

## CS 242 Project Proposal - Calvin Shipplett, shipple1

### Abstract:

I will create a chat app using Node.js. In this document I will specify functionality, goals for each week, and the final product.

### Technical Specifications:

It will be a Web-based app, coded in Node.js, html, and javascript. I will follow whatever coding standard I can find, but as of right now I haven't chosen one yet. I will display the project in Google Chrome.

### Functional Specifications:

My project will create a server for people to connect to and talk to eachother. In addition, I will add video and sound sharing, the ability to share images, and the ability to watch youtube videos that will be loaded onto the server and streamed to all users. It will be useful for group chats if people want to listen to the same music or watch informative videos. I will have each user connect to a main server, after which they will be able to send data back and forth between the server and eachother.

### Timeline:

Week1: Set up connections, set up a server, and create basic chat functionality

- Accept connections on a server
- Connect to the server (client code)
- Send a message to another client
- Display a message to another client

Week2: Create group chat functionality, including ability to switch rooms

- Let multiple clients connect to server
- Send messages to all clients
- Set up separate groups

Week3: Add sound/video streaming between clients

- Get audio from a user
- Send audio to server and all connected users
- Same with video

Week4: Add ability to load youtube/create playlists of videos

- Set up a video box on interface
- Create a playlist that each client can contribute to