

Assignment 3 - Sampler App  
Due Oct 17 23:59

Objectives

Sample some UI components using Swift UI.

App description

This app will use a number of UI elements so the app will not make much sense as a single app. You will use a tab bar with a number of tabs. The view for each tab is described below. The application is to be in Swift UI.

**Sports tab**

The view at this tab will contain a custom picker view with two columns. The first column will contain a list of countries. When the user has selected a country then the second column displays a list of sports in that country. The list of countries and their sports are given below. The view also has a slider. When the user selects the top (first) sport in the list. The slider moves all the way to the left. When the user selects the bottom (last) sport in the list the slider moves all the way to the right. When the user selects sports between the first and last the slider moves proportionally. So if Taiwan is selected and the user selects the second sport from the top then the slider moves 1/5 the way to the right. Conversely when the user moves the slider the picker will move to the corresponding sport.

Country	Sports
India	Cricket, Chess, Badminton, Field Hockey, Football, Tennis, Gilli-danda, Golf
USA	Baseball, Football, Curling, Basketball, Soccer, Rock Climbing, Skateboarding
Taiwan	Football, Archery, Baseball, Table Tennis, Cycling, Taekwondo

## Map Tab

This view contains a map view. The map is centered on San Diego and zoomed in so that El Cajon and Escondido are labeled in the map.

## Segment Tab

This view has a segmented control with three options: Progress, Text, Alert. When the user selects the "Progress" option they see a switch and an inactive activity indicator. When they turn the switch "on" or to the left the activity indicator spins. When they turn the switch off the activity indicator stops spinning. When the user selects the "Text" option they see a Text View that they can enter text. The text view should start with some text. When they select the "Alert" option they will see a button. When they click on the button an alert will pop up asking the user "Do you like the iPhone".

## Target Device

iPhone 13

## Grading

The assignment will be graded as follows:

Points	Item
10	Tab bar working
15	Picker in Sports Tab working correctly
15	Slider in Sports Tab working with Picker
10	Map view in Map tab working, centered on San Diego, zoomed in
10	Segment Control working in Segment Tab
10	Progress activity working in Segment Tab
10	Text view in Segment Tab
10	Alert in Segment Tab
10	Proper coding style
5	Map view shows users current location (optional)
15	Map view supports giving directions between two locations (optional)

## What to Turn in

Create a Xcode project for the assignment. Xcode places the project in its own directory. Place the directory (and all its contents) into a zip file. This assignment we will not use blackboard to turn in assignments. We will use my older course portal (<http://bismarck.sdsu.edu/CoursePortal>).