Assignment 3 Report

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Assignment: Assignment 3

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1. Description of the Assignment

This assignment was divided into two sections based on Chapter 9 and Chapter 10 problems.

- Section I: Required creating a UI with multiple input fields, logic to handle missing data, and keyboard behavior.
- Section II: Focused on implementing a tabbed UI with UIKit, converting segmented controls, managing date ranges, and splitting contact input.

2. Description of the Logic, Input, and Output

Section I:

- Split input into first and last name using two separate text fields.
- Show full name or "Hello World!" if empty when the button is tapped.
- Added input fields for phone number and email with appropriate keyboards.
- Keyboard dismisses via tapping outside or pressing Return.

Inputs:
- First Name
- Last Name
- Phone Number
- Email Address

Outputs:
- Full Name shown on screen
- Fallback "Hello World!" if both names empty

Section II:

- Created a tab bar interface using UIKit programmatically.
- First tab ("Main") includes:
  - First/Last Name fields
  - Output Label

- UISwitch
- UIDatePicker

- Second tab ("Settings") shows a static label.

Inputs:
- First Name
- Last Name
- UISwitch
- UIDatePicker

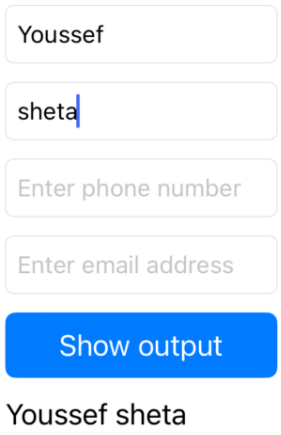
Outputs:
- Label showing combined first + last name
- Console logs for switch state

3. Screenshots

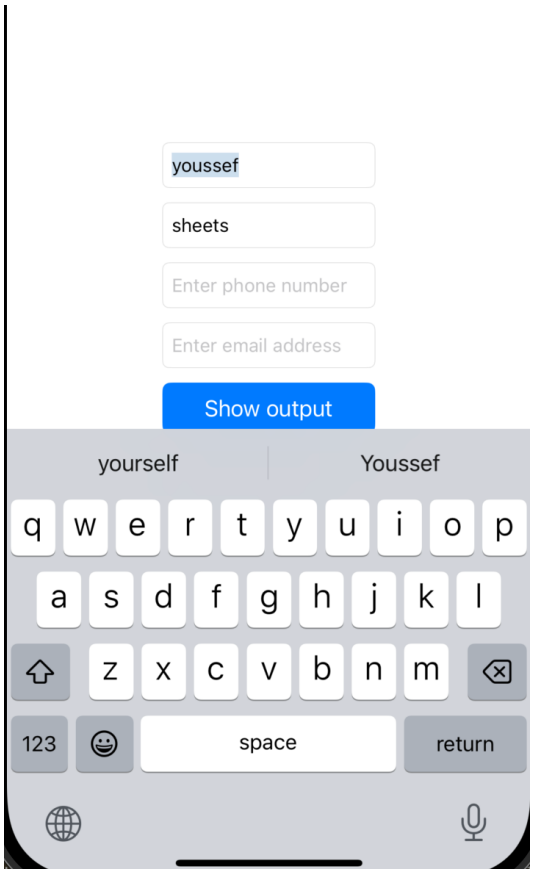
Screenshots – Section I Explanation

The following screenshots demonstrate the functionality implemented in Section I of the assignment:

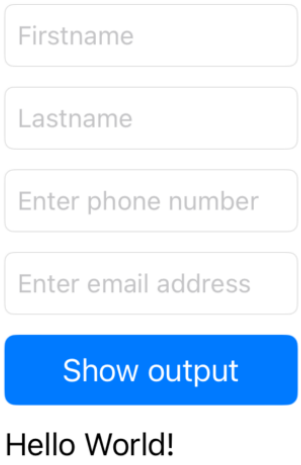
Screenshot 1: Shows filled First Name and Last Name fields, with output label displaying "youssef sheta" after tapping the button.



Screenshot 2: The keyboard is displayed when the user selects the First Name text field. This demonstrates proper keyboard presentation behavior.



Screenshot 3: When both the First Name and Last Name fields are empty, the output label correctly defaults to 'Hello World!'. This satisfies the fallback behavior.

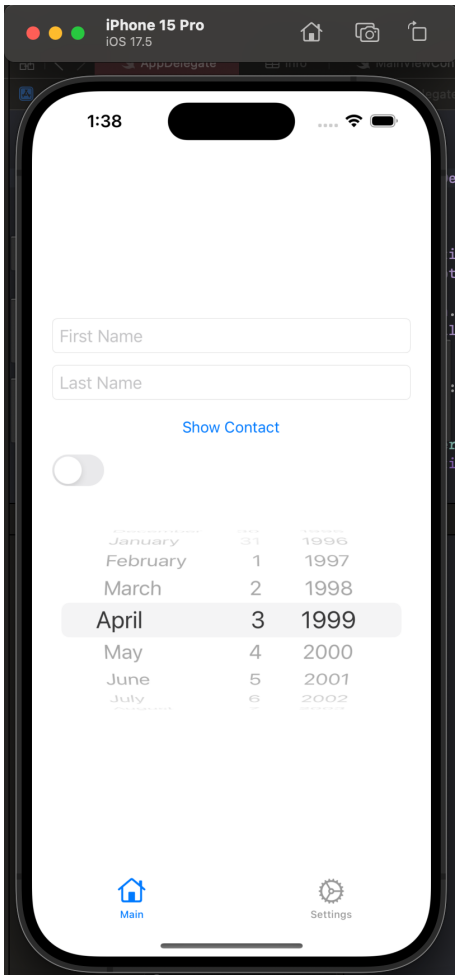


🧠 Note: Tapping anywhere outside of a text field dismisses the keyboard.

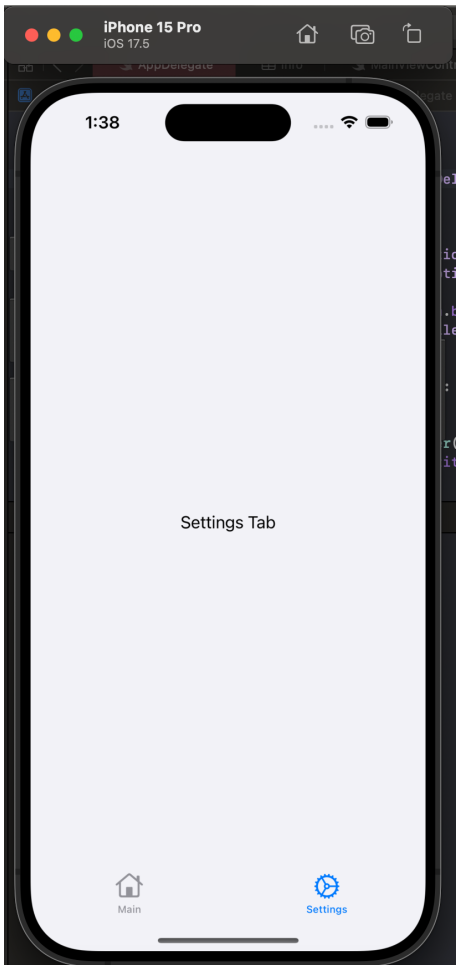
Section II:

Screenshots – Section II Explanation

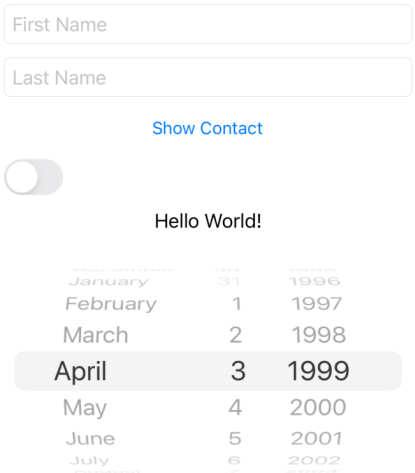
The following screenshots demonstrate the features implemented for Section II (Chapter 10 Problems 1–4):



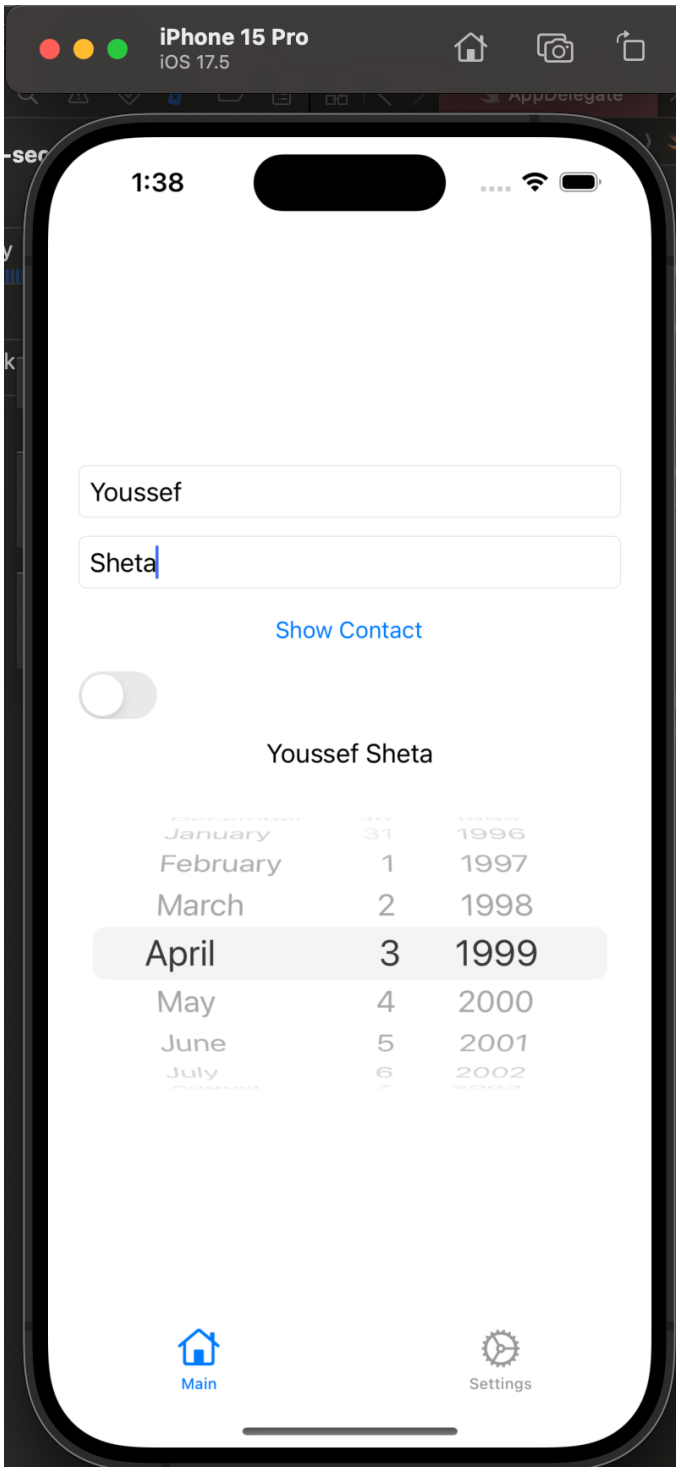
Screenshot A: The 'Main' tab shows first/last name fields, UISwitch, 'Show Contact' button, and the UIDatePicker set to default (April 3, 1999) as required.



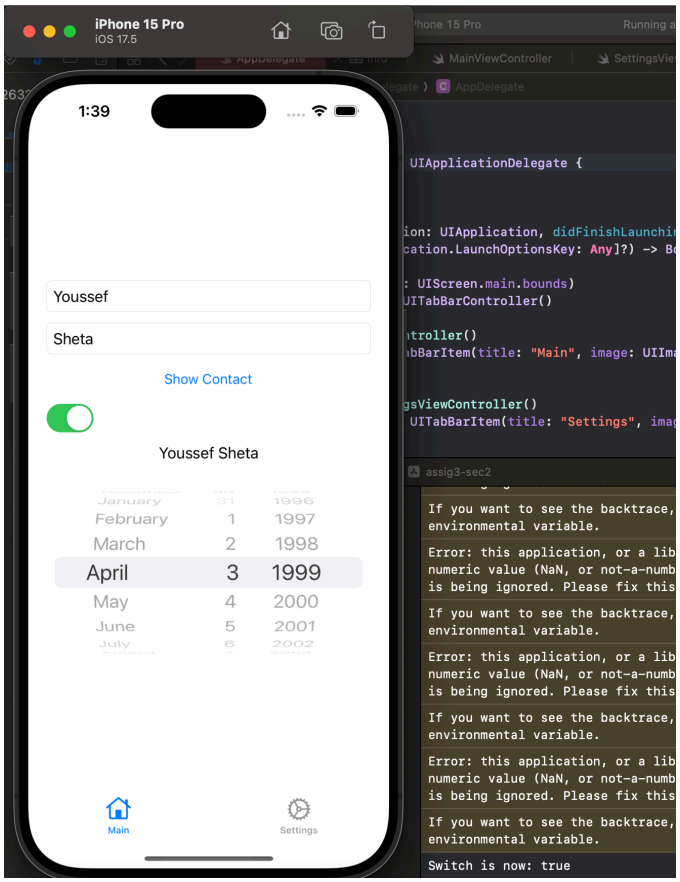
Screenshot B: The 'Settings' tab includes a simple label displaying 'Settings Tab' to fulfill the new tab controller requirement.



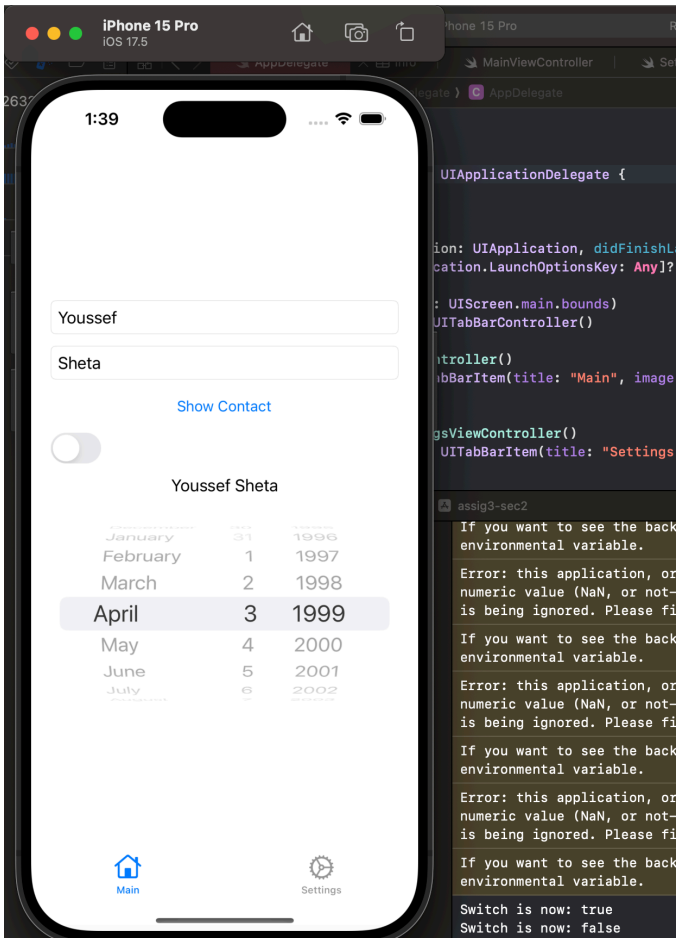
Screenshot C: When no name is entered and the button is pressed, the output displays 'Hello World!' as fallback.



Screenshot D: The output label correctly shows the full name 'Youssef Sheta' after entering both fields and pressing the button.



Screenshot E: Switch is toggled ON, and log appears in the debug console as 'Switch is now: true'.



Screenshot F: Switch is toggled OFF, with 'Switch is now: false' printed to console.

4. Conclusion and Answers to Questions

- Implemented all requested UI and behavior for both iOS assignment sections.
- Applied proper keyboard handling and field validation.
- Learned tab-based navigation, input handling, and DatePicker constraints.