

'Fennec' Project Backlog

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1. Problem Statement

There is no current solution for a community driven synchronous youtube videos and sound clip playback web app with a social aspect between participating users. Others existing systems with synchronous video don't have a way to see future videos that have been enqueued. Also these systems lack both malicious user removal and a blended of queue for music and videos.

2. Background Information

Multiple versions of synchronized listening have been attempted. A previous solution called Plug.dj relied too heavily on revenue from membership and consequently, shut down. Another solution called Sync Video offered the basic functionality of letting people join rooms and watch synchronized videos, although it lacked in two key areas: only the owner could queue up songs, and searching for youtube videos had to be done outside the website. Our website will allow multiple users to enter media into the queue, and allow searching YouTube and SoundCloud within the website.

3. Requirements

Functional Requirements

- As a user, I would like to view YouTube videos in a synchronized manner with my friends and strangers.
- As a user, I would like to listen to SoundCloud tracks in a synchronized manner with my friends and strangers.
- As a user, I would like to be able to communicate with my friends and strangers through a text based medium.
- As a user, I would like to be identified by a unique username of my choosing.
- As a user, I would like to hear a sound when a message is posted.
- As a user, I would like to be able to search available media through Fennec.
- As a user, I would like to be able to search YouTube's results for a query.
- As a user, I would like to be able to search Soundcloud's results for a query.
- As a user, I would like to be able to preview items returned in my search by their thumbnail images.
- As a user, I would like to added media to the queue what will be played.
- As a user, I would like to vote to remove content from the queue.
- As a user, I would like to vote to remove a user's ability to add to the queue.
- As a user, I would like to vote to kick malicious users from a station.
- As a user, I would like to create 'stations' that can be joined by others.
- As a user, I would like to be able to set a color for my station to differentiate it from others.
- As a user, I would like to be able to give a sharable link to join a 'station'.
- As a user, I would like to browse joinable 'stations' through the web client.

- As a user, I would like to decide if my 'station' is visible in the station browser.
- As a user, I would like to be able to name my station.
- As a user, I would like to see stations sorted by viewer count.
- As a user, I would like to be able to see the nicknames and total count of listeners in each station.
- As a user, I would like to circumnavigate YouTube ads (ads may create issues with synchronized playback).
- As a user, I would like to be able to view and copy the direct link to the media.

Non-functional Requirements

- Responsiveness: Searches for media should not require a loading screen, and appear reasonably quickly after the user searches. The UI should not stutter or lag when used.
- Reliability: Stations should be persistent until everyone in the station leaves. The user should always be able to join or create a station without bugs.
- Efficiency: Minimize requests to the server, and minimal strain on the user's device.
- Synchronized: Users should be synced to other users within a few seconds, to enable a unified listening and watching experience.
- Aesthetics: Clean, modern design that is both minimal and simple, and uses a clear and consistent color scheme that reflects user preferences.
- Intuitive: The site is immediately understandable to the average user.