

# Project Whitekey

## Requirements

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## **Preface**

Our application presents a simplistic piano interface that doesn't need to make any kind of differentiation between types of users and does not save any user data. The user's experience level with music will not affect general interactions with the program. As a result, we have listed the one possible user story that covers all interactions that can occur with the software.

## **Initialization/Closing**

The user launches the application with its icon, and the keyboard interface appears.

If a user switches out of the app, or closes the app, any sounds that are being played will be stopped.

A current scale display will show "Pentatonic Scale".

## **User Interface**

The user can select an accompaniment play button, which plays a respective backing track.

The user can select an accompaniment stop button, which halts the backing track.

## **Keys**

The user can touch keys to play sounds.

A key can only be white; no black keys are available on the board.

Each key contains its own unique note, mapped initially to the pentatonic scale.

If a key is pressed, it will play the sound that is currently mapped to it from the scale.

A user can press multiple keys at once, and each sound will be played simultaneously.

## **Options menu**

A user can select an Options button on the main user interface.

Triggering the options button will display a list of selectable scales

Selecting a scale in the menu will update the targeted sound value of each key.

Selecting a scale in the menu will update the current scale display to the name of the active scale.