Piscine Swift - Day 03

InstaFilter

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Summary: This document contains the subject for Day 03 for the "Piscine Swift" from 42

Contents

Chapter I

Foreword

Some quotes about photos and photography

"Photography is about finding out what can happen in the frame. When you put four edges around some facts, you change those facts."
– Garry Winogrand

"I began to realize that the camera sees the world differently than the human eye and that sometimes those differences can make a photograph more powerful than what you actually observed."
– Galen Rowell

"It's a successful photo when I would rather look at it than the subject matter"
-Anonymous

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 [official manual of Swift](#) and the [Swift Standard Library](#)
- 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 how to use and manipulate photos. For this we will also be learning about multi touch gestures, and Scene transition animations.

Chapter IV

Exercise 00 : Pictures

Exercise : 00
Pictures
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, UIImagePickerController
Notes : n/a

We will create an app that will access and load multiple images stored in device memory. List photos by name, and on open display image full screen.

Chapter V

Exercise 01 : Multi Touch

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

Now we want to use the swiping functionality to transition from one image to the next. Left swipe to descend(last) on the list, right swipe to ascend(next).

Chapter VI

Exercise 02: Stretch & Zoom

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

Now we are using other multi touch functions, pinch/double tap to zoom in, spread/double tap to zoom out. We should also be able to navigate while zoomed in (I.e. dragging left will let us see the left side of the document).

Chapter VII

Exercise 03: Filters

Exercise : 03
Filters
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, CoreImage
Notes : n/a

Now we are applying filters to the images, there should be at least 5 filters to choose from that can be selected with a button each. Then we should display what the photo looks like with the filter applied.

Hint: CIFilter(s)

Chapter VIII

Exercise 04: Carousel

Exercise : 04
Carousel
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, UIScrollView, PageControl, ICaro
Notes : n/a

We want to be able to transition with a smooth animation from photo to photo. We will do this by creating a carousel style animation to transition from photo to photo.

Chapter XI

Bonus : Save Changes To Photos

Bonus
Save Changes To Photos
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit
Notes : n/a

Now we need to be able to take the changes we have made to a photo and to be able to save it to disk.