

Release 1.0 Acceptance Document

Implemented User Stories:

As a user, I want to play an interactive keyboard.

- Plays a note whenever a key is pressed on the keyboard or whenever a user clicks a key on the piano
- Highlights the corresponding key when pressed or clicked

As a user, I want to be able to learn notes.

- A introduction lesson on notes
- Piano displays music notes on the keys

As a student, I want to be able to have keys highlighted on the piano when certain text-blocks are clicked so that I can learn in a visual as well as textual way.

- `changeColor()` is called to change the corresponding key to a highlighted when key is pressed or clicked
- `revertColor()` is called when a key is not clicked or pressed to revert key to original color

As a student, I want to be able to access the first lesson.

- An introduction lesson that has interactive buttons that teaches you notes, scales, and whole and half steps.

As a student, I would like to be able to be tested on the first lesson's information.

- Quiz on notes that test user knowledge on how to use the keyboard
- `highlightRandom()` generates a random note and highlights the corresponding note on the keyboard
- User either presses or clicks the corresponding key in order to be correct.
- `showSnackBar()` displays a message to the user and shows if the user is correct or wrong.

As a student I want to be able to learn how to read notes from a staff so that I can communicate with other musicians more effectively.

As a student I want to be able to learn how to construct a major and minor scale from a given note so that I understand the differences between them.

- A lesson on major and minor scales

As a student I want to understand the different keys and key-signatures associated with them so that I can read music more easily as well as have an easier time understanding intervals.

- Lesson on circle of fifths

As a student I want to understand the various intervals between notes so that I can more effectively communicate with other musicians and more accurately analyze music I come across.

- Lesson on intervals

As a student I want the site to be pretty so that I don't hate looking at it.

- Stylize website for a clean user interface.

Working Prototype Known Problems Report

MTK - 3/14/2017

- ~~Holding down a key, usually with multiple keys are pressed, in the Major and Minor Scales quizzes will cause to increment the score regardless if the inputArray does not equal to notesInArray~~
- ~~Playing notes using a computer's keyboard will uncolor highlighted keys~~
- Major and Minor scales quizzes do not work consistently.
- If a quiz picks a note to ask a question from (i.e. play a whole step from A) and the answer to the previous question was the same then the note in question will be highlighted red instead of blue.