

Rundown

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What Was Our Vision?

We are intending to build a college forum page that allows college students within their universities to connect with fellow students in a range of communities. This could range from finding housing, club/sports pages, or even general class and campus-wide communities.

The page will allow students to find a secure, reliable, and widely used forum that connects them with students with similar interests.

Admins will control the pages and communities and assign moderators to communities. Moderators will control the specific functions within certain subtopics and moderate those channels, similar to Discord.

The general user base (students) will then be able to join specific channels that fit their needs. Pages are publicly available to the community like the housing page, lost id page, etc.

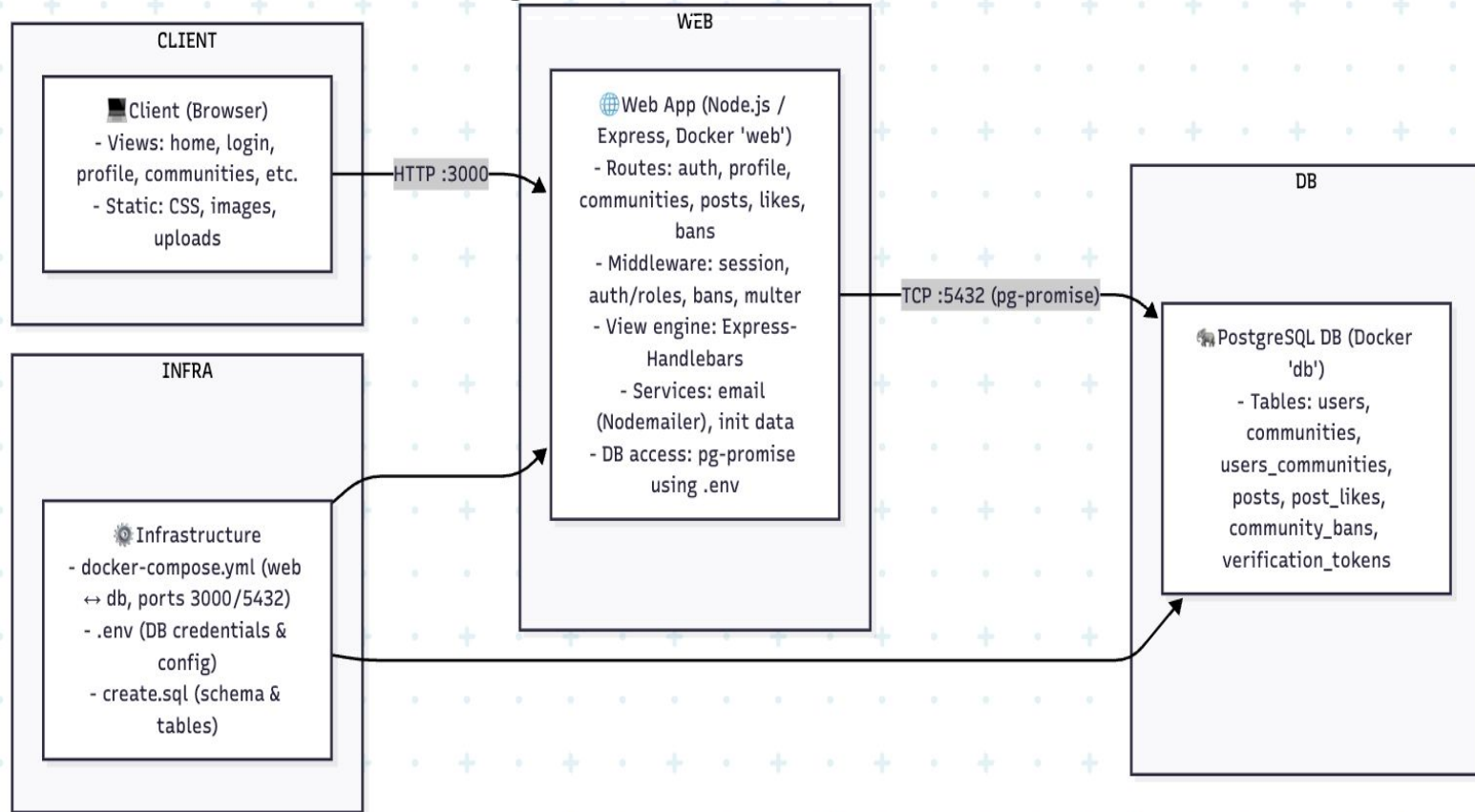
Tools of the Trade

- **Project Tracker– GitHub Project Board**
 - 5/5, easy to use and helped us understand the agile structure further. Simple to add new issues and view/edit previous ones.
- **VCS Repo– GitHub**
 - 4/5, clean and accessible. Only a few issues with overwriting code or having branches fall behind through user error. Git commands can be inconsistent.
- **Database– PostgreSQL**
 - 4/5, SQL is a fun language, and it was easy to create a baseline DB for mock information. Adding new columns and tables is straightforward. Sometimes confusing to understand table connections especially when the size grows.
- **Render– Deployment Environment**
 - 2/5, fairly confusing interface and setup process. Had immense difficulty getting it to run even with TA assistance. After extended outreach, the functionality was accomplished.
- **IDE– VS Code**
 - 5/5, Very accessible coding space. Plugins allow for user customization and very quick swapping between files while pulling/pushing code through GitHub.

Tools – Continued

- **Node JS- Application Server**
 - 3/5, similarly to handlebars, can be tedious to set the foundation for and ensure functionality. After creating the base necessities, it's easy enough to work with while continuing to add to the project. Had a few inconsistencies that needed resolving in order for our local instances to work, but we had each other for help.
- **Handlebars- HTML UI tool**
 - 4/5, very accessible KB and simple to add new pages to. Tedious to create the foundation for and work with in the beginning.
- **Chai & Mocha – Testing**
 - 4/5, straightforward and ample of resources given in the lab. There was trouble being able to differentiate work flows for test cases vs user experience.

Architecture Diagram



Features

- **Email Verification**

- When registering for the application, the application asks for a colorado.edu email to ensure the user is from the University of Colorado, Boulder. After entering a colorado email and clicking register, a verification email will be sent to the colorado email that was entered. The verification email contains a link that when pressed sends a message to the application, verifying that the account can be created.

- **Profile Page**

- On the navigation bar there is a button that goes to the user's profile page. When clicked, it redirects the user to a page where they can see their profile and change settings if they would like.

- **Add/ Delete Community**

- Admins are able to create their own communities, where other users can join and they have their own feed of the topic they are interested in. If an admin tries to create a community that already exists, it warns them that a community with that name already exists and asks the user if they would like to join the pre-existing community. Admins can delete communities as well.

Features - Continued

- **Create/ Delete Post**
 - Users are able to create posts in their community. The create post UI allows users to add a title, description and image if they would like. When logged in under admin you can delete posts that are inappropriate or violate the post guidelines.
- **Admin/Moderator**
 - Each user has a role assigned to them and have capabilities on the website based on their roles. Ex: Admin can add and remove communities.
- **Banning Users**
 - If a user is unable to follow the community or posts guidelines, admin are able to ban the user. The post or community stays up however, the users information gets recorded and does not allow them to use the application anymore.

Meeting Time

- **Weekly meeting after lectures in Norlin**
 - **15-30 minutes**
 - **Discussed what we completed, what we will work on, and if we need help**
- **Discord and Group Chat**
 - **Sent out updates any time we finished a feature and pushed it to main**

Some Challenges We Faced Along the Way

- **GitHub anxiety**
 - Pushing and pulling through the repository did not always feel consistent. Sometimes it wasn't entirely clear if a branch was up to date or why one person's local instance would function while someone else's did not. It felt difficult to trust that GitHub and the IDE were staying up-to-date. In turn, there were instances where either code stored in the repo or locally seemed to be overwritten or lost entirely, leading to further anxiety.
- **Adjusting our scope**
 - We had a fairly broad idea, wanting our project to extend multiple colleges. After realizing the importance of some other aspects, we decided to cut that idea in favor of staying local to Boulder with the possibility of expansion in the future.
- **What can we each do?**
 - We felt as though we had a fairly large group size, and for many members, their individual focus was directed towards 2 or 3 smaller features or pages just because there wasn't realistic room for us all to be doing a large amount of work. We quickly conglomerated into having multiple people working on, discussing, and refining the features we did have, and that is okay.

Future Scope/Enhancements

- **Mobile App Version**
 - Create a mobile app for iPhone and Android so students can use the platform more easily and get instant notifications.
- **Smart Recommendations**
 - Recommend communities, posts, and housing options using basic machine learning.
- **Marketplace Expansion**
 - Enable buying/selling textbooks, furniture, and class materials with built-in safety features.
- **College Expansion**
 - Developing features to allow admins to have styling freedom, making it so the styling can work for multiple colleges across the country

Demo

