

Lunarena



GROUP 307

CS4530 FINAL PROJECT

Jason Reed

Jay Atal

Tucker Gwertzman

Charlie Miller

PROJECT DESCRIPTION

Lunarena is a modern gaming platform aimed at making gaming more social and customizable, making them come back daily for more.

USABILITY UPDATES

UI Overhaul

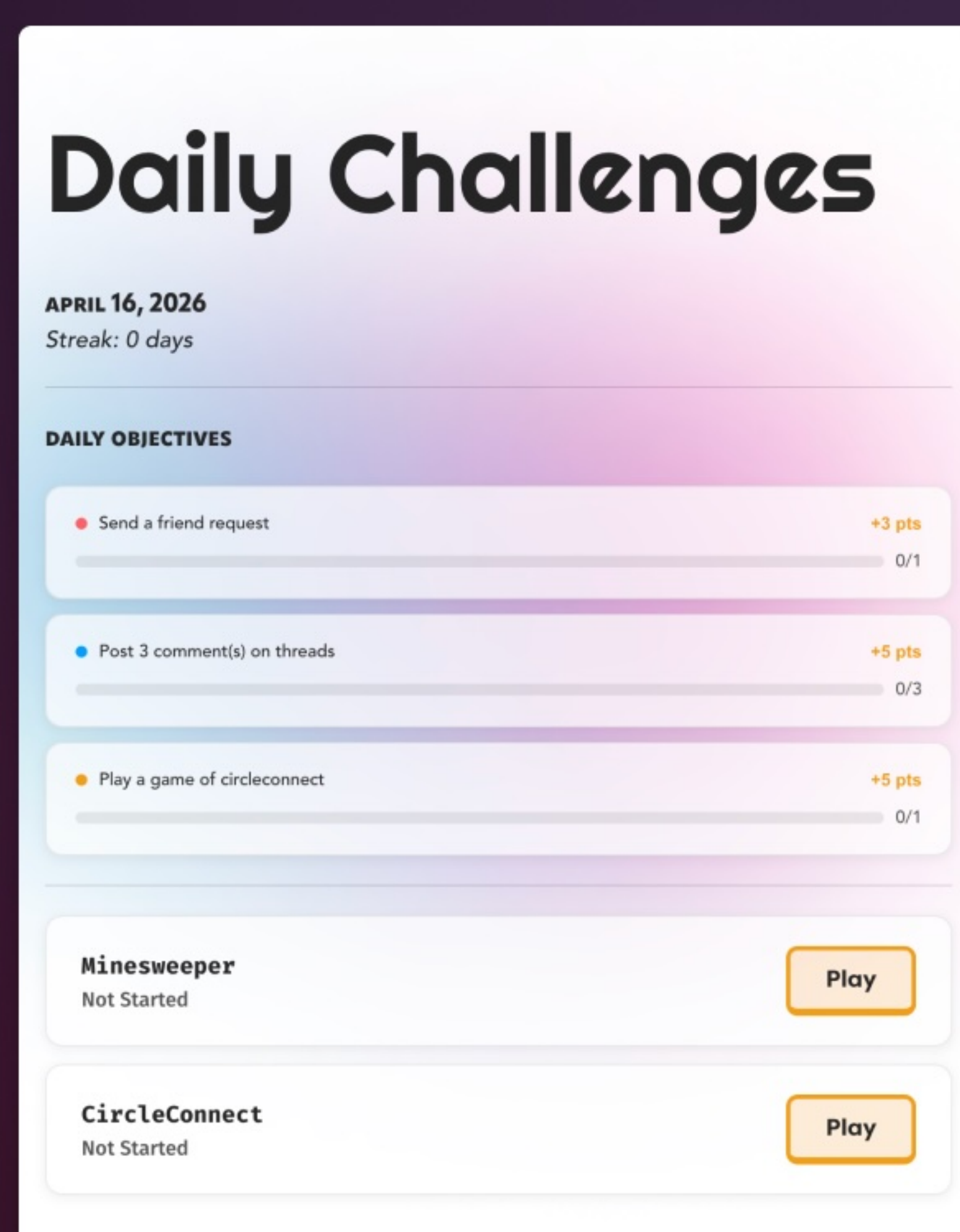
- Dark Mode!
- UI Overhaul
- Login Persistence

Leaderboards

- User Points
- Popular Games

Games

- Daily Challenges
- Tutorial Bot
- Forfeiting



TECH STACK & DESIGN

Our stack used React, Express, and switched KeyV to Mongoose for MongoDB, allowing us native schema definition. We used BetterAuth to create user sessions, so users could stay logged in on their devices even on refreshes. We implemented a complete UI overhaul that utilized a custom component library we developed. Each page consisted of a gradient and a color that matched the navigation bar. Our notification and DM systems were built upon the existing SOCKET.IO setup from the starter code. Our profile pictures were stored as Base64 data that allowed us to store them in Mongo. We used event listeners to wrap all the daily objectives. The daily games and objectives are seeded by day to ensure each user gets the same objectives and daily levels to play. CICD was set up using GitHub Actions, which ran our unit and e2e tests, as well as basic lint checks. MongoDB Atlas hosted our database. OnRender was used for our site deployment.

LINKS

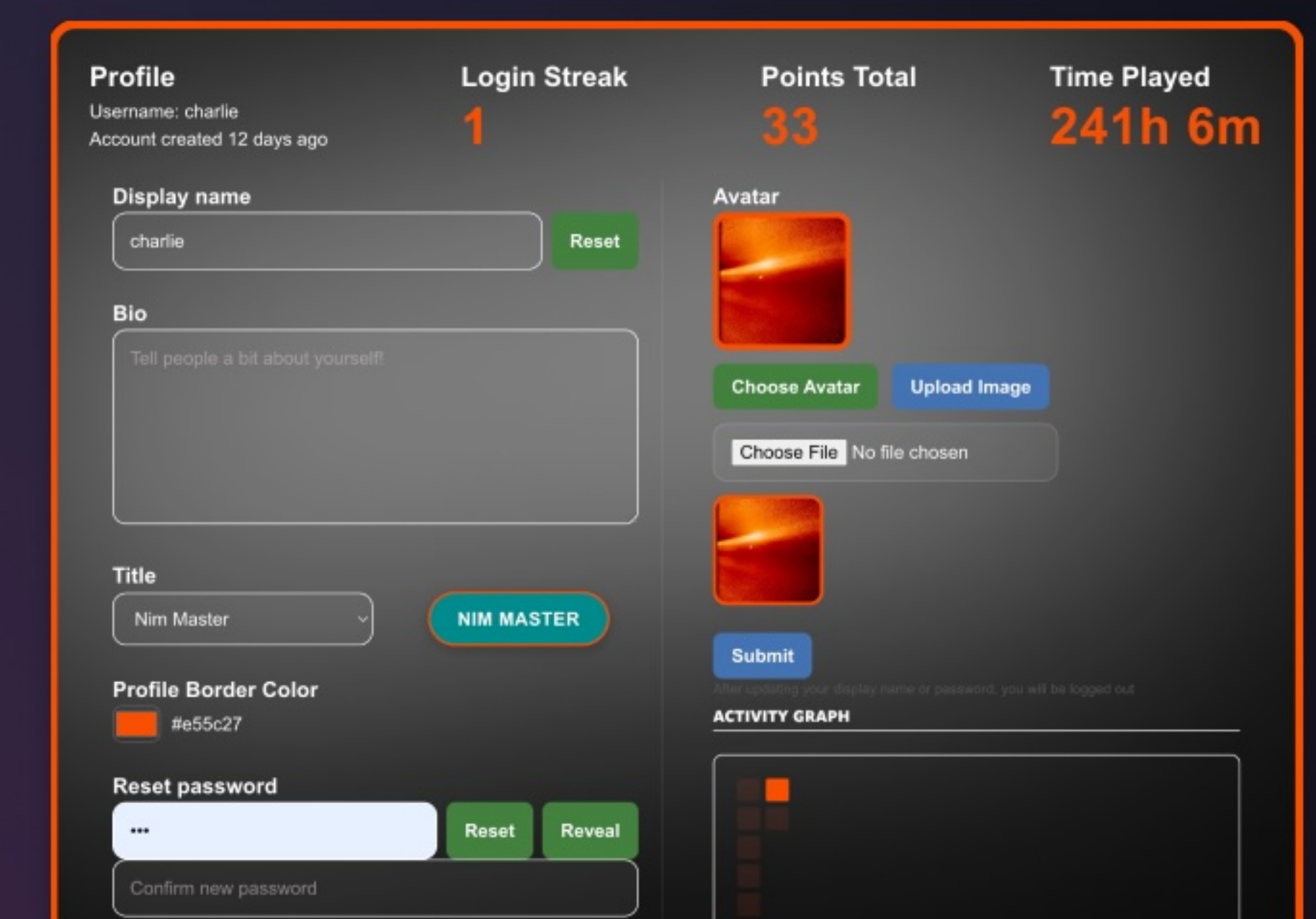
GitHub <https://github.com/neu-cs4530/spring26-project-group-307>

Website <https://spring26-project-group-307.onrender.com/>

PROFILE CUSTOMIZATION

Customize Your Profile!

- Titles
- Bio
- Avatars
- Accent Color



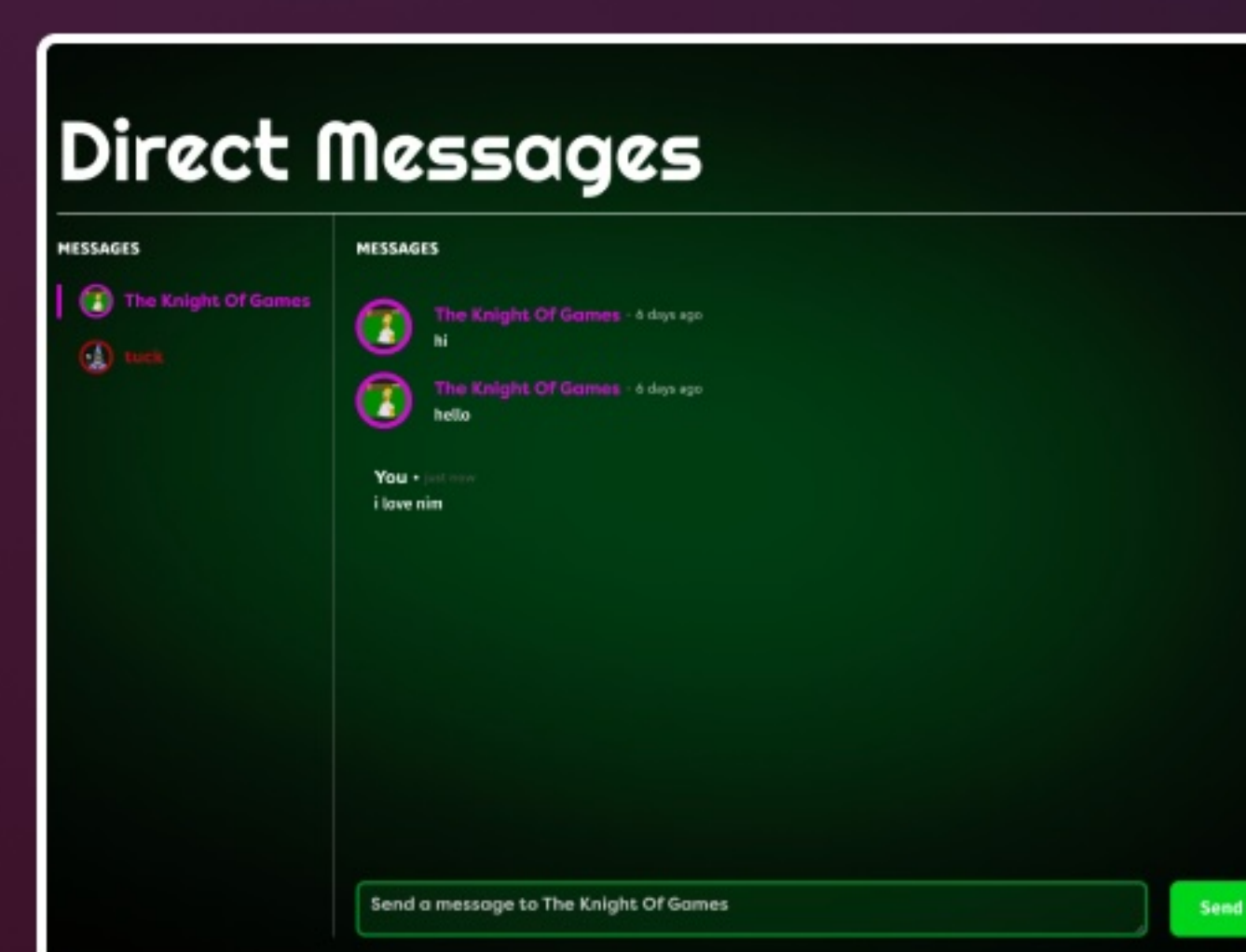
Other Updates

- Activity Graph
- Time Played
- Game Statistics

NEW SOCIAL SYSTEM

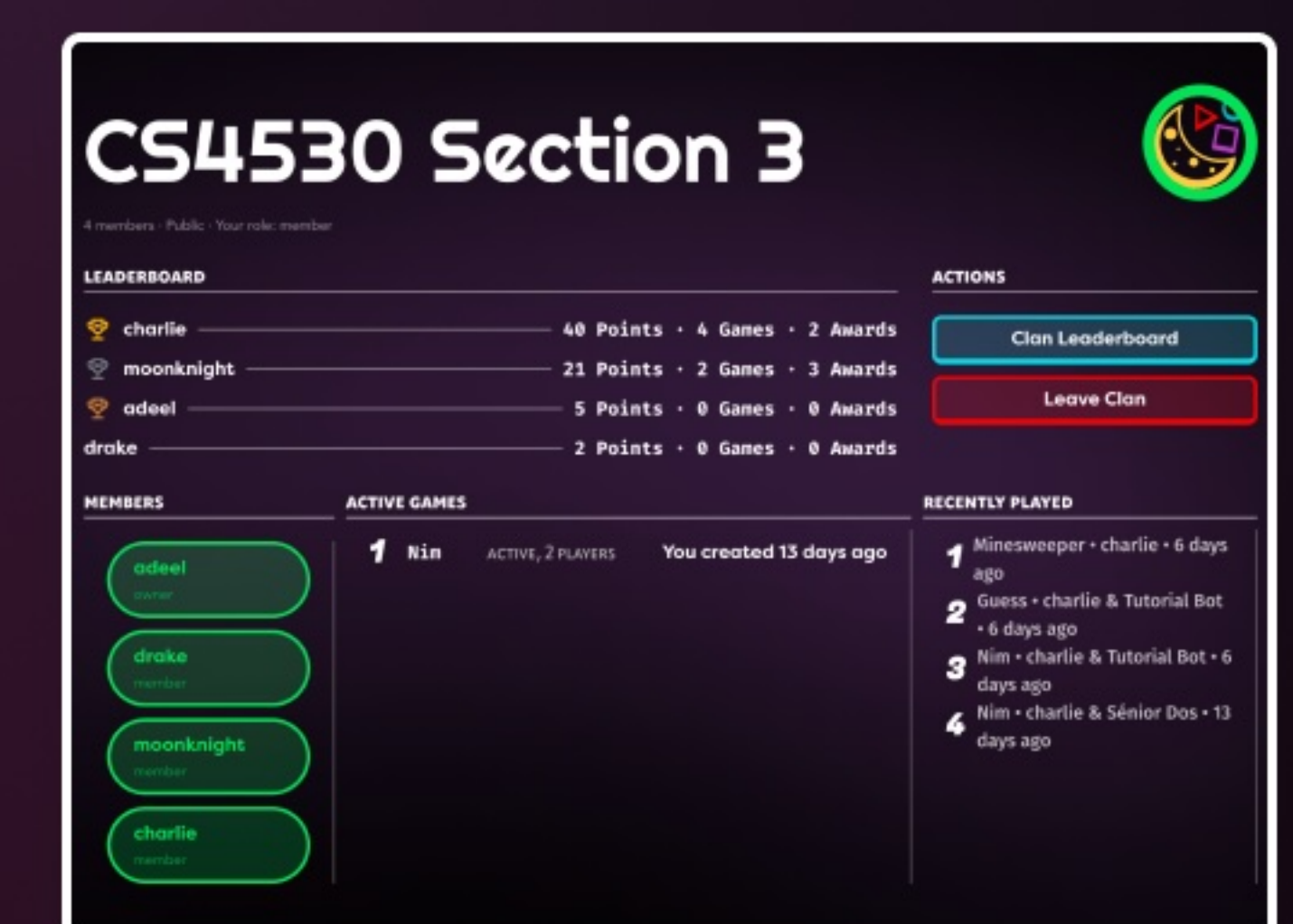
Friends

- Add Friends!
- Direct Messaging
- Friend Status



Clans

- Leaderboards
- Spectating
- Clan Roles



WHAT'S NEXT?

- Select custom daily objectives to role out new features, or have gamers choose preferences and tailor it to them
- Add a wider selection of games, we added 2 with Minesweeper and CircleConnect
- Ability to join new games with your clan members, have Clans compete in tournaments against each other and chats exclusive to the Clan