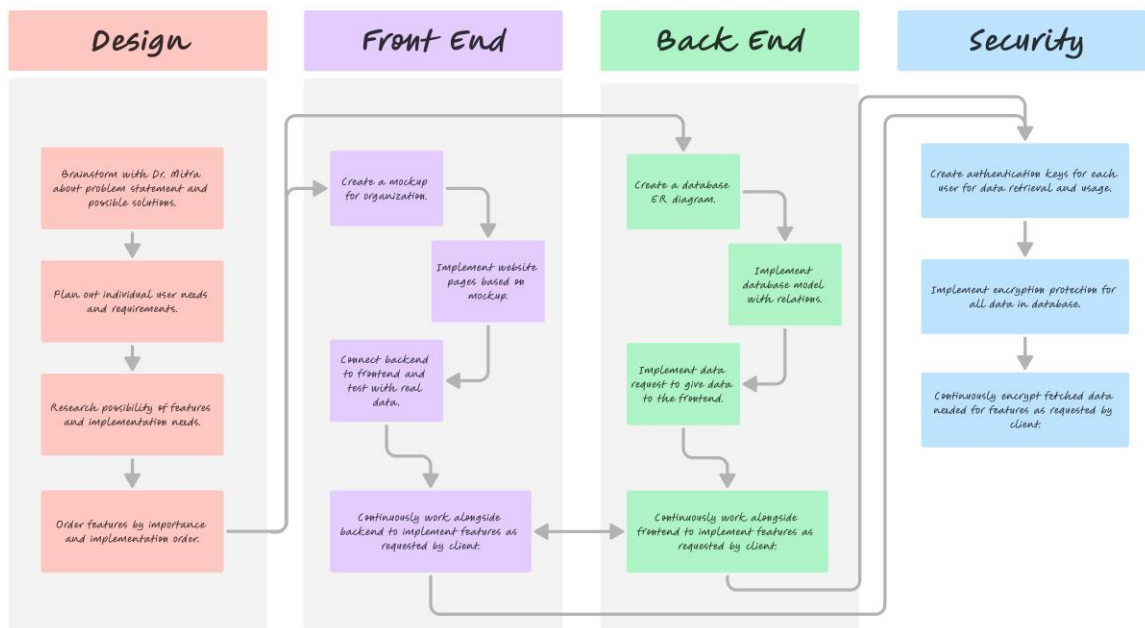Ria Patel - *Team Organization and Documentation, Project Manager*

Thomas Payton - *Component Design, Testing*

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

Weekly Summary

      This week, we continued to focus on setting up our front end and back end separately. For the frontend, we started adding more pages to the application and updated our high level Figma mockups. We also researched how to integrate a file uploader and database calls that may be necessary. We then finalized designs and screen flow with Dr. Mitra to make sure we were on the right path. For the backend, we implemented Type ORM, established connections to the database and updated our ER diagrams. We researched how to make calls to Canvas, what accessibility keys we may need, and how to grab data from Google Forms and CatMe. As always, we updated our website to make sure we had our most recent diagrams/work available for Dr. Mitra's access. Below is a picture of our task decomposition. As you can see, we are making great progress!

Task Decomposition

Design	Front End	Back End	Security
Brainstorm with Dr. Mitra about problem statement and possible solutions.	Create a mockup for organization.	Create a database ER diagram.	Create authentication keys for each user for data retrieval and usage.
Plan out individual user needs and requirements.	Implement website pages based on mockup.	Implement database model with relations.	Implement encryption protection for all data in database.
Research possibility of features and implementation needs.	Connect backend to frontend and test with real data.	Implement data request to give data to the frontend.	Continuously encrypt fetched data needed for features as requested by client.
Order features by importance and implementation order.	Continuously work alongside backend to implement features as requested by client.	Continuously work alongside frontend to implement features as requested by client.	

Past Week Accomplishments

Bradley Gaines:

- Learned and implemented Type ORM in the backend.
- Established connections to database.

Breckin Bartels:

- Started routing frontend to add more pages.
- Started working on getting a file uploader working (This will be a page).
- Determined what database calls are needed for early-stage development.
    - Determined when these need to be implemented.

Kat Christofferson:

- Implemented data base using Type ORM
- Worked on Updating the Diagram for Database.

Ria Patel:

- Updated our website:
    - Status reports.
    - Documents.
    - Sketches.
    - Project overview/explanation.
- Updated mockups/schematics.
- Researched typescript commands/functions.

Thomas Payton:

- Continued to implement high level Figma mockups into Next web app.
- Finalized designs and screen flow with Mitra to ensure we're going in the right direction.

Varun Jain:

- Implemented Database in Type ORM.
- Figured out if we need keys for accessibility.
- Figured out how to grab Catme and google forms data.

Pending Issues: None

Individual Contributions

Name	Individual Contributions	Hours This Week	Hours Cumulative
Bradley Gaines	Learning TypeOrm, trying to learn how students will be added from front end all the way to database	5	24
Breckin Bartels	Added a few new page baselines, and added routing to them. Fixed a few minor stylistic things.	5	24
Kat Christofferson	Assisted with Implementing the controller, the tables, and the routes. Created Get request for each table.	6	24
Ria Patel	Updated website. Updated schematics/diagrams. Learning Typescript commands.	6	25
Thomas Payton	Continued work on Figma mockups and added team specific drilldown pages to the Next web app.	6	24
Varun Jain	Assisted with Implementing the controller, the tables, and the routes. Created Get request for each table. Updated the ER diagram.	6	25

Plans For the Upcoming Week

Bradley Gaines:

- Backend work
- Figure out how to add students from a csv (file transfer? Decomposition?)

Breckin Bartels:

- Possibly make a few more page outlines.
- Work on a file uploader.
- Work with backend to transfer data for login?
  - Could also work with them on how to transfer files to them.

Kat Christofferson:

- Assist in finishing up the Get APIs.

- Work on figuring out how to get some of the data needed.
- Possibly assist with getting the backend connect with the frontend.

Ria Patel:

- Update our website:
  - Status reports.
  - Documents.
  - Sketches.
  - Project overview/explanation.
- Update mockups/schematics.
- Research typescript commands/functions.
- Assist with connected frontend and backend.
- Research call commands.

Thomas Payton:

- Update the Next home page according to specifications from Mitra
- Figure out optimal way to design home screen
- Update Figma mockups with new ideas
- Added more detail to team drill down pages

Varun Jain:

- Update the ER diagram
- Fix up table implementation
- Figure out how to get details from Canvas
- Assist with extracting data from CSV to the database.

Weekly Advisor Meeting Summary

(Notes below are from our meeting with Dr. Mitra on October 24. We meet biweekly, making our next meeting November 7).

- Screen flow diagram demo:
  - Primarily the view of professor, head TA, or TA.
  - Head TA should have same rights as the instructor once initialized.
  - Client thinks it is a good iteration but keep mind open for changes.
- ER diagram demo:
  - Add a table for assignments/grades.

- - - Integrate canvas? Could be risky.
  - Client thinks it is a very thought out but keep mind open for changes.
- Front end application demo:
  - There are lots of teams (~150) so it may be hard to show them this way.
    - Fix the design.
    - Past ideas:
      - Boxes for each team organized by TA for easy organization.
      - Add box colored outline for team status (one for each demo).
      - Add search bar to lookup student.
  - Comments organization:
    - Have unread/read/resolved for each comment.
    - Filter organization on comments.
- Next meeting requests:
  - Have more frontend screens done.