

# CS4530 Final Project

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### Project Description

The original version of FakeStackOverflow was lacking a sense of user engagement and community connection. The features didn't encourage long-term user interaction beyond asking and answering questions. We believed that in order for the platform to be as trustworthy as possible, it was important to garner a sense of community between users and create an environment where valuable contributions are recognized.

In order to accomplish this, we implemented a following system for users to be able to interact with others whose contributions they find valuable, notifications for real-time interactions, Sign In With Google to streamline the sign up/sign in process, community spaces to allow for more personalized spaces, polls to encourage interactions between users, and new game types of TicTacToe and Chopsticks to allow for more variety in games.

### Demo and Source

Live Deployment:

<https://cs4530-s25-103.onrender.com>

Github Repo:

<https://github.com/neu-cs4530/spring25-team-project-spring25-project-group-103>

### Our Technology Stack and Design

We enhanced the FakeStackOverflow platform by expanding the existing codebase to introduce new features such as Followers, OAuth, Notifications, Communities, Polls, and additional game types. These features were implemented by extending the existing schemas, service/controller methods, and React hooks, while also introducing new ones to handle real-time updates and new functionality.

The frontend was built using React, with socket-io integrated for real-time updates, ensuring instant feedback for users during interactions like voting in polls or making game moves.

Our continuous integration pipeline runs an automated test suite on the frontend and backend components. After testing, the site is deployed using Render, ensuring that new features, fixes, and improvements are promptly made available to users.

### Future Work

While we have successfully implemented our MVP, there are several potential enhancements and improvements for future work.

Our current game library supports TicTacToe, Nim, and Chopsticks, but in the future, we would like to expand it to include games like Mancala to appeal to more users. To make the gaming experience even further improved, we could implement Tournaments to encourage more user interactions. We would also like to implement editing/deleting questions, answers, and polls to allow for more control over the content that they're putting out there. Lastly, we would like to support more OAuth providers beyond Google, like Facebook and Apple.

