Background

What have you missed the most about life before the pandemic?

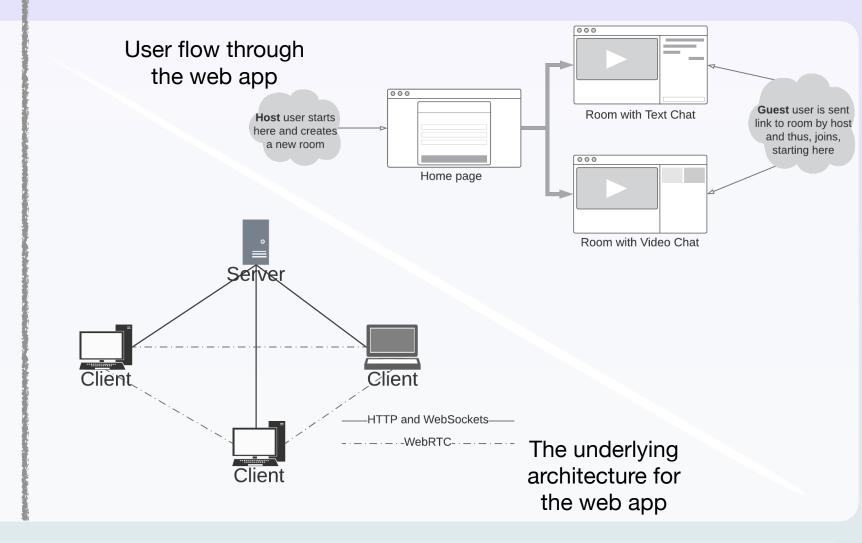
AIMS

- Build an app to allow remote users watch videos together and in sync.
- The app should allow all users have playback full control unless specifically denied by the host.
- The app should allow for varying levels of user communications such as text, voice or video chat.
- Complete user study on the feeling of togetherness between remote users watching video using the app

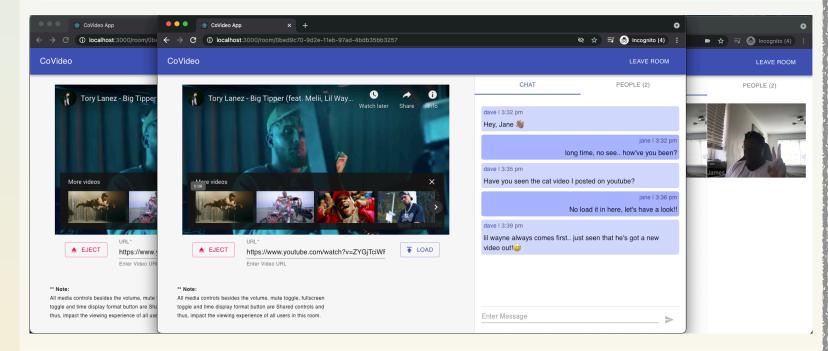
Approach

- Use WebRTC it offers the greatest documentation, support and sub-second latency.
- Build for the Web it is most widely available and accessible
- Compare the feeling of togetherness while varying the communication modality available to users
- Learn to use chosen tech
- Produce and evaluate prototypes
- Complete design, coding and testing of final app
- Run and evaluate user study

App Design and Architecture



Implementation



CoVideo web app, featuring:

- Two room communication modes Text Chat, Video Chat,
- Two room types Watch Together, Broadcast
- A shared video player in each room

Try it yourself at https://covideo.herokuapp.com/

...or see the code at https://github.com/David24E/CSP420

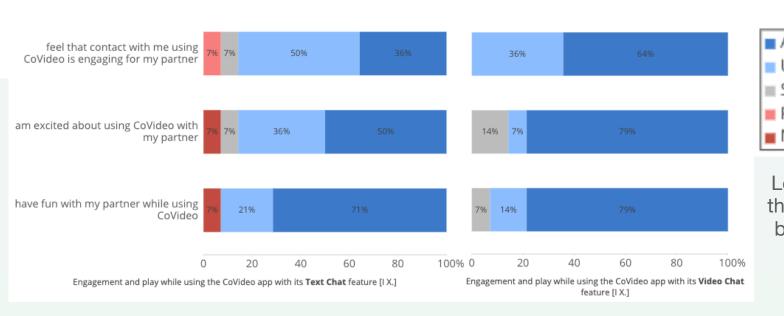
Evaluation

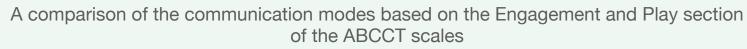
Research Questions:

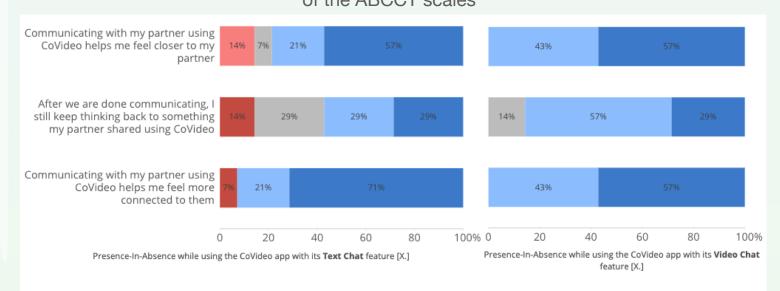
- Does using the app foster the feeling of togetherness between remote users?
- What are the effects of the chosen communication mode on that feeling of togetherness?
- How can the app be improved so that it reinforces and further stimulates the feeling of togetherness?

Method:

- Get participants to experience the app using both communication modes.
- Get participants to fill a session questionnaire after each session and a final questionnaire to end the study.







A comparison of the communication modes based on the Presence-In-absence section of the ABCCT scales





Communication Mode
Preference while using the
CoVideo app

Strongly Agree	78.6%
Agree	21.4%

Connecting with remote friends or family while participating in a shared activity further fosters the feeling of togetherness