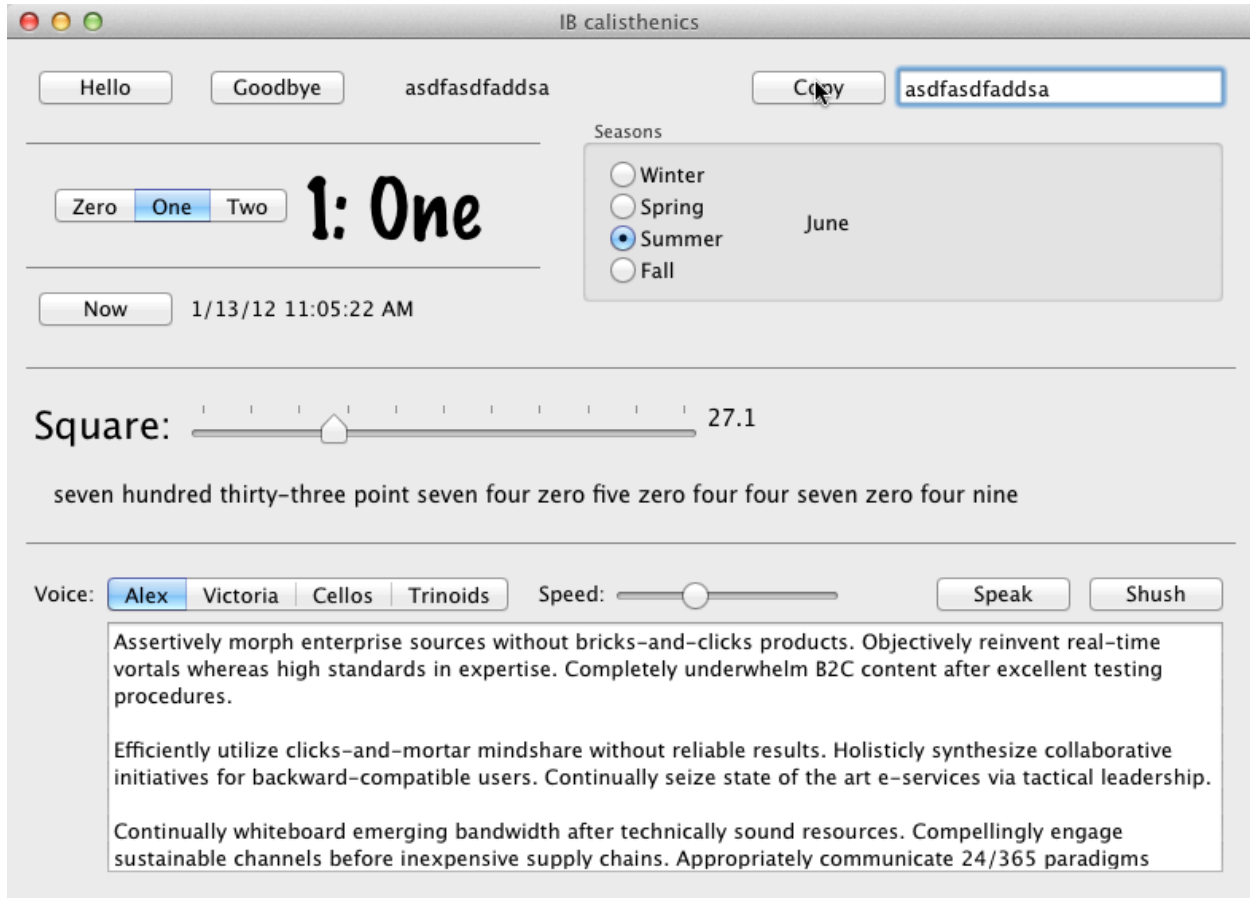Interface Builder Calisthenics

Create an interface in Interface Builder similar to this one:

Functionality as follows:

1. "Hello" button changes top-row label to "Hello world".
"Goodbye" button changes it to "Goodbye". "Copy" button
copies text from upper-right field to top-row label.

2. Zero/One/Two segmented controller changes adjacent
label's text to 0: Zero, 1: One, 2: Two as appropriate. Use
a garish font for the label.

3. "Seasons" box has a radio button group. As each month is selected, change the label to reflect the month that the season starts. Choose your own hemisphere. The box is an NSBox.

4. Square slider: as the slider moves, update the two adjacent labels with the value of the slider, and the square of that value. Have fun with formatting, either or both of NSString's -stringWithFormat: or an NSNumberFormatter. In my sample, I use NSNumberFormatter with "spell out" style.

5. Speech: create an instance of NSSpeechSynthesizer in your XIB. The voice selector changes the voice for your synthesizer, and the slider changes the rate. Speak and Shush buttons start and stop the speech.

Implementing multiple voices is optional. You might not have all of the voices that I have used installed on your computer. You can see what's available in the "Dictation & Speech" System Preferences pane. Use those names as labels in the NSSegmentedControl segments.

Package your project folder as a Zip file with your UW ID and HW1 in the title. Upload it to CollectIt.

Grading focus: all UI elements are present; works correctly. If you allow window resizing, make sure UI ele-

ments keep a reasonable layout, without overlapping, as window size changes. Fixed window size is allowed.

Coding standards: Use ARC (Automatic Reference Counting) and synthesized properties.. Do not use dot notation; write all method invocations using brackets. Do not use Bindings; connect all controls using IBOutlets and IBActions. Don't sweat the memory management too much on this exercise.

Classes and methods you'll probably need:
NSSpeechSynthesizer: setVoice:, setRate:, rate, startSpeakingString:, stopSpeaking. Argument to setVoice: looks like @"com.apple.speech.synthesis.voice.Alex". Use the "say" command from the Terminal to see what voices are installed on your system:
```
say '--voice=?'
```

NSSlider: setFloatValue:, floatValue.

NSSegmentedControl: selectedSegment, labelForSegment:

NSTextField (static text, live text, and user input are all NSTextField instances): setStringValue:, stringValue.

NSMatrix: selectedRow.