

# Assignment 2

## CPSC 599.72 — iProgramming for Creative Minds

### Building Your First App

In this assignment you will build an app with an array of control elements. Have a look at the basic layout of the app.

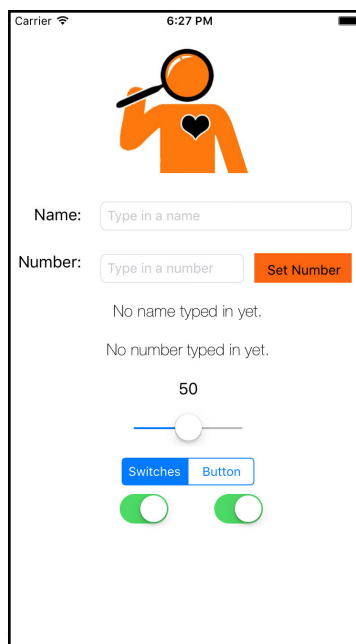


Fig. 1: Start screen

This is what your app should look like. The image file is provided to you in the assignment file package. You need to include the image at the top, labels, text fields, buttons, and switches. Make sure that you use auto layout to add constraints to all the view elements. The functionality of the app should work as follows.

- **Entry screen:** When the app starts, it should look like in Figure 1.

- **Entering a name:** When you tap on the name text field, the alphanumeric keyboard appears (Fig. 2). After a tap on “Done”, the keyboard is dismissed and the entered name is displayed with a greeting.

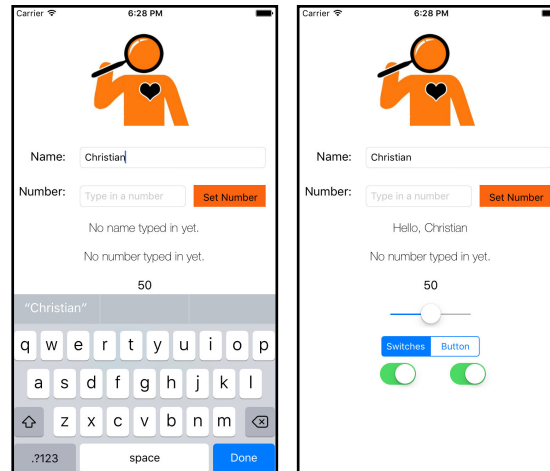


Fig.2: Entering a name

- **Entering a number:** When you tap on the number field, the numeric key pad appears to enter a number (Fig. 3). Tap on the “Set Number” button to close the keyboard and display a message with the entered number as shown.

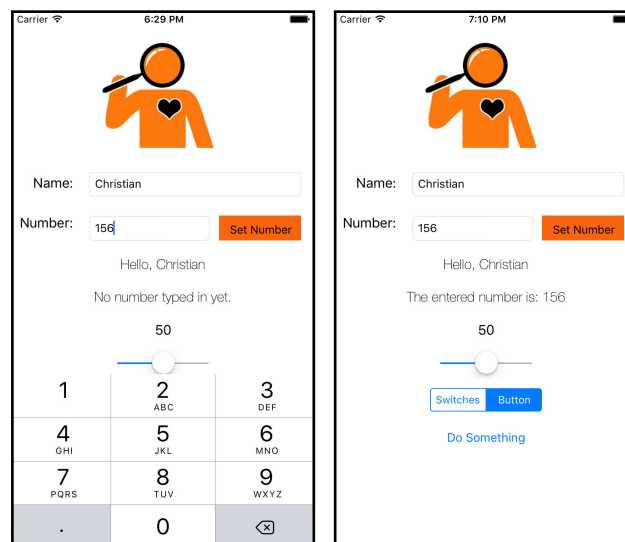


Fig. 3: Entering a number

- **Slider:** When you move the slider, its value is instantly updated and displayed in the label right above the slider (Fig. 4).

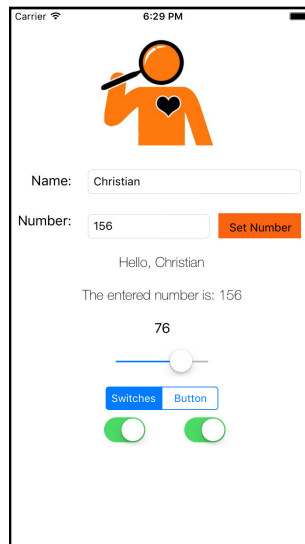


Fig. 4: Moving the slider

- **Synchronized Switches:** Tapping on either of the two switches, changes the state of both switches (Fig. 5).

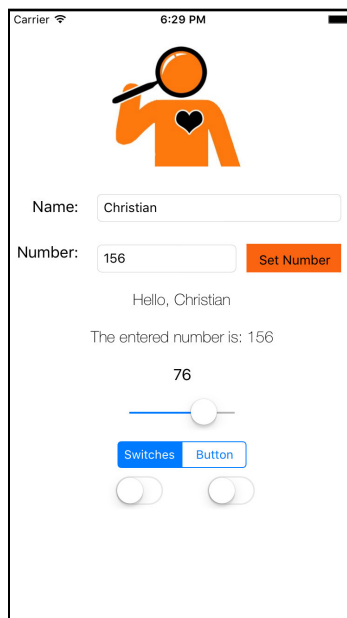


Fig. 5: Toggling the switches

- **Toggle Switch:** Tapping on the “Button” toggle, makes the two switches disappear and displays a button “Do Something” (Fig. 6). Selecting this button brings up an alert message.

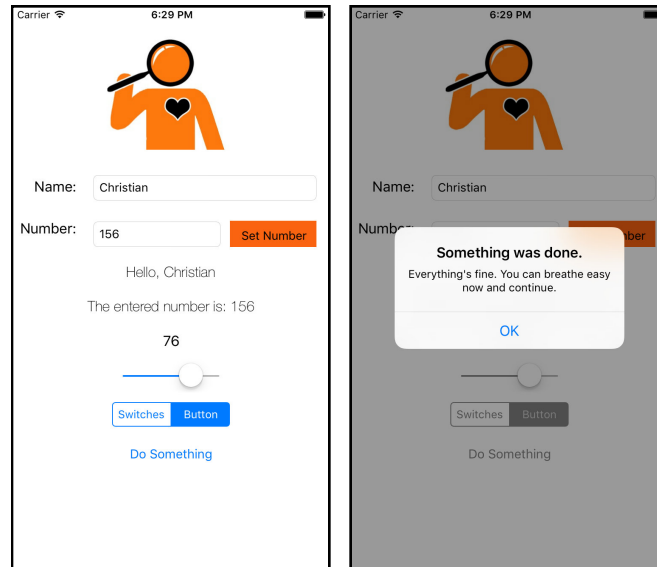


Fig. 6: Switching to the button and triggering an alert.

- **Empty entries:** Should the user enter nothing in the text field or delete the contents of the text field, appropriate messages are displayed in the labels (Fig. 7).

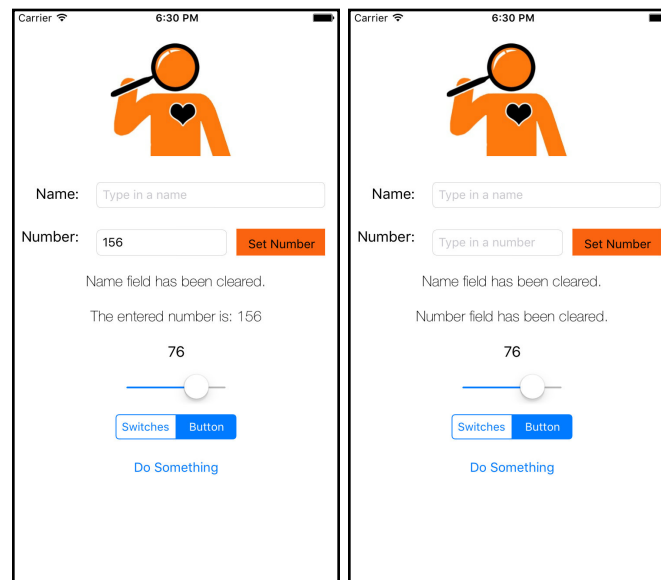


Fig. 7: Dealing with empty text entries

Implement this app with the behaviour described above in Swift using Xcode 9.<sup>1</sup>

Submit your complete project as a **ZIP archive** through the dropbox in D2L.

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<sup>1</sup> Use Xcode 8.x, if you don't have access to the latest Xcode 9 version.