
Swift 2 Homeworks

or: How I Learned to Stop Worrying and Love Swift



made by

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Introduction

“Ladies and gentleman, by way of introduction, this is a document about a modern programming language, a safe, fast and interactive one, about Swift 2.”

“S for Swift” by Orson Welles¹

In the folder you downloaded, you can find some exercises made during the Object Oriented Programming course of Politecnico of Turin (Computer Engineering - 2014/15). I modified and adapted the exercises, originally made in Java 8, to be resolved in Swift 2.

What do you need

Collection... I mean... list of stuff that you probably need:

- Personal computer
- Apple OSX (if you own a Mac, or if you're are a illegal nerd), or a distribution of Linux
- Xcode 7.x (or later)
- A brain

If you never wrote code in Swift, but you attended or you're attending an object oriented course, I suggest you to read Developers' documentation [here](#) and to watch WWDC2014 videos recorded by Apple for developers. Videos and documentation are free.

How to resolve the exercises²

Each folder represent an exercise. Inside them you can find another folder (containing the source code), an Xcode project file and a PDF file called **Requirements**.

In the PDF you can find a list of requirements. The order of requirements let you “easily” resolve the exercise.

Clicking on **<name_of_the_exercise>.xcodproj**, Xcode will be launched automatically. In the left part of the interface (Project Navigator), you will find two types of code files:

- **main.swift** in which you can find a simple “client” code, made for testing your project thanks a series of prints in the console
- **<name_of_the_class>.swift** inside **<name_of_exercise>** folder. Here you can find the real exercise.

¹ Orson Welles, in another dimension, is a very famous programmer.

² ...without copying the solution from another source.

To resolve the exercise you must fill the spaces in which the label **// TODO:** is present. You can also create variables or constants inside the classes (**Remember:** in Swift constants are very important and you should use them when it is possible).

You **CANNOT** change the name of the functions (or methods) or the return type but you **CAN** create new files and new classes if necessary.

Attention: I used a beta version of Xcode and Swift 2 to adapt the exercises (Xcode 7 beta 4). Something may change in future releases. For this reason, these exercises are not backward compatible with previous versions of Xcode and Swift.

let sortedExercises: [Exercise]

This is an “array” of sorted-by-difficulty exercises (the sorting algorithm is subjective):

- **University:** introduction of basic aspects of the language and classes
- **Diet:** introduction to closures
- **Schools:** complex closures
- **Clinic:** introduction to error handling
- **Social:** “complex” error handling (originally made to introduce GUIs in Java8)
- **Airline:** error handling, enumerations, closures, tuples and NSDate.

Build, run and...

...if there are mistakes in the requirements or in the code, please, tell me via GitHub or via e-mail.