**Project 4 – Progressions and Scales (a.k.a. Jay’ Fretboard)**

**Description**

This application will display six guitar chords based on the key chosen from the Circle of Fifths. The user will be able to choose open chords or bar chords and the application will display one or more scales that can be used with the chords chosen. The application will have a record function and allow users to save recordings.

**ERD**

Diagram

Description automatically generated

Note: Chords table will use a Boolean value = True if the chord diagram is a bar chord.

**Wireframes**

Main Page

A picture containing schematic

Description automatically generated

Admin Page

Graphical user interface

Description automatically generated

**User Stories**

* I am a guitar player and I want to select a musical key so I can play chord progressions
* I am a guitar player and I want to record my chord progressions so I can play them back
* I am a guitar player and I want to create a user login
* I am a guitar player and I want to login so I can save my chord progressions
* I am a guitar player and I want to login so I can delete my chord progressions
* I am a guitar player and I want to see guitar scales so I can play leads with my chord progressions
* I am a site administrator and I want a user admin page so I can reset passwords
* I am a site administrator and I want an admin page so I can delete users

**MVP**

* User login
* User-selected Key returns six chord diagrams for the key group.
* User can select open or bar chords.
* Displays one or more guitar scales appropriate for the selected key.
* Allows user to record, playback and save audio.

**Stretch Goals**

* Guitar scales are pulled from [www.tofret.com](http://www.tofret.com) API based on selected chords. Scale diagrams rendered dynamically using canvas.
* Implement Oauth security for user logon.
* Delete related records (i.e. user is deleted and associated recordings are deleted using cascade)

**New (untaught) Components**

* audio-react-recorder
* The canvas html/React component

**Resources**

Chord Diagrams - <https://chordpic.com/>

Scales Diagrams - <https://www.guitarscale.org/all-scales.html>

**Audio Recording**

React-mp3-audio-recording

Sample code includes ability to download and adjust playback speed.

<https://medium.com/front-end-weekly/recording-audio-in-mp3-using-reactjs-under-5-minutes-5e960defaf10>

npm install --save mic-recorder-to-mp3

https://github.com/Matheswaaran/react-mp3-audio-recording/blob/master/src/App.js

audio-react-recorder

First attempt was with audio-react-recorder. Had some dependency issues. Code provided didi not fully reproduce the provided demo.

React Recorder - <https://www.npmjs.com/package/audio-react-recorder>

Required:

npm install --save prop-types

npm install --save audio-react-recorder --legacy-peer-deps

https://github.com/doppelgunner/audio-react-recorder