

- Checkers
  - For SE 319 I designed and implemented an online multiplayer checkers game using NodeJS and the Express framework. For this project I had to learn a lot about web socket communication, as I needed to both push and receive data to and from clients in real time, for the implementation, I utilized the Socket.io package. The project itself was really the first time that I had successfully built both ends of a web application and used what I had learned in the classroom to produce something that really worked.
- S-chat
  - The s-chat project is a secure command line chat application utilizing RSA cryptography. The idea behind the project was to create a secure way for users to chat via the command line, with the naming convention falling in line with applications like ssh and scp. This project was created for a Fundamentals of Networking class, and was built using NodeJS .
- StringCenter
  - The StringCenter project for CS309 was the first real test of my web development skills, as we made a NodeJS social media application centered around music, specifically for stringed instruments. The idea was pretty simple, a user could create an account and then they could perform normal social media actions, follow, post, etc. The difference was that the application allowed users to create their own guitar tabs and then they could share those tabs with their friends. This project was challenging as we had to essentially build a production application that managed users and data, had a UI, and was able to be stateless in such a way that the service could be scaled if need be. This project taught me the most about web development and how to manage a project in general, it also gave me a really good glimpse into what it would feel like working on a professional development team.