SingleStream

Team 8 - 3.09.2017

John Fantell, Will Stone, Roshni Vachhani, Ryan Flynn, and Robert Rotering



Team Members

- Robert Rotering
- John Fantell
- Roshni Vachhani
- Ryan Flynn
- Will Stone



Agenda

- Problem
- Solution
- Front-End
- Back-End
- Mock-Ups

Global Streaming Market

- \$9.7 Billion Global Market by 2022
- Spotify, Apple Music, Pandora, SoundCloud
- Gained over a Billion users from 2011–2015



Being a fan of a wide variety of music can be a pain.
Depending on the music player of your choice, not all of your artists will be available.











Google Play











Existing Applications

- Tomahawk is advertised as an all in one music player
- Supports many different api's as well as local music files
- Even has social media integration









The Solution

- A platform that unifies the content of each music streaming platform
- Combines the best of social media and music streaming to provide a fully integrated experience











Users/Stakeholders

- Those who:
 - > Belong to multiple subscription/cloud-based music services such as Spotify, Last.fm, etc.
 - > Listen and share music with their friends
 - > Listen to media on non-mainstream music/media services (YouTube and Soundcloud)
 - >Enjoy posting, reviewing, polling, and all in all engaging in an online community dedicated to music



- All in one application that brings together multiple APIs
- Create track playlists across multiple stream services
- Ability to share music with other music lovers



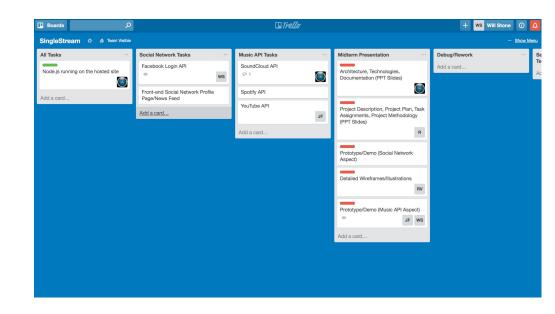
Functional/NonFunctional Requirements

- User profiles + community
- Saved playlists
- Track Search
- Discovery with track URL's
- Listening activity feed
- Listening statistics



Project Management

- Agile Development
- Weekly Meetings
- Trello for task tracking and assignment
- GitHub for collaborative coding
- Full Stack Development





Project Plan: Overview

- 3/10: Divide into sub-groups
 - > Start working with music APIs
 - > Start building social network (front-end)
- 4/1: Have APIs fully integrated with application
- 4/14: Have back-end functionality operational
- 4/17 4/19: Usability tests
- 4/24 4/27: Presentations





The Front-End

HTML5, CSS3, Bootstrap







Front-End Design

HTML5

- Semantic markup
- Cross-browser support

CSS3

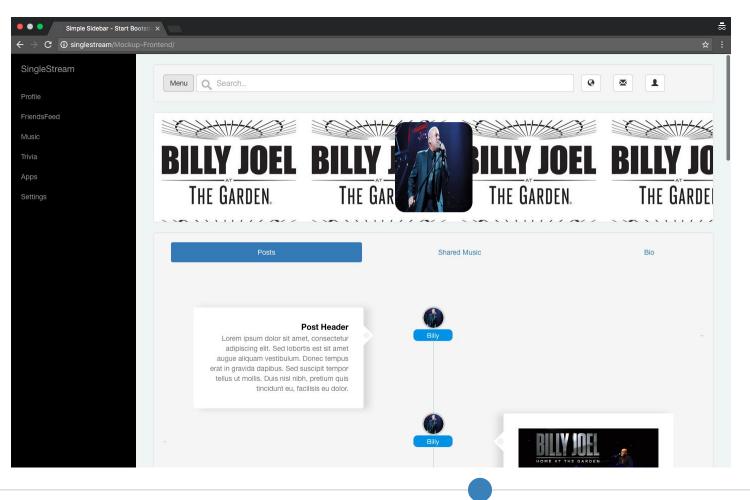
- Page layout
- Consistent styles

Bootstrap

- Modern design
- Responsive and intuitive site

SingleStream About My Music Friend Feed Discover Contact Studying **Studying** Relaxing Car Rides The Twins (Prague) Max Richter Memoryhouse 6 days ago 1:58 Spring 2017 Jean-Michel Blais 6 days ago 2:06 Piano Trio in G Major, L. 3: I. Andantino con ... Claude Debussy, Jos... The Essentials: Debu. 11 days ago 9:15 **Favorites** Prelude For Time Feelers Eluvium Copia 2017-02-16 Indie Light of the Seven Game Of Thrones: S... Ramin Djawadi 2017-02-16 9:49 Shower Stars in Dreams Dirk Maassen Zenith 2017-02-10 Oceano Roberto Cacciapaglia Quarto tempo (Fourt. 2017-01-31 Party Divenire Ludovico Einaudi 6:44 Divenire 2017-01-31 Workout Nostos Jean-Michel Blais, B... II 2017-01-31 4:32 Irene's Theme David Arnold & Mich... Sherlock: Music Fro... 2017-01-25 0:43 Throwback Awaken Dario Marianelli, Jac... Jane Eyre - Original ... 2017-01-25 4:26 Acoustic Pop

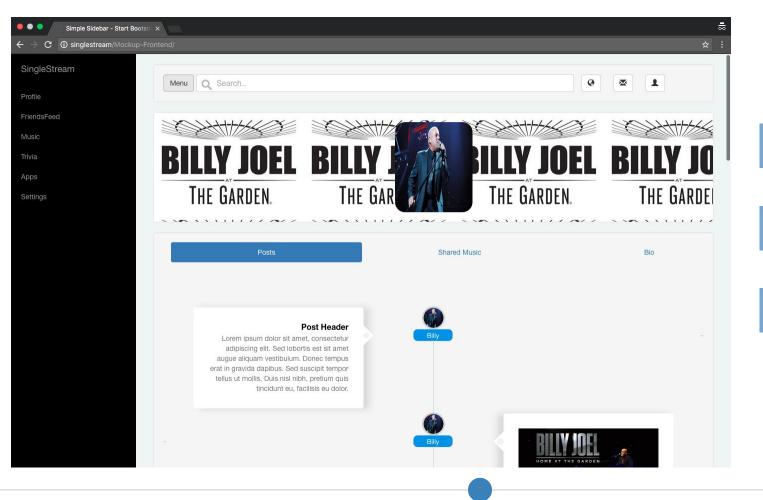
First Mockup: Spotify Inspired Music Interface



Sleek sidebar navigation menu (Toggle with Menu button)

Search field at the top of each page (Friends, Albums, Events)

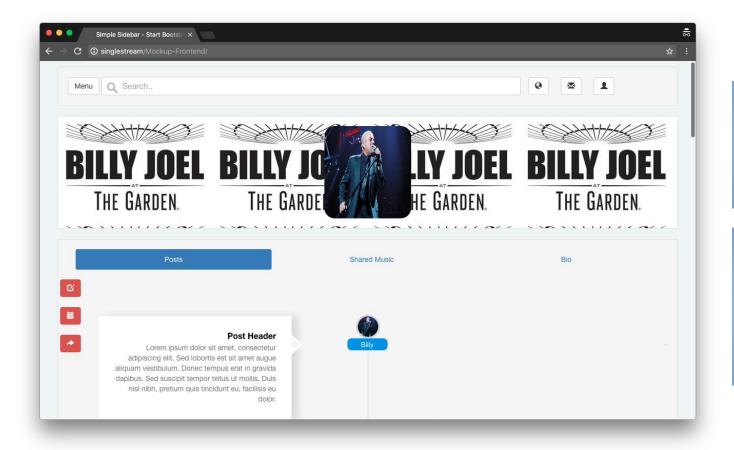
Responsive Design + Mobile Friendly



Profile

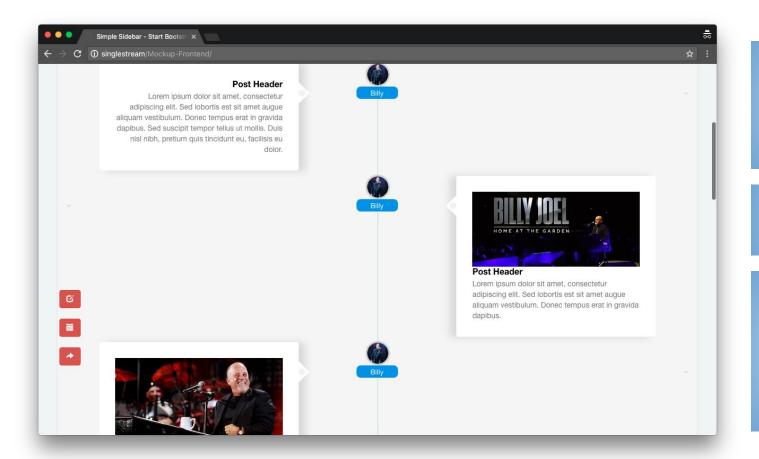
FriendsFeed

Music



Review your favorite song, create and share a new playlist with friends

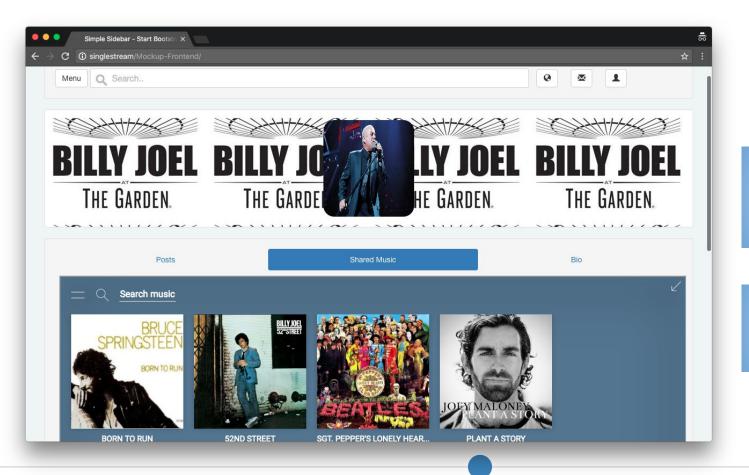
Share songs and albums from your YouTube, Spotify, and SoundCloud accounts



Review your favorite song, create and share a new playlist with friends

Customize who can see your posts

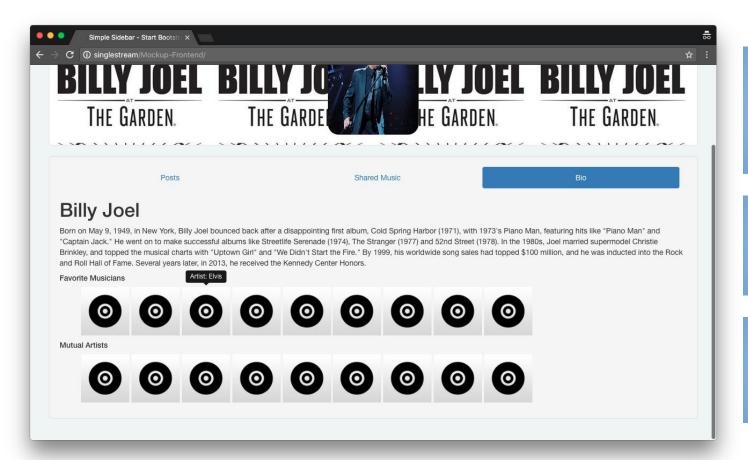
Share songs and albums from your YouTube, Spotify, and SoundCloud accounts



See all of the music you have shared recently

Filter by albums, playlists, songs

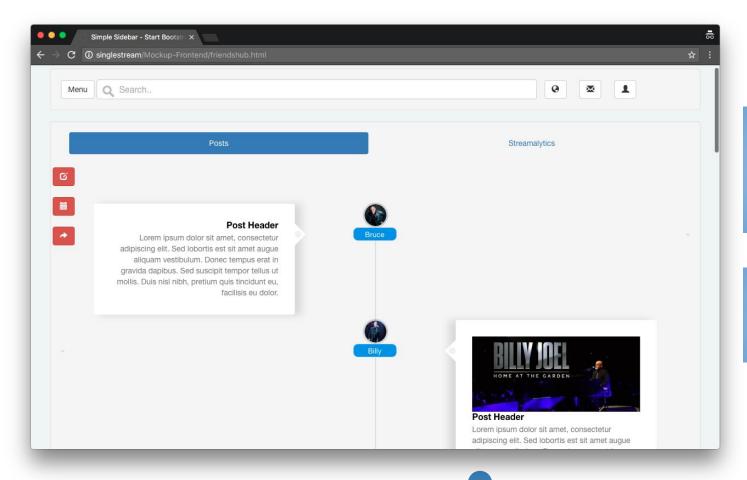
Profile: Shared Music



Let the community know who you are, which music you like most

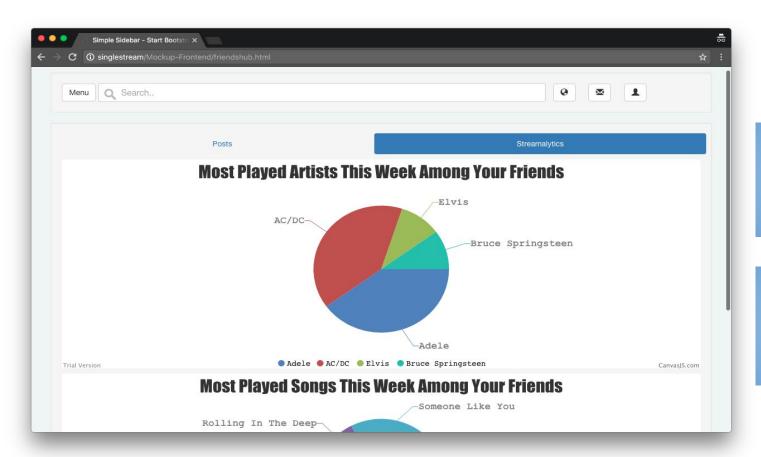
Rank your favorite artists and musicians

See what music you have in common with your friends



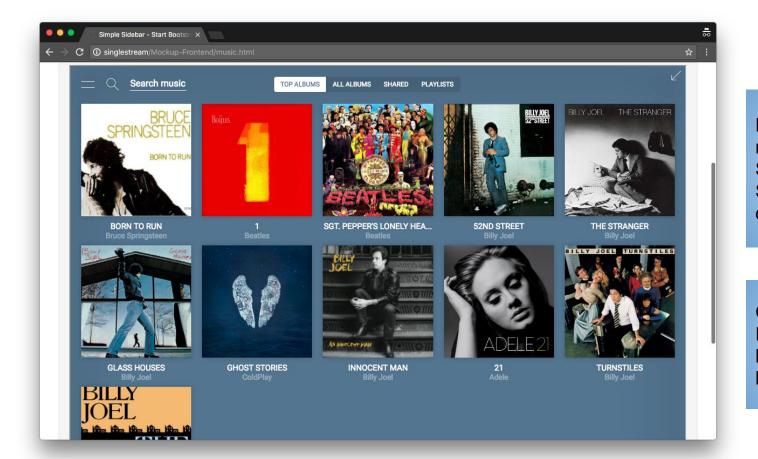
Explore all of the wonderful new music your friends share with you

Poll, debate, discuss. It's all about the music!



Reading is one thing. Visualizing is another.

See which artist, song, album, music video is trending in your friend circle



Play all of your music from SoundCloud, Spotify, YouTube in one place!

Customizable! Filter your tunes however you would like.



The Back-End

MEAN STACK









Back-End Technologies

MongoDB

- Account information
- API songs
- User posts and shares

Express

 Build the framework for a multi-page application

AngularJS

- Communicate with client side
- Formatting and design of user interface

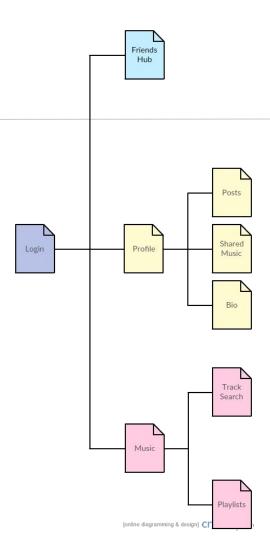
node.js

- Backend scripting
- I/O
- API interactions/User authentication



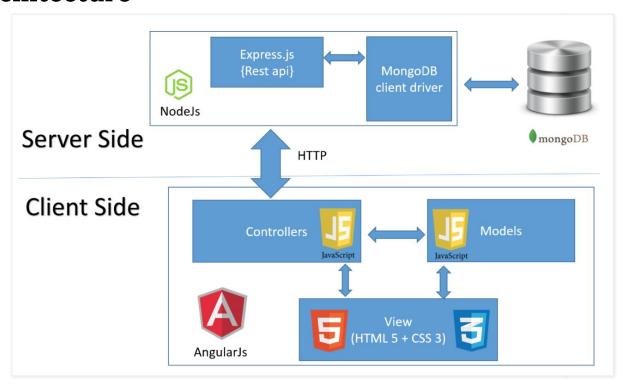
Website Structure

- Profile view/edit
 - Posts
 - Shared Music
 - Bio
- FriendsFeed
 - Posts, Shared Music
 - Analytics
- Music
 - Search for Tracks
 - View Playlists





File System Architecture





Thanks!

Any questions?