



Piscine iOS Swift - Day 05

Kanto

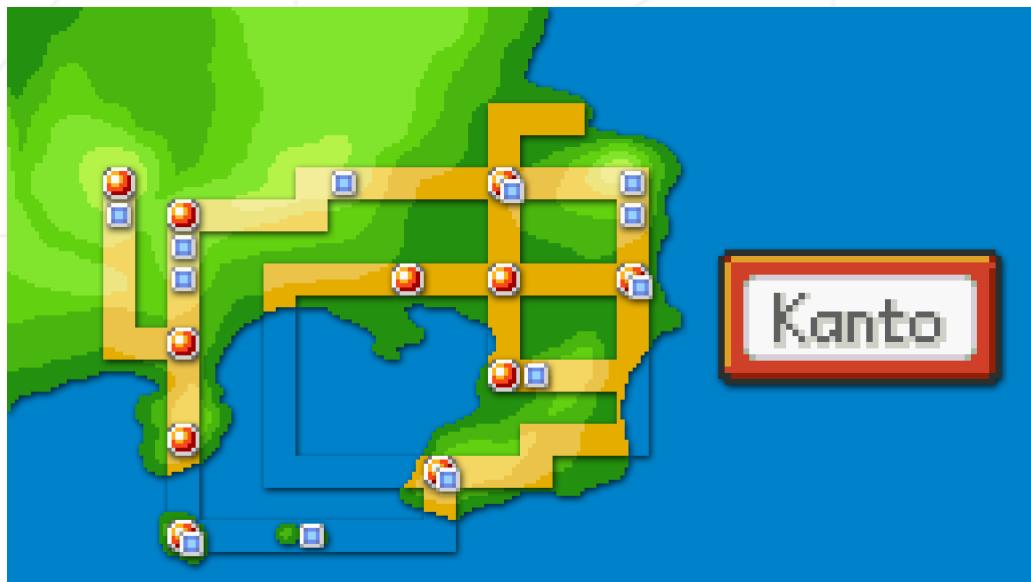
Résumé: This document contain the subject for Day 05 from iOS Swift piscine from [42](#)

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Chapitre I

Préambule



Chapitre II

Instructions

- Only this page will serve as reference. Do not trust rumors.
- Read attentively the whole document before beginning.
- This document can change up to an hour before submission.
- Your exercises will be corrected by your piscine colleagues.
- The document can be relied upon, do not blindly trust the demos which can contain unrequired additions.
- You will have to deliver an app every day (except for Day 01) on your git repository, where you deliver the file of the Xcode project.
- Here it is the official manual of [Swift](#) and of [Swift Standard Library](#)
- It is forbidden to use other libraries, packages, pods...before Day 07
- Got a question ? Ask your peer on the right. Otherwise, try your peer on the left.
- Think about discussing on the forum Piscine of your Intra !
- Use your brain!!!



The videos on Intra were produced before Swift 3. Remove the prefix "NS" which you see in front of the class/struct/function in the code in the videos in order to use them in Swift 3.



Intra indicates the date and the hour of closing for your repositories. This date and hour also corresponds to the beginning of the peer-evaluation period for the corresponding piscine day. This peer-evaluation period lasts exactly 24h. After 24h passed, your missing peer grades will be completed with 0.

Chapitre III

Introduction

Geolocation is an indispensable weapon of the good iOS developer kit, it is essential to know how to use it.

Apple makes available to you different frameworks like **MapKit** which allows you to use a very simple map or **CoreLocation** which allows you to manage the user's location.

These 2 frameworks will be your best friends for this day.

You will create a geolocation application of several places using :

- a **TabBarController** : to organise your different views.
- a **MKMapView** : for the map.
- a **CLLocationManager** : to geolocate the user.
- a **SegmentedControlBar** : to change the style of the map.
- a **MKAnnotationView** : to customize the pop-up map.

Chapitre IV

Exercice 00 : Tab Bar

	Exercice : 00
	Tab Bar
	Fichiers à rendre : .xcodeproj and all the necessary files
	Fonctions Autorisées : Swift Standard Library, UIKit
	Remarques : n/a

Start by creating the project by choosing *Tabbed Application*.

Customize the icons of the 2 views already in the *MainStoryboard*.

One of the views will be the list of several places in a **table view**. The other will be the map on which the places will be displayed.

Chapitre V

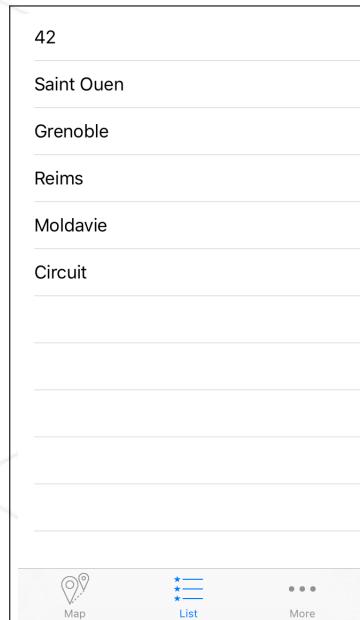
Exercice 01 : Table View

	Exercice : 01
	Table View
	Fichiers à rendre : .xcodeproj and all the necessary files
	Fonctions Autorisées : Swift Standard Library, UIKit
	Remarques : n/a

You will now add a **table view** to one of these 2 views. It must display at least 3 different places.



Think about organizing your data to make the development more easy in future exercises. You always have the right to add other files to your project.



42
Saint Ouen
Grenoble
Reims
Moldavie
Circuit

Map List More

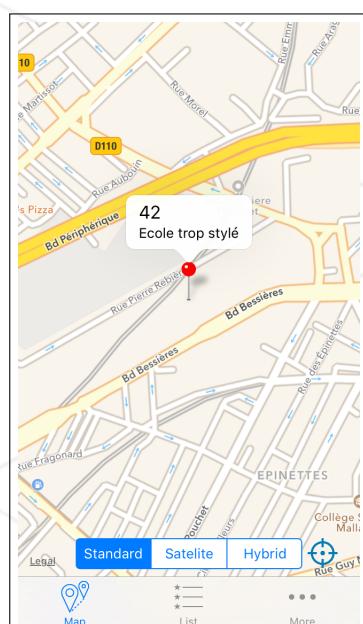
Chapitre VI

Exercice 02 : MapKit

	<p>Exercice : 02</p> <p>MapKit</p> <p>Fichiers à rendre : .xcodeproj and all the necessary files</p> <p>Fonctions Autorisées : Swift Standard Library, UIKit, MapKit</p> <p>Remarques : n/a</p>
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Let's get to the heart of the matter with this exercise, you will :

- Add a map to the second view.
- Display a *pin* to Ecole 42.
- Add a title and subtitle to this *pin*. This information must appear when you click on the pin.
- When it arrives on the map it must be zoomed on the Ecole 42.



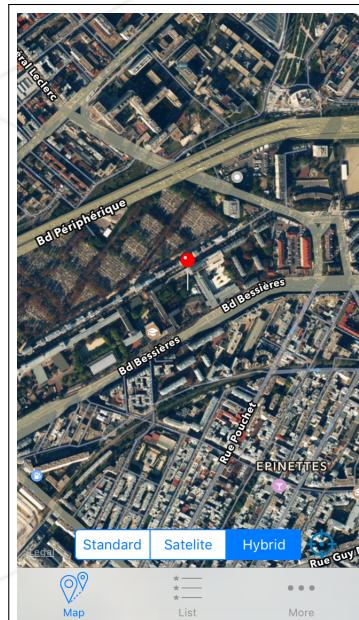
Chapitre VII

Exercice 03 : SegmentControlBar

	Exercice : 03
	SegmentControlBar
	Fichiers à rendre : .xcodeproj and all the necessary files
	Fonctions Autorisées : Swift Standard Library, UIKit, MapKit
	Remarques : n/a

Now that you have managed to display the map as you want, you can add a **segmented control bar** to select the mode of the map.

There are 3 ways to display a map : *Hybrid*, *Satellite* or *Standard*. The **segmented control bar** allow to change the mode at any moment.



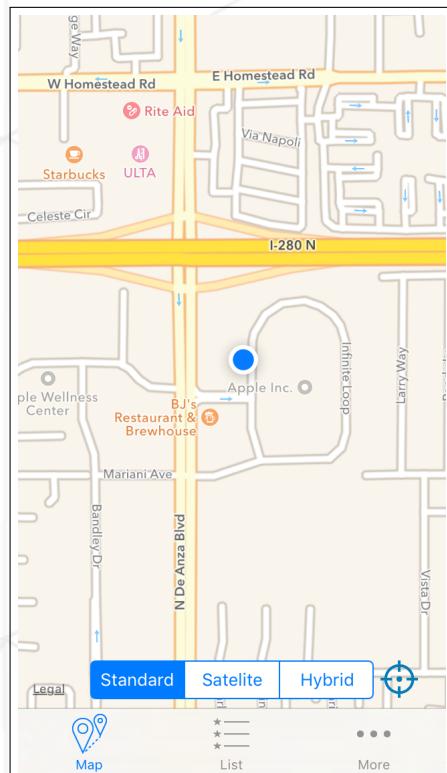
Chapitre VIII

Exercice 04 : Geolocalisation

	Exercice : 04
	Geolocalisation
	Fichiers à rendre : .xcodeproj and all the necessary files
	Fonctions Autorisées : Swift Standard Library, UIKit, MapKit, CoreLocation
	Remarques : n/a

Now that your map is functional, it would be nice if you could have a button to get geolocalized.

Add a button that should refocus the map to your position by adjusting the scale of the display to zoom in on you.



Chapitre IX

Exercice 05 : Selection d'un lieu

	Exercice : 05
	Selection d'un lieu
	Fichiers à rendre : .xcodeproj and all the necessary files
	Fonctions Autorisées : Swift Standard Library, UIKit, MapKit, CoreLocation
	Remarques : n/a

You must now make your list functional by passing variables between your views :

- All the places in your list must be present on your view of the map as *pin* with a title and a subtitle.
- A click on one of the places on your list must return to the view of the map and zoom to the selected place.



Under no circumstances should you instantiate a controller and a view again.

Chapitre X

Exercice 06 : Couleurs des Pins

	Exercice : 06
Couleurs des Pins	
Fichiers à rendre : .xcodeproj and all the necessary files	
Fonctions Autorisées : Swift Standard Library, UIKit, MapKit, CoreLocation	
Remarques : n/a	

You will now customize the *pin* of the map giving them different colors.

