Piscine Swift - Day 06

Earth, Water & Fire BNB

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

Contents

Chapter I

Foreword

From The Map Is Not The Territory from Farnham Street

The map of reality is not reality. Even the best maps are imperfect. That's because they are reductions of what they represent. If a map were to represent the territory with perfect fidelity, it would no longer be a reduction and thus would no longer be useful to us. A map can also be a snapshot of a point in time, representing something that no longer exists. This is important to keep in mind as we think through problems and make better decisions.

The Relationship Between Map and Territory
In 1931, in New Orleans, Louisiana, mathematician Alfred Korzybski presented a paper on mathematical semantics. To the non-technical reader, most of the paper reads like an abstruse argument on the relationship of mathematics to human language, and of both to physical reality. Important stuff certainly, but not necessarily immediately useful for the layperson.

However, in his string of arguments on the structure of language, Korzybski introduced and popularized the idea that the map is not the territory. In other words, the description of the thing is not the thing itself. The model is not reality. The abstraction is not the abstracted. This has enormous practical consequences.

In Korzybski's words:

> A. A map may have a structure similar or dissimilar to the structure of the territory.
>
> B. Two similar structures have similar 'logical' characteristics. Thus, if in a correct map, Dresden is given as between Paris and Warsaw, a similar relation is found in the actual territory.
>
> C. A map is not the actual territory.
>
> D. An ideal map would contain the map of the map, the map of the map of the map, etc., endlessly…We may call this characteristic self-reflexiveness.

Maps are necessary, but flawed. (By maps, we mean any abstraction of reality, including descriptions, theories, models, etc.) The problem with a map is not simply that it is an abstraction; we need abstraction. A map with the scale of one mile to one mile would not have the problems that maps have, nor would it be helpful in any way.

To solve this problem, the mind creates maps of reality in order to understand it, because the only way we can process the complexity of reality is through abstraction. But frequently, we don't understand our maps or their limits. In fact, we are so reliant on abstraction that we will frequently use an incorrect model simply because we feel any model is preferable to no model. (Reminding one of the drunk looking for his keys under the streetlight because "That's where the light is!")

Even the best and most useful maps suffer from limitations, and Korzybski gives us a few to explore: (A.) The map could be incorrect without us realizing it; (B.) The map is, by necessity, a reduction of the actual thing, a process in which you lose certain important information; and (C.) A map needs interpretation, a process that can cause major errors. (The only way to truly solve the last would be an endless chain of maps-of-maps, which he called self-reflexiveness.)

With the aid of modern psychology, we also see another issue: the human brain takes great leaps and shortcuts in order to make sense of its surroundings. As Charlie Munger has pointed out, a good idea and the human mind act something like the sperm and the egg — after the first good idea gets in, the door closes. This makes the map-territory problem a close cousin of man-with-a-hammer tendency.

This tendency is obviously problematic in our effort to simplify reality. When we see a powerful model work well, we tend to over-apply it, using it in non-analogous situations. We have trouble delimiting its usefulness, which causes errors.

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 is all about maps and to learn about it we will build an AirBNB clone complete with directions, profiles and a rent it button.

Chapter IV

Exercise 00 : Map API Calls

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

We are learning about maps, this assignment is to get MapKit displayed on screen, displaying geographic content.

Chapter V

Exercise 01 : Where Am I?

Exercise : 01
Where Am I?
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, MapKit
Notes : n/a

Now we have to make markers on our map, to begin we should show our current location.

Chapter VI

Exercise 02: Where Is Home

Exercise : 02
Where Is Home
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, MapKit
Notes : n/a

For this assignment we want to input our own address and have an accurate marker that represents our location based on the address provided.

Chapter VII

Exercise 03: Charting Routes

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

Now we want to chart courses between two points of interest. Try using our house and the nearest grocery store. Now try three other addresses.

Chapter VIII

Exercise 04: Making A Storefront

Exercise : 04
Making A Storefront
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, MapKit
Notes : n/a

Now we want to build a storefront. We want to make pages that display information about potential rental locations, this includes, pricing, photos, descriptions and contact info. Make about four fake locations nearby.

Chapter XI

Exercise 05: Earth BNB

Exercise : 04
Earth BNB
Files to turn in: .xcodeproj and all necessary files
Allowed functions : Swift Standard Library, UIKit, MapKit
Notes : n/a

Putting it all together. Now we are going to make an AirBNB clone, so let’s call it EarthBNB. We will not implement the backend to actually rent a location or accept payments but all other functionality should be present. Ratings and reviews, locations displayed on map, amenities listed, photos and descriptions. We should have basic info previews on click on the map with the option to go the the store listing pages for more details should we choose to. We should be able to go back to the map and forward to the last viewed location page as needed.

Chapter X

Bonus : Make It Look Professional

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

Add some polish, create some design. Go nuts, but just make it look better than what we already have, this will increase the value of your portfolio.