

Hi There!

For this portion of the interview, we'd like you to help us implement an iOS app for the therapist community manager. Please take as much time as necessary, but we do recommend that candidates return the assignment in a timely manner. The assignment should not take more than a few hours. Feel free to email your Talkspace contact with any questions you may have regarding this assignment.

You can use Swift or Objective-C for any new classes you create. The project structure can be modified as you see fit. Please only target the latest iOS version, and iPhones supported by that iOS version. We will review your code for correctness, architecture, efficiency and readability. You should test the code well enough that you think it's correct but you don't need to include any tests in your submission. Any tests submitted will not count towards the final consideration. You can also assume that the input data is well-formed (e.g. integers are not encoded as strings and vice versa).

Background

Our therapist community manager would like an app that is able to display each of the following lists of information:

1. A list of all therapists that are currently on duty.
 - Sort the list by the time remaining until the end of the therapist's shift, shortest to longest. For instance if therapist Freud is on duty between 9:00AM and 11:00AM, and the current device time is 10:59AM, this therapist should appear towards the top of the list.
2. A list of all therapists that are scheduled to start working later in the day.
 - Sort the list by the time remaining until the start of the therapist's shift, shortest to longest. For instance if therapist Freud is on duty between 9:00AM and 11:00AM, and the current device time is 8:59AM, this therapist should appear towards the top of the list.
 - Do not include therapists that have completed their shift.
3. A list of gaps during the day when there are no therapists on duty

Getting Started

We have provided you with an input JSON file in the Data directory. You will need to write code to read in this data and convert it to a form consumable by your view controller(s). The data must be loaded in the viewDidLoad method.

The file is a response from a fictitious request for therapists working on the day of the request. It does not represent an ongoing schedule. For example, if therapist Freud is scheduled to work overnight from 11PM to 2AM. It does not imply that therapist Freud worked the 11PM to 2AM shift from the prior day. A shift for 12AM to 2AM would have been returned in the response if therapist Freud worked the overnight shift from the prior day.

NOTES:

1. The JSON field **therapistSince** is a UNIX Epoch time. It should be formatted to the device's locale (MM/DD/YYYY or DD/MM/YYYY)
2. The JSON field **shiftInfo** (containing **start** and **duration**) represents seconds after midnight in the device's local timezone, and shift duration in seconds, respectively.
 - Times should be formatted based on the device's locale (e.g. 2:00PM or 14:00).

Please take a look at `TherapistRoster.png`, located in the project directory. It is a guide for how the application should look. You should not deviate too far from it. Each cell's layout should appear as specified in the screenshot. If a therapist's name is too long it can be trailing truncated. The License and "since" date cannot be truncated and must hug the therapist's name. The buttons can be replaced with a toolbar if you prefer.

Tips & FAQs

- We are not looking for gotchas or future proofing. Your solution should solve the problem but does not need to worry about features we haven't asked for (e.g. you don't need to persist any data to disk, or handle networking, security, etc).
- You do not need to write your own sorting algorithm.
- You are welcome to use any third party libraries with the relevant license information. You should not need any extra libraries, but we won't penalize you for using one. Make sure the solution code you send back to us compiles on the latest version of XCode without any additional steps, like downloading CocoaPods.