

# «Abacus» in Objective-C + Kindergarten mode

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# As an introduction...

## Goals of this exercise

- Manipulate the main interaction mechanisms under iOS
- Have most of them both as «outlet» and «actions»
- Practice a bit more StoryBoard
- Write a bit of Objective-C
  - ▶ **Without ARC**
  - ▶ **Sadly, too simple for really experimenting memory management**

# Demo on a «small» device



# Demo on a «large» device



# iMidiNoteConverter



A similar application exists in the AppStore

Issued from a previous MOOC





The screenshot shows the App Store preview for the application "iMidiNoteConverter" by Sebastien REMY. The app is free and has a 4+ age rating. The preview includes an app icon showing a MIDI cable and three iPhone screenshots. The screenshots display the app's interface, which features a keyboard layout with notes labeled in French (Do, Ré, Mi, Fa, Sol, La, Si) and English (C, D, E, F, G, A, B). The interface also includes a display for the current note and octave, such as "Do3 = C3 = 60", and a slider for adjusting the octave. A settings menu is visible on the right side of the screenshots.

# A few hints

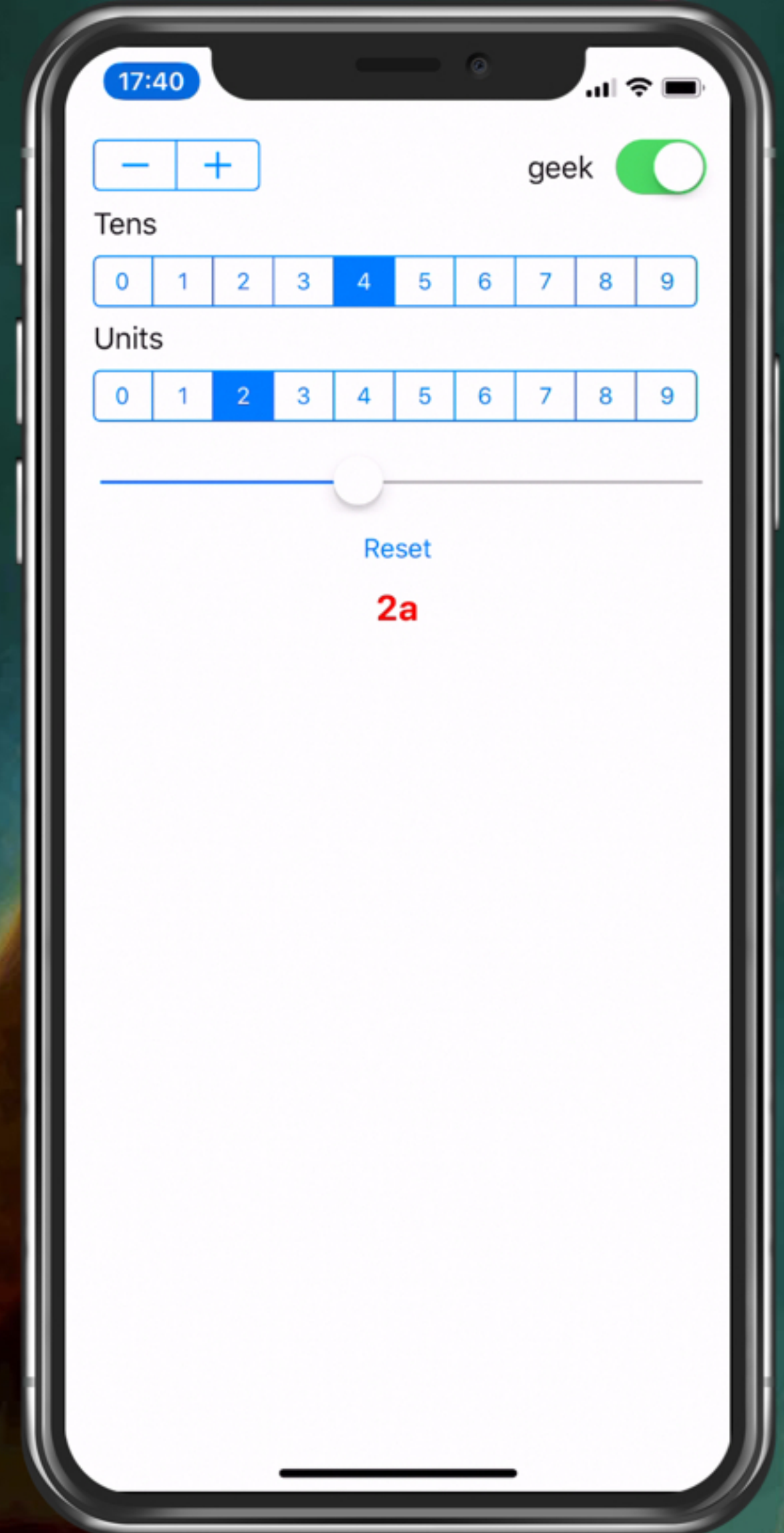
## Interface mechanisms to be used

-  UIButton + UILabel + UIStepper
-  UISwitch
-  UISegmentedControl
-  UISlider

## A bit of code

-  NSString formatting
-  A bit of color management

## But you know...



# A few hints



## Interface mechanisms to be used

- UIButton + UISegmentedControl
- UISwitch
- UISegmentedControl
- UISlider



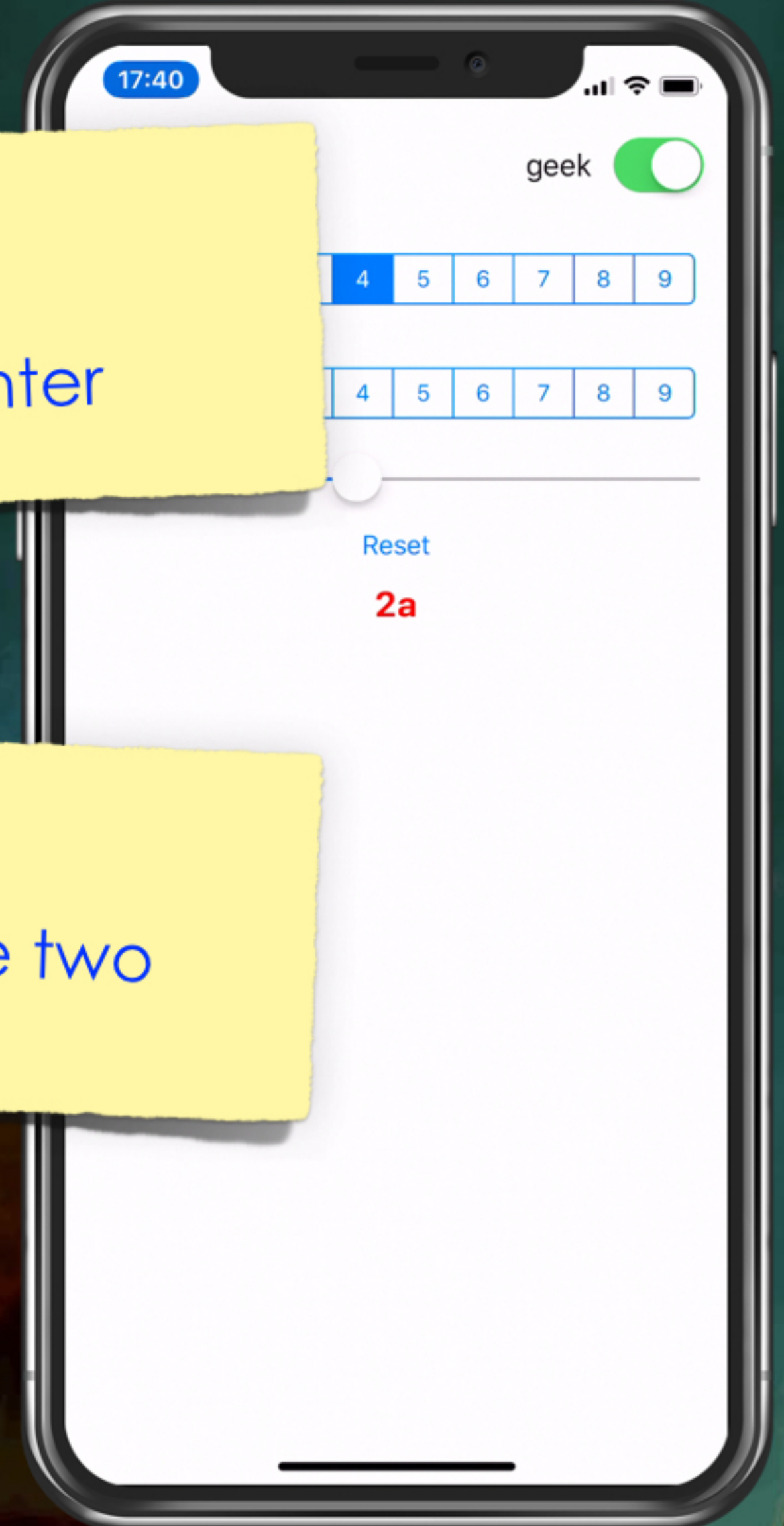
### Trick 1

Just use the stepper's counter



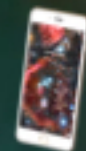
### Trick 2

Use the same method for the two UISegmentedControls



## A bit of color

- NSString formatting
- A bit of color



## But you know...



# As a conclusion...



**Have fun!**



**You may enrich the exercise**

- 📍 Resources in the video description's page