# Sight Reading App – Who can benefit?

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## Introduction

# What is sight reading?

Before delving into our goals, it is important to mention what sight reading is.

Sight reading is the ability to play a piece of music you have never seen or heard before, by reading it off a page of written music. This means a score sheet of music, with notes, a clef, a tempo, etc. It's generally understood that music can be viewed as a form of language. Like natural languages, once we know the fundamental sounds and symbols that make up words, we can read almost any text in that language. The more one reads the larger their vocabulary becomes and they become better at understanding and reading new texts. Musicians attempting to improve their sight readability do similar things. Increased exposure to similar notes/strings of notes/chords, etc., is the same idea, but the majority of people don't experience reading sheet music day-to-day like we are exposed to in using our languages while reading, writing, and speaking.

#### Project direction

Now that we know what sight reading is, **how can we improve it**? There are tools available for this purpose, but we believe that they have too many overwhelming features available. Our focus is to create an app that is solely dedicated to help our users practice, and improve their skills, no matter how familiar you are with music and what background you have prior to using our app. It is key to know that, just like a language, the more practice you get with specific usage of the skill, the better you'll be. At its core, practice does make perfect.

## Target audience

Our app will be for **all age ranges**, with a primary focus on music students. There will certainly not be limitations to non-music students, but that being said, the more advanced areas of practice within the app will be more used by those heavily interested in music, which tends to be music students. The fact that the app should be accessible to all, does create a potential need for specific accommodations, which is one of the key focuses of our research.

## User Research Method

We felt it best to provide users with a quick to fill out survey form that contained important questions based on our discussions prior to creating the survey form, in order to get a good grasp of our target audience and who the app will appeal most towards. This is because we can ask a multitude of questions on a survey and have it streamlined in a way such that the statistics we get out of the survey can be compared and analyzed to make inferences about our respondents' needs. The **majority** of our respondents are between the **ages 18-30**, which is the most likely age range for post-secondary music students by far, and the age range we wanted the most forms filled out for. **61.5%** of our respondents had **taken music** classes before, while only 7.7% of these people are pursuing a music degree in post-secondary (7.7% of the total respondents, 13.3% of respondents in the age range 18-30). Being that only just over half of respondents had taken music before, it may be surprising to know that **69.2%** of respondents **play a musical instrument** (Figure 1)! This shows that just because someone has little or no experience with music, does not mean they cannot play or enjoy playing music to the same level someone with experience could.

How often do you play musical instruments?

26 responses

Daily
A few times a week
Once a week
Once every few months
Rarely
Never

Figure 1 - A pie chart showing how often respondents play musical instruments.

An overwhelming **majority of respondents** show at least **some interest** in music, on a 1-5 scale (1 being low, and 5 being high) **88.5%** of respondents answered a 3, 4, or 5 on the scale when asked how **interested in music** they are (Figure 2). Around 3/4ths of the total respondents have not attempted to improve their sight reading skills before, although we see that even the percentage of people very strongly interested in music is higher than that (30.8%).

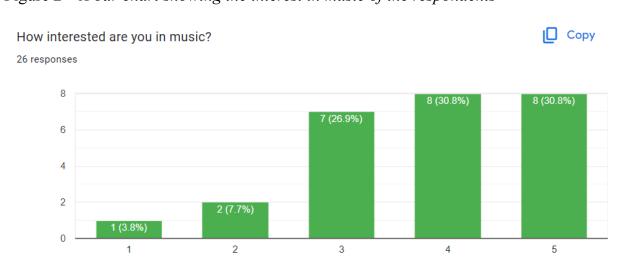
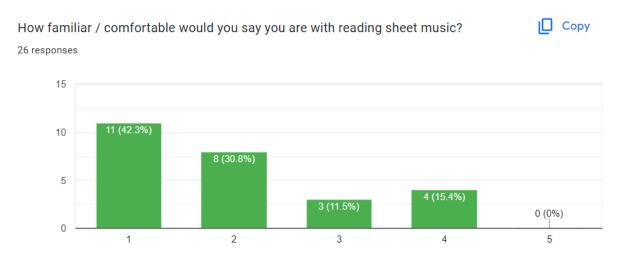


Figure 2 - A bar chart showing the interest in music of the respondents

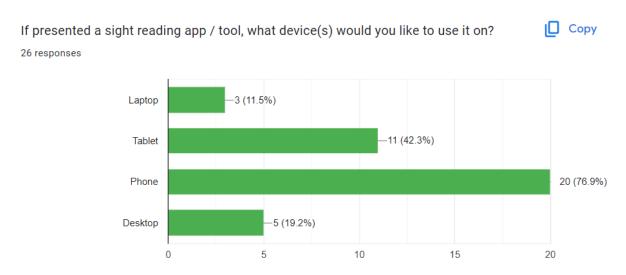
Despite the interest of the majority of respondents, it is extremely interesting to note that **not one respondent** felt very **confident** in their **sight reading skills**! When asked the similar question, "how familiar / comfortable would you say you are with reading sheet music" with answers ranging from 1-5 (similar to before), **0 respondents** felt extremely confident in their abilities (Figure 3). This goes to show that no matter what skill level or background of music you're in, there is always room to improve. You can always get better with practice!

Figure 3 – A bar chart showing the respondents' comfortability in reading music sheet



Respondents would mostly like to use this app on their **tablets / phones** (Figure 4), and by far most of them would **practice** piano at **home** (secondly many responded at school, church, or in quiet areas, as opposed to outside or at work or in noisy areas). This gives a good example of the types of environments users will have while using the app, that being mostly **quiet areas** where they can focus on their practice easier.

Figure 4 – horizontal bar chart showing the respondents' preferred device for sight reading.



Lastly, when respondents were asked if they had any specific extra accommodations that would be useful to know, of course most left this field blank, but we got three valuable insights for this question. Two people responded wanting the ability to change the color of the screen to help for eye strain, eg. a dark mode vs. a light mode, or maybe even more personalizable like a dark blue, some people want options for theming. The other insightful comment is that someone wants easy to read chord charts, and the option to make chords more complicated for advanced users, and the ability to change the key. This could certainly be valuable and seems like an understandable accommodation to be made.

# Conclusion: Relate to framework

Connecting our results from the survey and our framework (Figure 5), we now have a better grasp of who our target audience is and what needs they expect from an app like this. We can rule out noisy areas as a focal point for our environments, as well as laptops for our objects. We did not get many responses from people aged under 18 (only three responses), so we didn't get much information from that age range, but we got many responses from the other age ranges and it seems like this app will be well suited for people aged 18-30. Our activities and interactions can remain similar, with the knowledge that we could allow the ability to set the key of the music, to users who want that.

Figure 5 —a table containing AEIOU Framework for our Sight Reading app.

| Activities   | Environments                 | Interactions                                    | Objects                             | Users   |
|--|------------------------------|---|-------------------------------------|---|
| Improve speed<br>when<br>recognizing<br>music                  | Quiet area Noisy area School | Opening the app(?)  Pressing MIDI keyboard note | MIDI keyboard  Tablet  Laptop       | Advanced music student  Beginner music student  |
| Find out which<br>notes and<br>patterns need<br>'more practice | Home<br>Church               | Selecting<br>multiple choice<br>option          | Left hand Right hand                | Elderly / older<br>people (30+)<br>Young adults |
| Increase<br>accuracy of<br>sight-reading                       | Outside                      | Choosing level of difficulty / experience       | Connector for keyboard to device(?) | (18-30)<br>Kids (>18)                           |
| Tracking<br>attempts for<br>performance<br>rating              |                              | Completing lessons / units / tests              | Audio output<br>device(s)           | Music teacher                                   |