**PROJECT PROPOSAL – CAPSTONE 2**

*Matt Allen Robinson*

**SIGHT READING TRAINING CENTER,** *by Grace Music*

1. The tech stack for this project will be PostgreSQL // Node.js // React.
2. This application will be an evenly focused full-stack affair, but most of the heavy lifting will be done in the back-end.
3. This will be a website and a mobile app. The first iteration will most likely be a web application, but the second will be a mobile app.
4. The goal of this project is to provide a curriculum for people who serve in music ministry at churches to grow in their skills regarding ear training and sight reading for musical purposes.
5. The demographic of my users is people of all ages who have a desire to grow in their musical aptitude.
6. I plan on using data for populating the curriculum, logging in and logging out users, and sitewide editing via admin portals. I plan on collecting the data through a back-end API set up solely for the application. In addition to that, the Soundcloud API will be used for audio playback.
7. Here is the outline for the project.
8. Database schema: USER table 🡪 CONTACT table … // COURSE table <- LESSON table 🡨 COURSE\_LESSON table
9. The issues will include handling links properly, handling PDF files, and storing audio via the Soundcloud API correctly.
10. I need to secure passwords for this project to protect users.
11. The functionality will include contact forms, logging in and logging out, admin content creation privileges, and curriculum coursework for users.
12. User flow: SIGNUP 🡪 LOGIN 🡪 SELECT COURSE 🡪 BEGIN LESSONS 🡪 MARK OFF LESSONS AS YOU GO 🡪 COMPLETE COURSE 🡪 BEGIN NEW COURSE.
13. The features that take the site past CRUD are the admin sitewide privileges, Soundcloud API interaction, and curriculum progression. My stretch goal is to build it in React Native so that it can be an iOS / Android app.