



# Play by ear

## Interval Trainer

### **Development Team:**

Dana Wright

Josh Coldiron

Savannah Jones

#### **Inspiration**

Savannah has experience learning to play piano by reading sheet music but has never mastered playing solely by ear. We decided to develop a program that can teach anyone wanting to learn the chords and associate keys with memory and sound.

#### **What it does**

This program presents an octave on a piano. It will play a chord or an interval based on player preference and the player must repeat the correct sequence with the correct keys to progress in the game.

By doing this, they will hopefully begin to retain knowledge of the keys by the sounds they make, versus only using sheet music.

#### **How we built it**

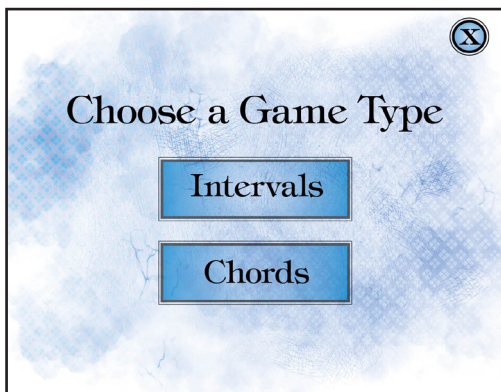
Using game maker studio we created key objects that make a sound when depressed. The color of the key changes to indicate that it is being played, and then if the sequence is correct, a success screen will play, and a new challenge will be presented to the player.

## Menu Screen



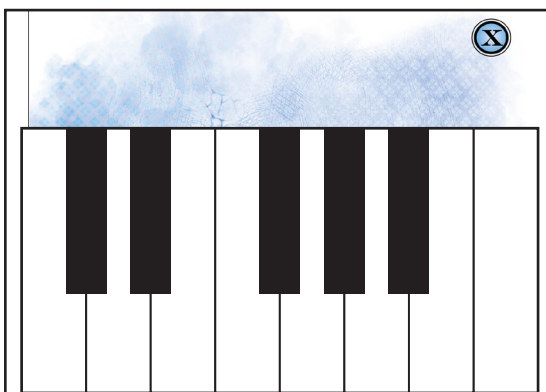
When application is loaded, user is greeted with intro screen. Intro screen provides user with options for game. Options include instructions, that explain the modes and what the game is. Option 2 lets the user play the game. Credits inform the user of the developer and company. The final option allows the user to close the game.

## Optional Transition Screen



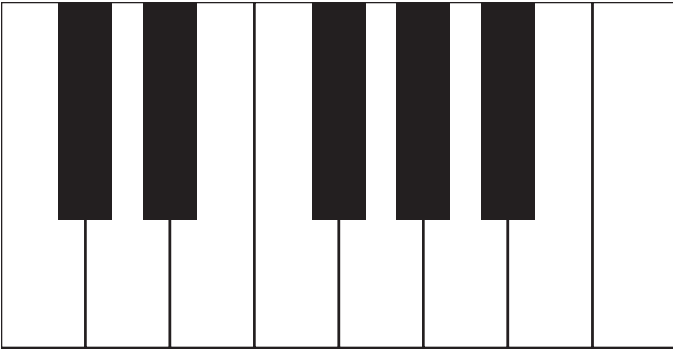
This is an optional feature if time permits. If we are able to add additional game modes for the game, the user will be given of game mode at this transition screen. This will act as a sub menu.

## Game Screen

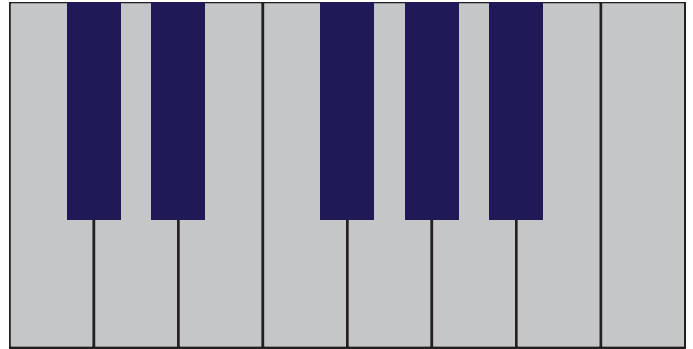


User is greeted with actual game screen that is a size based around 1024x768. There is a menu to exit the game at the top. In the middle is a visual indicator for the user to know how they are playing the game. At the bottom are keys.

## Game Play



When player begins game they are given sequence of tones or chords depending on the game mode. The user then has to copy the mode perfectly to succeed.



To let the player know they are selecting a key, the key will change color. The above image shows the alternate state of the keys.

## End Screens



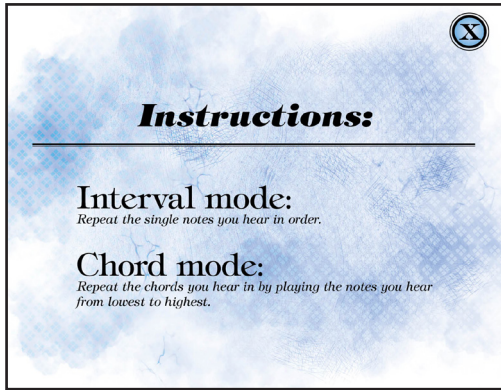
If the user copies all the notes perfectly, they are given a victory screen and have the option to try again or exit through the close button at the top. If the player loses they message comes up as soon as they miss the note, and they have the same options.

## End Screens



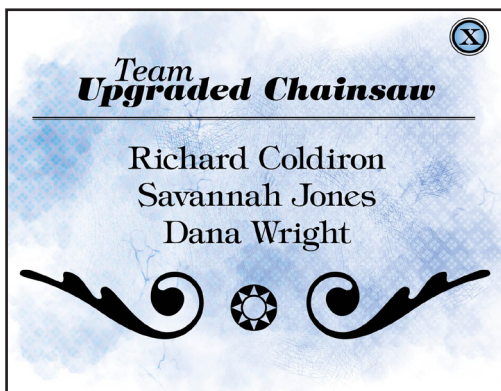
If the player loses they message comes up as soon as they miss the note, and they have the same options.

## Instructions



From the menu there are two other options. The user can select the instruction screen which gives them information on how to play the modes, then a button to exit from this mode.

## Credits



Credits briefly tells the player the company (team) name and staff names.