

# CS4530 Final Project: "CoveyForums"

Group 204: Nick, Victor, Jason, and Alex

## Our feature: Forum Functionality

In our recent enhancement of CoveyTown, we successfully integrated a forum feature, similar to Reddit, transforming the platform into a more interactive and engaging community space. This enhancement has introduced several key functionalities:

1. Discussion Initiation and Engagement: Users can start conversations with posts and deepen discussions through comments, enriching community dialogue.
2. Karma System: A leaderboard highlights active participation, while personal karma tracking enables users to see their community impact.
3. Content Interaction: Upvoting and downvoting allow users to democratically shape content visibility and share their opinions.

These features will create a structured space for meaningful, asynchronous interactions, thereby strengthening community bonds.

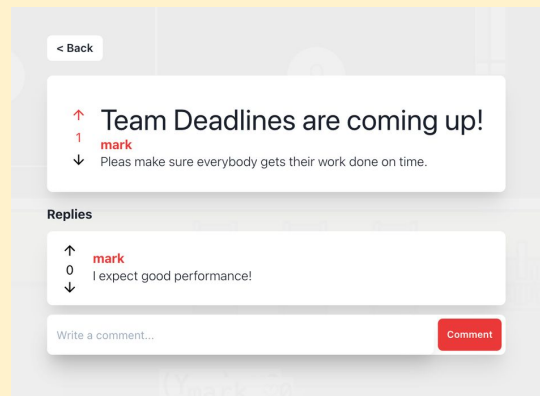
With Forums, we aim to elevate CoveyTown from a virtual office space to a dynamic, self-regulating community, where user contributions are recognized and behaviors are moderated. This transformation is further supported by our introduction of extensible database functionality, ensuring persistent towns.

## Demo and Source

Our demo is available at [link], and our code at <https://github.com/neu-cs4530/fall23-team-project-group-204>.



Players have their current Karma count displayed above them



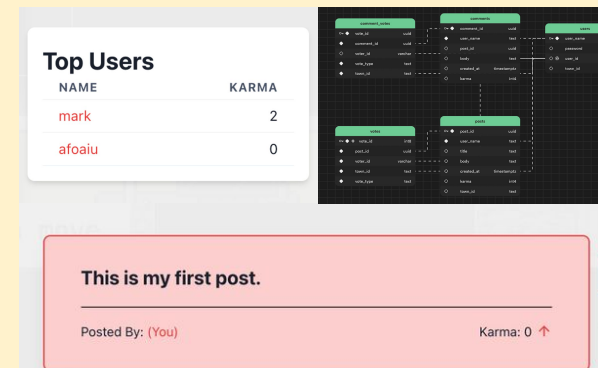
Example post and comment

## Our Technology Stack & Design

In our CoveyTown project, we've significantly enhanced the platform with a new ForumArea and Karma system, facilitated by the integration of a PostgreSQL database managed through Supabase. This database supports complex forum functionalities like posts, comments, and a user-based karma system, ensuring persistence of user interactions. The backend, developed with Supabase's JavaScript Client, interfaces seamlessly with our frontend, which now features intuitive UI components for forum interactions. Our approach combines RESTful API extensions for state transfers, like post creation and karma updates, with WebSocket API for real-time karma display alongside player sprites. This comprehensive update transforms CoveyTown into a dynamic, interactive community, supported by a robust three-layer web application architecture.

## Future Work

Reflecting on our project, future explorations could focus on areas such as enhancing the user interaction model, particularly by adding the ability to edit and delete comments. This would provide more flexibility in managing user-generated content. Additionally, implementing advanced search functions and notification systems could significantly improve user engagement and navigation. Another potential area for improvement is refining the user authentication process to ensure seamless session continuity. These suggestions are not immediate plans but rather opportunities for future teams to build upon our work, further evolving CoveyTown into a more user-centric platform.



In order of appearance: Karma leaderboard, database schema, example post