

Assignment 0

Due Date: September 30, 2024 at 7:00 PM

Overview

This assignment will be worth **10%** of your total grade.

Deployment Target

Please note that the “Minimum Deployments” within the target should be set to 17.5. Anything other than 17.5 will result in a 10% deduction.

Specifications

The goal of this assignment is to design and build a hobby tracker app using SwiftUI. This project will test your understanding of Swift and SwiftUI while encouraging creativity in user interface design and simple data management. There is no need for any database/core data to be used.

User Interface - 45 points

Home Screen

- The app should have a navigation bar with a title “Hobby Tracker” and a plus button ‘+’ in the far right of the navigation bar.
- The main screen should display a list of hobbies that users want to track and each hobby should have a name and an emoji representing the hobby.
 - For example, if reading is a hobby, one of your list items could display “Reading” with the book emoji next to the text label.
- There should be 10 pre-loaded hobbies when the app is opened.
- If there are no pre-loaded hobbies, there should be a Text field that displays stating “Add a hobby using the ‘+’ button”.

Add Hobby Screen

- When the plus ‘+’ button is tapped, this screen should be displayed using either a modal sheet or a navigation link.
 - If a modal sheet is used, there needs to be an ‘X’ button in the top right to dismiss the view. If a `NavigationLink` is used, there needs to be a back button in the top left of the screen for a user to navigate back.
- The Add Hobby screen should have 3 UI elements which when selected/filled in, should allow a user to submit a hobby and return the user back to the main screen.
 - A `TextField`
 - A `Picker` that when clicked, displays 20 unique emojis to choose from. Feel free to pick any 20 emojis you’d like
 - A `Button` that states “Submit”

Functionality - 20 points

- Duplicate hobbies cannot be added. Display an alert stating “This hobby has already been added” with a cancel button to dismiss the alert if a user attempts to enter a duplicate.
 - A duplicate is defined as a `String` duplicate that is case insensitive. For example, if a user tries to enter “ReAdInG” if “Reading” is already entered as a hobby, then the alert should display, irrespective of what emoji is used.
- Users cannot enter a hobby name that is less than 3 or more than 16 characters, so the submit button should be disabled until a hobby name is the appropriate character length.
- There needs to be a way to dismiss the keyboard on the Add Hobby screen.

UI Styling - 10 points

- Change the background color of the Add Hobby screen to a color of your choice.
- Change the “Submit” text in the Add Hobby screen to size 20 and the color of your choice.

Coding Style - 20 points

You will be evaluated on:

- Cleanliness of code (both the SwiftUI view abstractions and the Swift code)
- Directory structure of files
- The data structure(s) used

Slack Setup - 5 points

Please submit a screenshot (.png or .jpeg) of the Slack workspace to show you have signed up correctly.

Notes

- You can copy and paste emojis from emojiopedia: <https://emojiopedia.org/apple/ios-16.4> .
- No data persistence should be needed for this assignment, if I re-run the project, it should restore the app back to the original state.
- I will only test this app on an iPhone 15 in portrait mode, so be sure to use one of those two devices for testing.
- There is no specific UI that needs to be developed other than ensuring all bullet points are answered.

Submission

Please submit the following on BlackBoard:

- .zip of the entire Xcode project
- The screenshot (.png or .jpeg) of the Slack workspace