

start Easy Keys app

- make sure app doesn't crash on startup by opening multiple times

Press any keys

- Make sure notes highlight on can be pressed for all notes

User should hear notes pressed along with the notes of the scale highlighted

- Make sure all notes play correct audio on press
- Make sure all notes of the correct scale highlight on button hold

Change to a different scale

- Make sure all scales have correct note intervals highlighted on press or scale lock

Hold a note and use the "lock scale" slider

- Make sure locking scale leaves notes of all scales highlighted upon release of the any note
- Make sure slider moves to "on" position

User can unlock the slider

- Make sure when slider is unlocked, pressing any new key will not leave the scale highlighted on release
- Make sure slider moves to "off" position

Reset Keyboard

- Make sure this button reverts the keyboard back to it's default unhighlighted state on locked scales
- Shouldn't do anything when used on unlocked scale, including no crashes or other issues

Unit Test

Unit testing was automatically done by Xcode builder.

However we used old technique (i.e. print) to check whether each function works or not.

Arturo : Tested funcion startOsc and stopOsc in SoundGenerator class. Input pitches for test case were 260 and 500, which are boundary values of keyboard pitch.

Brandon : Tested UnlockScale and ResetKeyColor in ViewController class. Set color and lock status and check whether color and lock status are changed by function.

Nithin : Tested function ModifyKeys in ViewController class. Put empty string and 'A' to check scale text and key colors are changed.

Sangwoo : Tested each scale functions in ViewController class. Set root to C and B, which are Boundary Values, and check scales are implemented correctly by checking the key color.