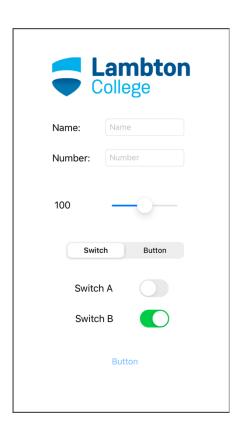
We are going to build an app that uses some iOS controls:

- Image view
- Slider
- Text Fields
- Switch
- Buttons
- We are going to set and retrieve values of these controls. You will learn how to use
 Action Sheets to force the user to make a choice and how to use Alerts to give the user
 important feedback.
- The logo at the top is an image view
- Two text field: one alphanumeric and the other only numerical
- Slider and a label representing slider values
- Two switch controls
- A button
- When the user taps the Segmented Control, the switches disappear and are replaced by a button.
- When the Button is pressed, an Action Sheet pops up, asking if the user really meant to tap the button.



Controls are divided into three categories:

- Active controls: button, switch, ...
- Static controls: image view, label, ...
- Passive controls: text fields they store data

Creating an application

Create a single view application. Create a new group in your project name it images and put inside the logo of the college. All images in iOS should be .png or .jpg.

Drag and drop an image view into your project. Then after resizing your image view choose and select the source from the attribute inspector. In the view section, for the mode, select aspect fit. What is the interaction section?

Add a label and a text field and duplicate your views. Modify the size and positions of the new controls so they are perfectly aligned with the rest of the controls in our view so far.

Clear Button is a pop-up button which lets you choose when the Clear button should appear. Adjust to Fit specifies whether the size of the text should shrink if the text field is reduced in size.

Provide a placeholder for the text fields. For the second text field, in the keyboard type choose number pad.

Hiding keyboard

When the user taps the Done button on the text keyboard, Did End On Exit event will be generated.

Add the following method to your view controller file by adding an action to the text fields.

```
@IBAction func textFieldDoneEditing(_ sender: UITextField) {
    sender.resignFirstResponder()
}
```

Select the text field in the story board. Drag from the circle next to Did End On Exit to the File's Owner (View Controller) and let go.

We want to hide keyboard when we tap anywhere in the view. We are going to add gesture recognizer to our main view. Add the two following lines to your view did load function

```
let tapGesture = UITapGestureRecognizer(target: self, action:
#selector(ViewController.viewTapped))
self.view.addGestureRecognizer(tapGesture)
```

The Gesture Recognizer is assigned to call the viewTapped method which we will write. This method should call resignFirstResponder on both Text Fields to ensure that the keyboard is hidden.

Session 2

Next step is to add a slider and a label. We are going to add action for this slider in view controller. Control drag your slider to the view controller in order to add an action and name it sliderChanged.

Question:

Update the slider value when the application run

Next – drag and drop a segmented control and two switches and a button to your view. We want to hide one of the buttons when we click on the segmented control. We need to add action to that. To do so we need to create outlets for the button and the two switches.

The code should look at the selectedSegmentIndex property of sender, which tells us which of the actions is currently selected.

Add action for the switches. Add action as well for the button Make button be hidden when application is loaded.