

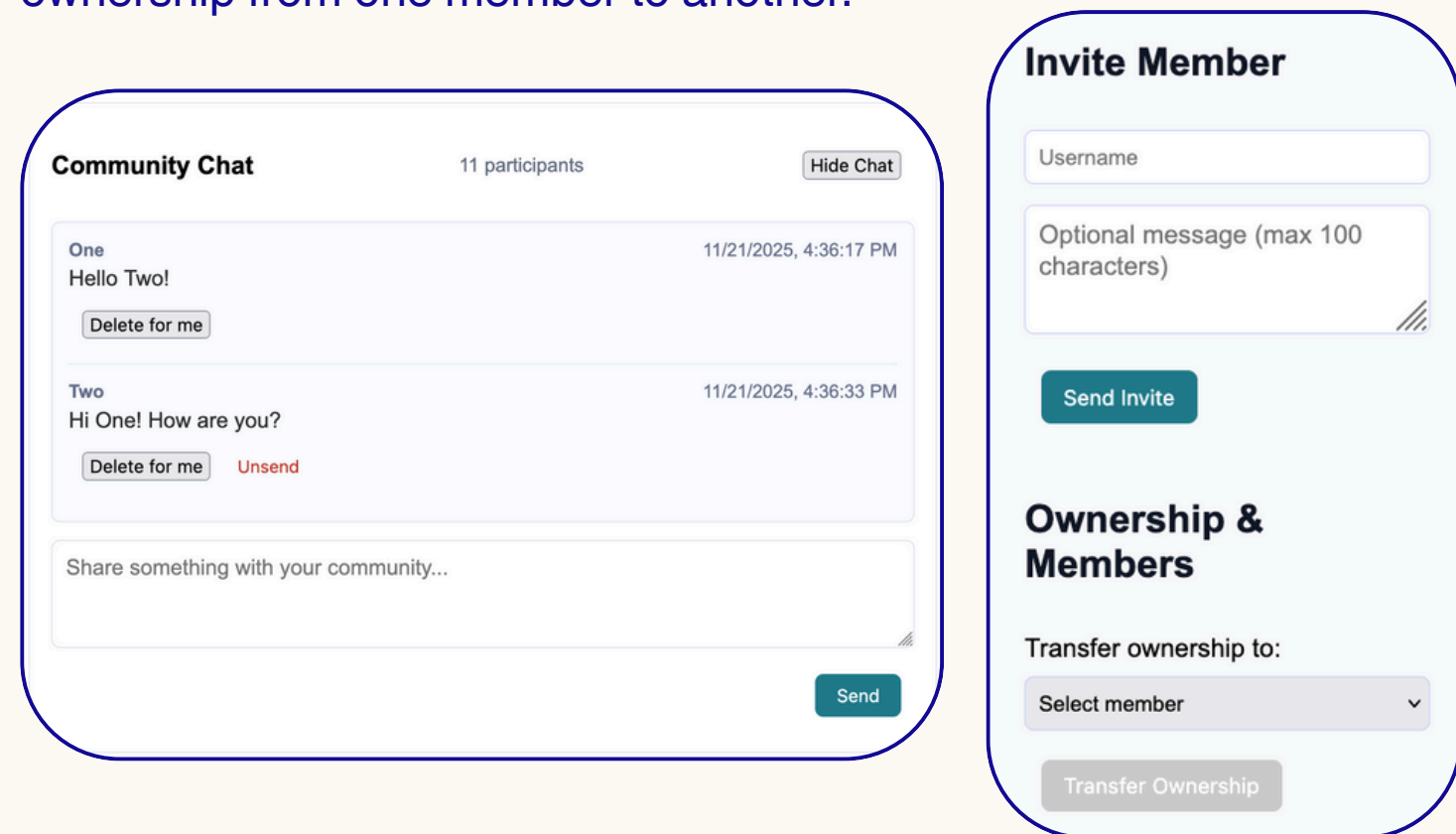
# CS4530 Final Project: FakeStackOverflow+

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## Our Features

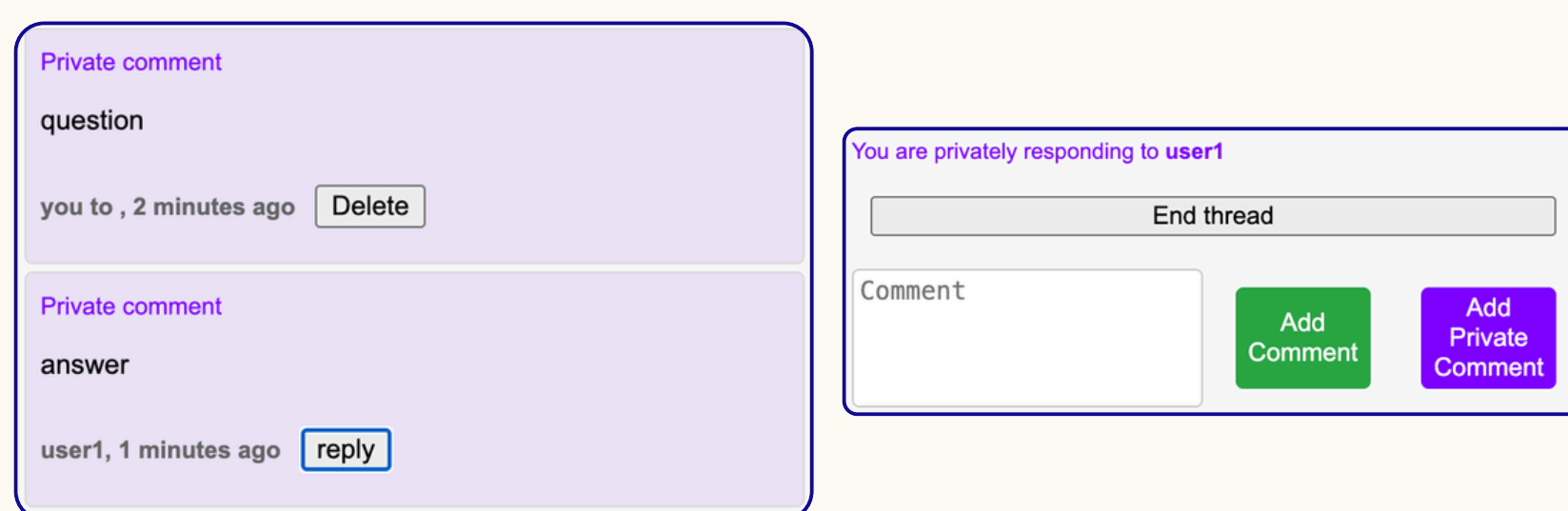
### Community Chat

The community chat feature upgrades the existing community as a whole. Registered users can join public communities and access private chats, where they can send, delete, and unsend messages, only visible to those who are joined within the community. Additionally, registered users can create private communities, which are only accessible by invite from an admin. Admins can send personalized invite messages, or transfer ownership from one member to another.



### Private Comments

The private comment threads feature allows registered users to add a private comment to the comment section of an answer or question. Comments in a private thread are only visible to the initiating registered user, and the author of the question or answer. Comments can be exchanged back and forth to each other through the 'reply' button. The initiator of the private comment thread can delete the thread, deleting all comments associated with it.



### Wrapped

The Wrapped feature allows users to view a summary of their activity in a visually appealing way. In the sidebar, a user can click "My Wrapped" to view their Wrapped. Messages summarizing the user's activity and interests are shown on the page. Users can email their an html token of their wrapped to themselves and other users as long as they have their email address set on their profile. Wrapped emails will also be sent out automatically over designated time periods selected by the user. The Wrapped can also be downloaded as PNG, PDF, or JSON file. Graphs and pie charts are used to display user data. Messages on the screen as well as the Wrapped itself can be regenerated. Users will also receive badges on their Wrapped for reaching certain milestones.

## Tech Stack & Design

Our community chat was built in a two way design in which the chat service and community service were interlinked, allowing for proper socket integration. Users data within the community is also used for chat specific features.

Our private threads feature utilized the existing socket integration for updating questions in order to provide real time changes to all registered users who are present within a comment section. The comment section component was modified to show comments based on different conditions a registered user meets, maintaining privacy.

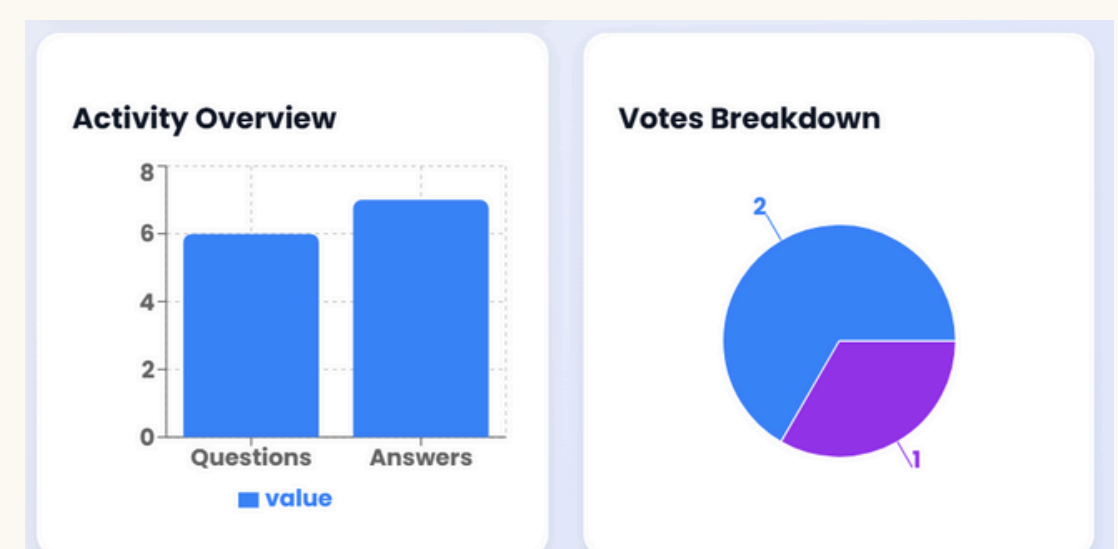
Our Wrapped feature was built using its own schema containing the relevant user data. Services were designed for generating Wrapped, sending emails, and LLM messages. Resend was used for sending emails. Namecheap was used to get domain for sending emails through Resend. Netlify was used for configuring DNS records. The OpenAI API was used for generating messages using ChatGPT. A new controller with new endpoints was made. A link to My Wrapped on the side bar was added. Recharts was used for visual elements.

## Future Work

For the community chat, our future steps would be to update the existing UI to fit more modern and accessible themes aligning with a design overhaul. Additionally the similarity score would need to be updated to rely on user data involved in the wrapped data section.

For private threads, the next step would be to show a registered user exactly which comment they are replying to when they hit reply, similar to how this is done in iMessages.

For Wrapped, the future steps would include adding a slideshow, more animations, more advanced stats, and a unique file type for downloading. This was allow the Wrapped to be even more fun and appealing than it already is.



Demo Site: <https://cs4530-f25-805.onrender.com>

Github Repository: <https://github.com/neu-cs4530/fall25-project-fall25-project-group-805>