Piscine Swift - Day 04

This Day In History

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Summary: This document contains the subject for Day for the "Piscine Swift" from 42

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Chapter I

Foreword

"The notion of the Internet as a force of political and social revolution is not a new one. As far back as the early 1990s, in the early days of the World Wide Web, there were technologists and writers arguing forcefully that the Internet was destined to become the most important tool for cultural change in human history."

-Jamais Cascio

Chapter II

General Instructions

- Only this document will serve as reference. Do not trust rumors.
- Read carefully the whole subject before beginning.
- Watch out! This document could potentially change up to an hour before submission.
- This project will be corrected by humans only.
- This course is designed to build on previous days' concepts, try your hardest to finish everyday.
- Each day culminates in a portfolio piece, if you finish the day this is something you can use to get hired.
- When submitting, submit the folder of the Xcode project.
- Only the work submitted on the repository will be accounted for during peer-2-peer correction.
- Here it is the <u>official manual of Swift</u> and the <u>Swift Standard Library</u>
- It is forbidden to use other libraries, packages, pods, etc. Unless otherwise stated in the project.
- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.
- You can discuss on the Piscine forum of your Intra!
- By Odin, by Thor! Use your brain!!!

Chapter III

Introduction

Today we are learning about HTTP requests, UI gestures and adaptive forms. We will create a this day in history app that will pull from wikipedia pages that list what has happened on that day in the past (using HTTP requests).

Chapter IV

Exercise 00: HTTP Requests To Wikipedia

Exercise : 00

HTTP Requests To Wikipedia

Files to turn in: .xcodeproj and all necessary files

Allowed functions : Swift Standard Library, UIKit, URL, URLSession

Notes : n/a

Today we are learning about HTTP requests. We are going to build something that pulls from wikipedia's "On this day". This assignment needs to only pull from wikipedias "on this day/today" page.

Chapter V

Exercise 01: UI Gestures

Exercise : 01	
UI Gestures	
Files to turn in: .xcodeproj and all necessary files	
Allowed functions : Swift Standard Library, UIKit, UIGestureRecognizer	
Notes : n/a	

We are learning how to implement UI Gestures. Many are built in classes in swift but we need to learn how to use them. We will have the background change color when we do different gestures.

Tap = Pink, Pinch = Green, Swipe Up = Yellow, Swipe Down = Red, Swipe Right Blue, Swipe Left = Purple, Rotation = Peach.

Chapter VI

Exercise 02: Choose The Date

Exercise: 02
Choose The Date
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit
Notes : n/a

For this assignment we are creating a date picker that uses touch gestures and spins. Each element should spin separately from the other (I.e. month, year, day). It should look something similar to the image below.

Hint: Use an outlet

MM/DD/YY HH:MM

Thu Feb 7	6	49		
Fri Feb 8	7	50	AM	
Today	8	51	PM	
Sun Feb 10	9	52		
Mon Feb 11	10	53		

Chapter VII

Exercise 03: Adaptive Layout Forms

Exercise : 03

Adaptive Layout Forms

Files to turn in: .xcodeproj and all necessary files

Allowed functions : Swift Standard Library, UIKit

Notes : n/a

As we gather data from our HTTP requests, it won't always be the same sized data. One day might have a sentence or two, another may have pages worth of information. We need to account for this in our design and create dynamic forms that can adapt to varying sizes of information. The elements should play well with each other and allow for scrolling to see the information overflow.

Hint: View Controllers, Dynamic Text, Auto Layout

Chapter VIII

Exercise 04: This Day In History

Exercise: 04
This Day In History
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit
Notes : n/a

Now we pull it all together to make a portfolio piece. We will use the date picker to choose which day to use the HTTP requests to pull from, this will auto populate an adaptive layout form that can scroll and adapt to the content we give it. There should be a back button to get back to the date picker, and a forward button to get back to a date's data if we accidentally pushed it.

Chapter XI

Bonus: Localize It

Bonus
Localize It
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit
Notes : n/a

Add localization (translation or alternate languages). There are many methods to achieve this, get creative and make it work.