# 10: Campus Walk III

### Due: Noon November 5

## Description

In this final assignment you will extend your app from last week to include editing and searching features.

## Required Features

This list is simply the required features of the app. You need to implement all of them into your own robust design.

1. Include a search bar on your list of buildings. Use Search Bar scope buttons to allow searching by building name or year of construction. Be sure to customize the keyboard to the appropriate type depending on the search type. Changing scope type should bring up the appropriate keyboard
2. Allow the user to enter information (text) about a building. This information should appear below the photo in the detail view of a building. The information can be arbitrarily long so make no restrictions on the size/length of the text. Information should persist as long as the app is running: if the user returns to a building for which information was previously added, that information should still appear. Existing information should be editable.
3. Layout your Detail Building view (showing name, photo, info, etc.) such that when scrolling is necessary to view all the detail information, the entire view scrolls (including name, photo, etc) rather than just the textView containing the text.

## Hints

1. To have the keyboard type change while it is currently visible you may try resigning the first responder and then becoming first responder again (on the correct responder object).

2. To support the desired scrolling behavior in which your textView itself doesn't scroll you'll need to resize your textView to fit its content (and change your scrollView's contentSize). UITextView has a property `contentSize` that makes this pretty easy, but to avoid complications with Auto Layout, you may want to programmatically add the textView so that you can freely change its frame as needed.

## Testing

1. Be sure to thoroughly test your app under all conditions to ensure that it always behaves correctly.

2. Xcode's debug bar has a "Debug View Hierarchy" button which is useful for examining the layout of your subviews at a breakpoint.

## Submission

Your submission should be pushed on the master branch. Be sure to verify that your project builds and remove all cruft and compiler warnings.