

Asynchronous Music Collaboration: Eliminating the Need for Editing by Hand

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Introduction

In a survey of over 1000 people aged between 18-35, **80% of them said they experienced significant depressive symptoms** during the pandemic. Loneliness **heightens risk of both physical and mental illnesses as well as suicidal behavior**. Making music has been found to alleviate these symptoms. During a pandemic, or among a long distance friend group, this is not possible. Currently, the only way for groups to make music virtually is through a **time-consuming process of manually viewing and editing a collection of videos**.

Our proposed project is a website which will **provide backing tracks and a recording framework for users to create music videos automatically - without the need for editing by hand**. One of the reasons that this kind of application has not been created is most likely because it is difficult to determine the best time to switch between users during the mashup.

Related Work

Existing Karaoke Apps

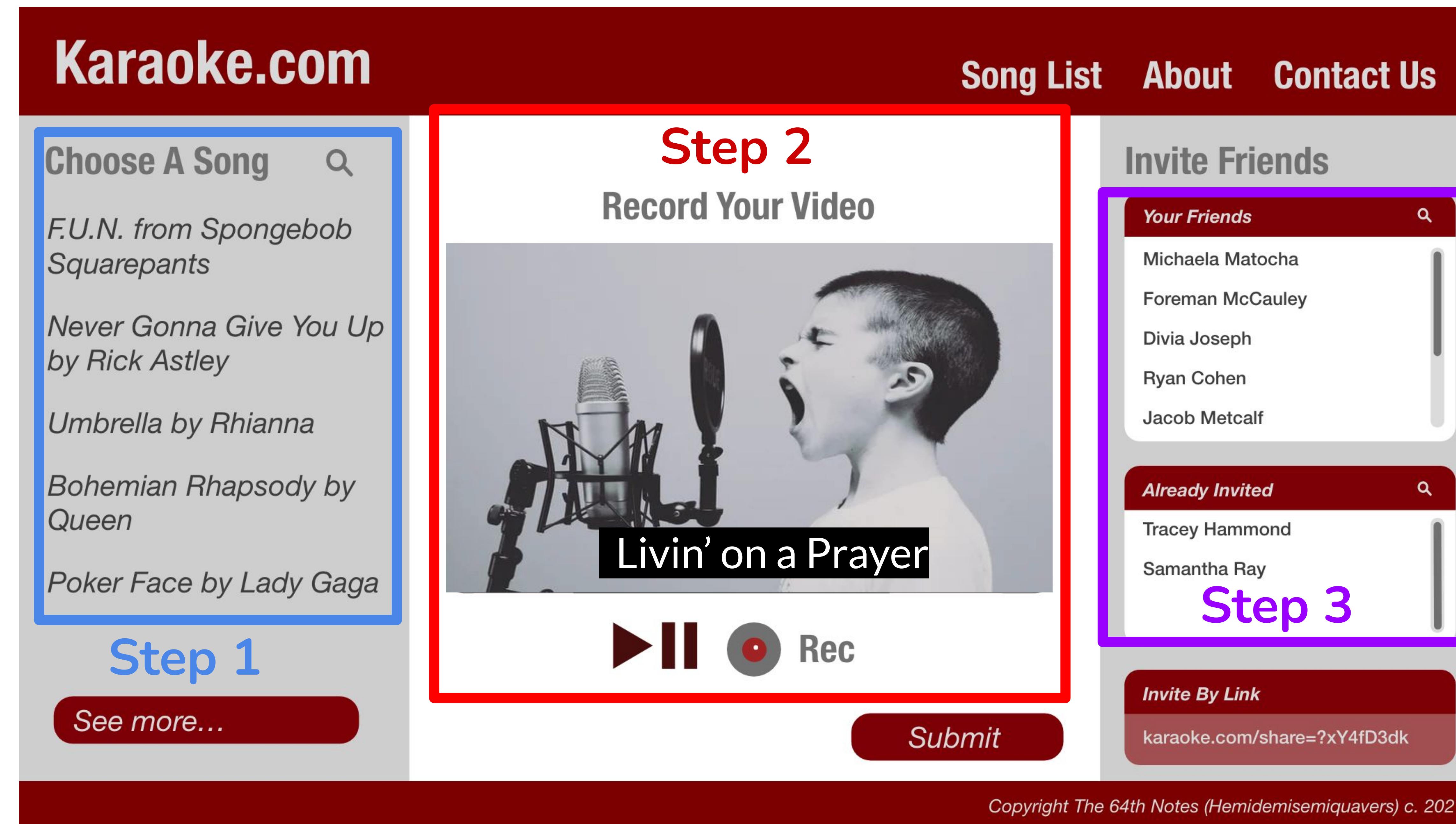
- Acapella
- Smule

Video Editing Tools

- Adobe Premier
- iMovie

Real-Time Music Collaboration

- JackTrip
- Daisyphone



Methodology

Recordings will be stored on **Vimeo** and the music will come from the **Spotify API**. Users will record a video using music from **Spotify** and that video will then be uploaded to **Vimeo**.



Evaluation

The goal of our application is to be able to provide people with the ability to **enjoy karaoke with friends at any time and place**. Users will be able to create an account on the site, choose a song, and record a karaoke video. They will then be able to share it with their friends (or our team for our base scope), and finally, compile the video, editing it until they are satisfied.

To evaluate the effects of our application, we will **compare the time it takes to edit a karaoke video by hand with the time it takes on our app**, and **run test scripts** to ensure proper functionality.

Another one of our evaluation metrics is a survey taking place midway through the development process. After generating the auto compilation video, we will measure **how long the editing window is open, and how many edits are made**.

The idea is to eliminate the need for hand editing videos of this style.