

# CS4530 Final Project

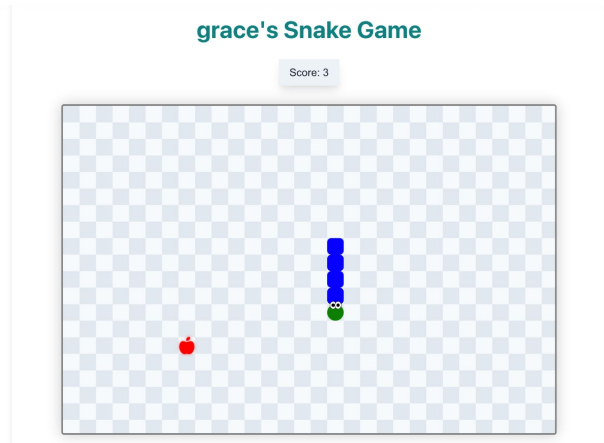
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## Our Enhancements:

Our project enhances Fake StackOverflow (FSO) with a revamped UI using Chakra UI, improving aesthetics, structure, and responsiveness. We also introduced community features, which allow users to create and join topic-based groups, react to content, block users, and upload files. Additionally, we integrated a playable Snake game with high scores, leaderboards, and spectate mode.

## Demo & Source:

Our demo site is available at <https://cs4530-s25-413.onrender.com/> and our source code is available at <https://github.com/neu-cs4530/spring25-project-group-413>



## Technology Stack & Design:

We implemented our changes into the existing Fake StackOverflow codebase. Users can create and join communities from the communities page. The communities page connects via websockets and HTTP to the backend, where the database containing the communities is managed. We implemented the blocking, file upload, and reactions features in the same manner. We implemented the snake game by following the implementation of the Nim game. The front end sends moves to update the game state, while the backend maintains the state and sends the updated game state for the front end to render. We sync the front and back end using websockets for real-time game play. Finally, every feature mentioned above as well as each feature already in Fake StackOverflow got a ChakraUI upgrade.

## Future Improvements:

While we did allow users to spectate the snake game, we were unable to add a two player version of the game. Future work might involve completing the two player version. We allow users to create and join communities, letting them discuss topics they are interested in. Future improvement might be adding moderators/administrators to these communities, letting them approve/reject requests to join the community or delete certain posts.