

Capstone Collaboration Platform

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Problem

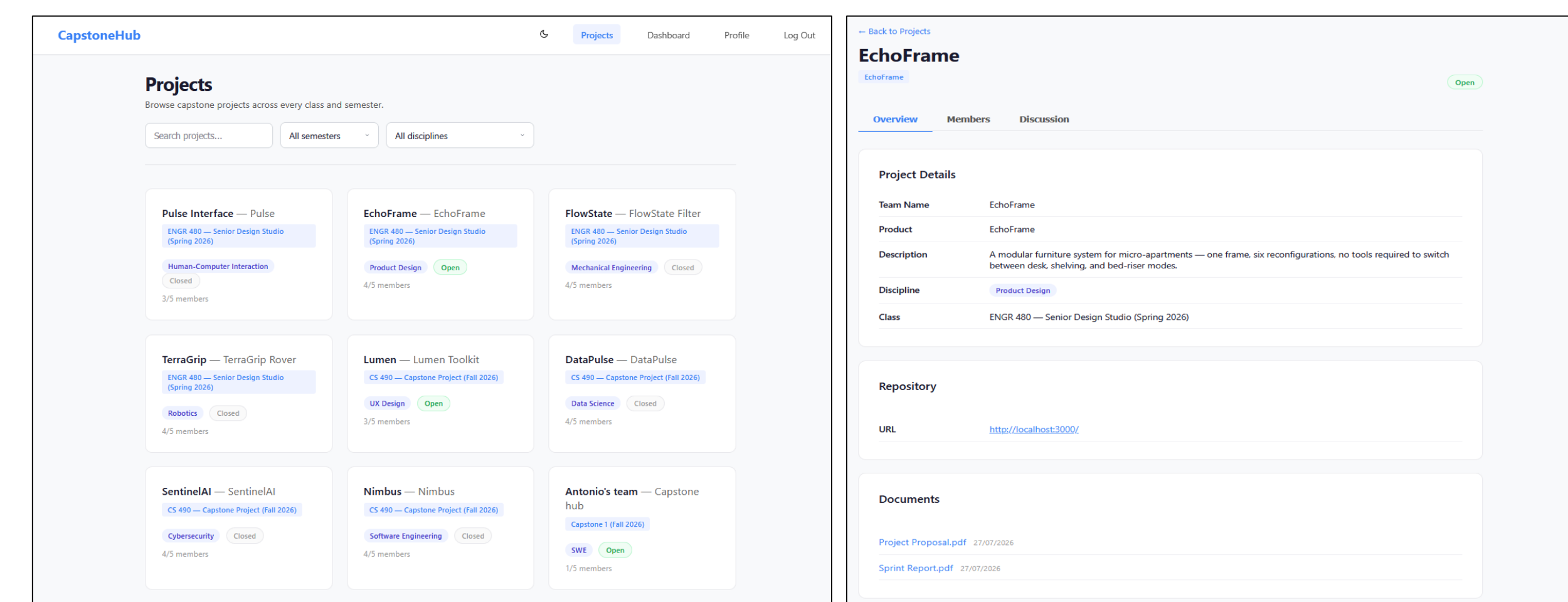
- Many students and professors everywhere struggle with coordination when it comes to large projects, such as capstone/senior projects.
- All of the time and energy it takes to deal with coordination between student groups with each other and professors could be spent making the project better.
- Having so many deadlines while working on a stressful project can easily allow for some very important things to fall through the cracks.

Our Solution

Our approach was to make our platform a website so that it would easily fit into most student’s workflows.

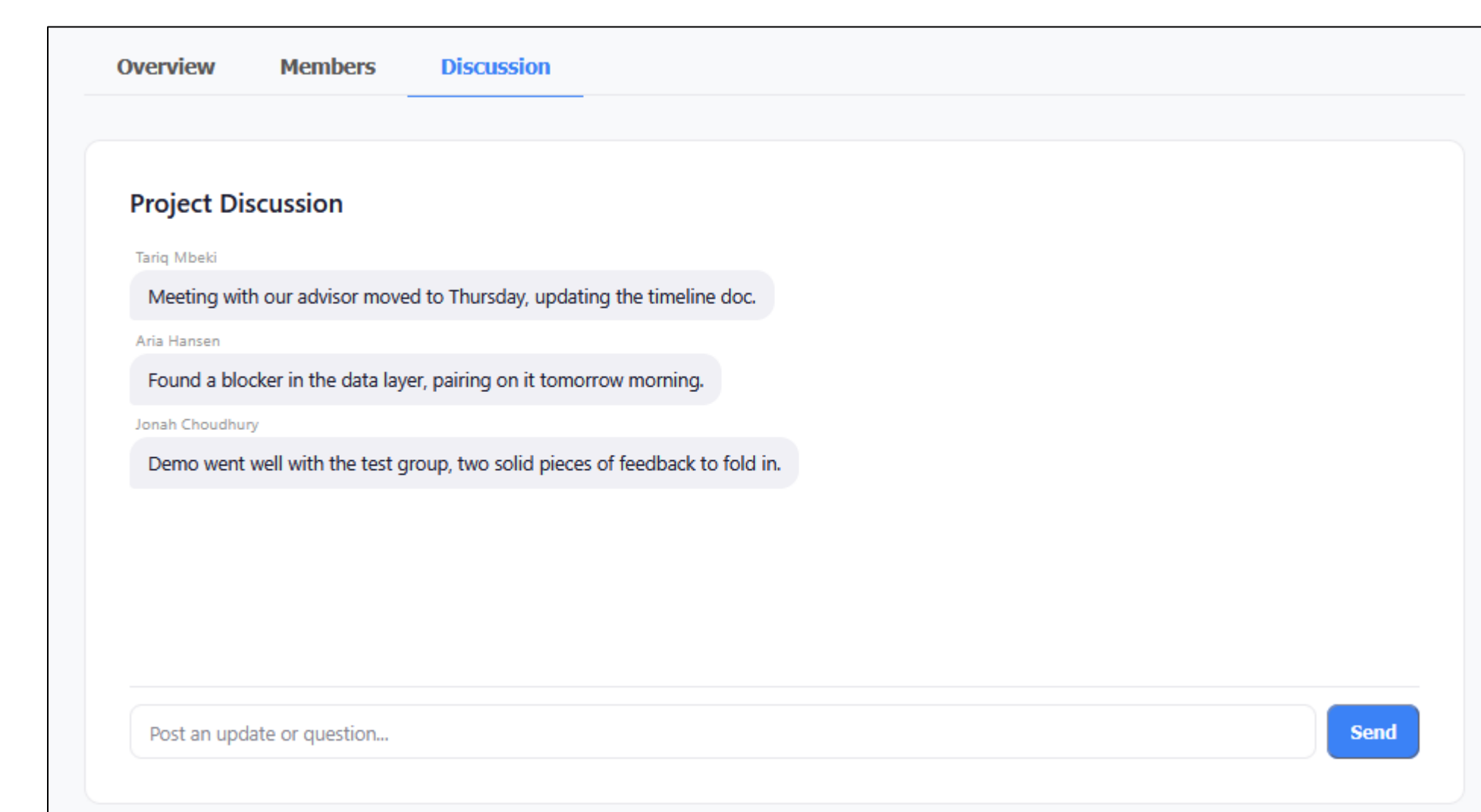
We wanted the website to feel convenient instead of something that you had to fight against, so maximizing function while minimizing bloat was a priority.

Demo & Screenshots



Main Projects Page.

Project Overview Page.



Example of the chat box being used

Engineering Process (SO6)

- We had a strict planning and requirement analysis phase, with internal documents such as a requirement document, and database design document.
- We have a real MongoDB database which that is ready for deployment.
- We have tested extensively internally, and we are ready to being widescale user testing in the near future.
- Our dedication to the Scrum development style helps us move at a steady yet fast pace which contributed to our success in this project.

Stakeholders & Requirements

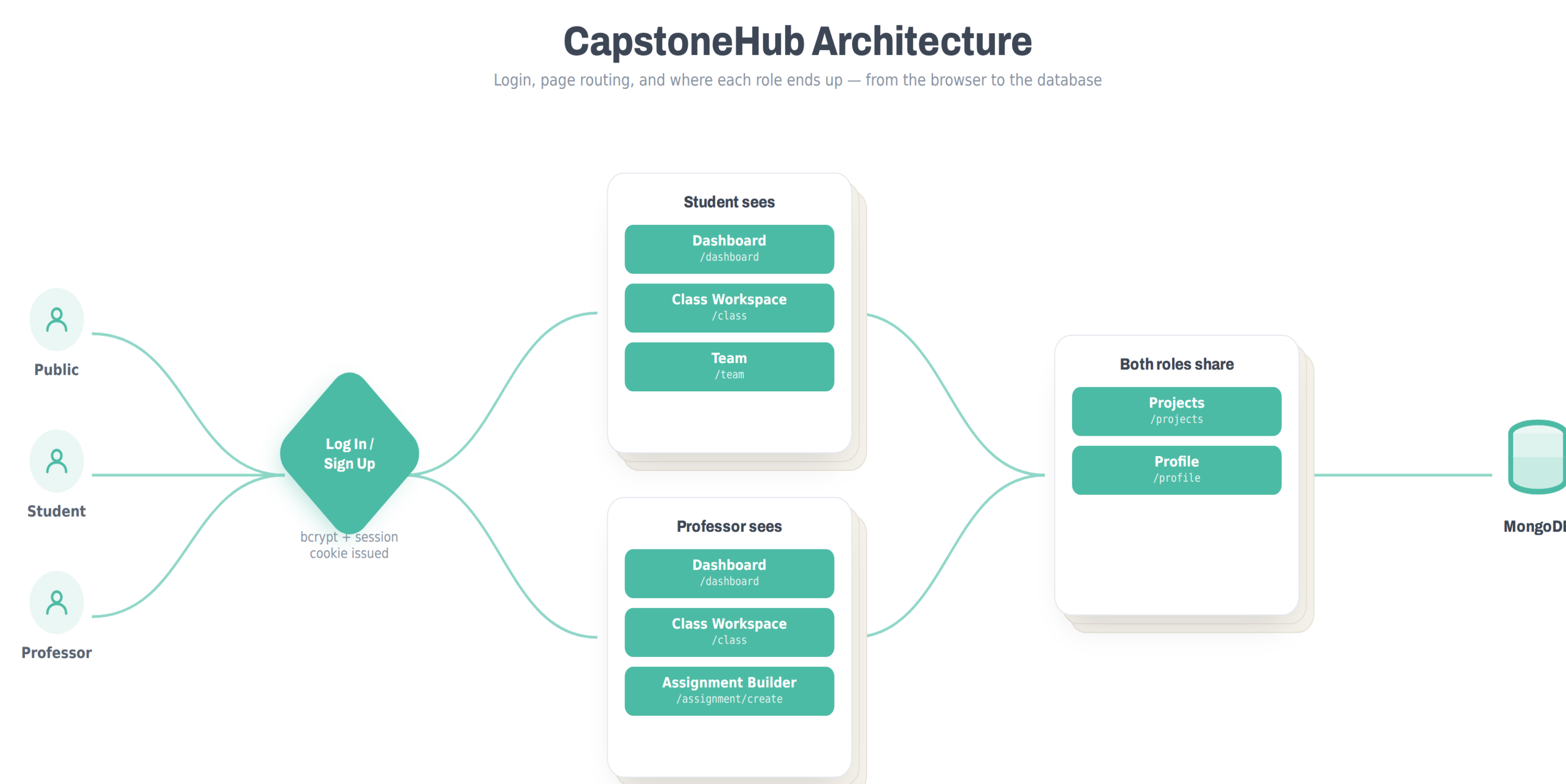
Our main stakeholders were all of the students and professors out there that wanted to create something big. To make sure that their needs were met, we prioritized these requirements:

Reliability: The website will always be available, performant, and as compatible as possible.

Student Groups: Students will be able to join groups with each other and chat together to coordinate their efforts in a professional environment.

Professor Moderation: Professors will be able to view what students are doing in order to best guide them.

Architecture



Results & Evaluation

We were not able to perform testing with a large number of users. This is something that would have to come later in the development lifecycle. To get feedback, we asked trusted peers and for their feedback on the website, here are some examples.

“This website feels easy to use, I wouldn’t mind using this for school” – Student Peer 1

“While using this website does feel nice, the chats should feel more global instead of just being in the one menu.” – Student Peer 2, providing feedback which will be implemented in the future

What's Next

Our next objective is to find schools or other institutions which would like to adopt our platform.

We are ready to begin user testing and to further refine the product until then.

Acknowledgments

We would like to acknowledge our professor Masoud Sadjadi for guiding us through this process, as well as the KFSCIS Capstone Program as a whole for giving us this opportunity.

Foundational Software in our stack:

[1] Node.js, OpenJS Foundation, <https://nodejs.org>

[2] MongoDB, MongoDB inc., <https://www.mongodb.com/>