



M5 - Workshop-Mobile

M-MOB-100

Getting Started

Setting up Mobile Development Tools



Getting Started

language: Swift, Kotlin, Javascript



- Your repository must contain the totality of your source files, but no useless files (binary, temp files, obj files,...).
- All the bonus files (including a potential specific Makefile) should be in a directory named *bonus*.
- Error messages have to be written on the error output, and the program should then exit with the 84 error code (0 if there is no error).

SWIFT

+ PREREQUISITES

For iOS development, you need macOS (10.11.5 or later).
You also need XCode, you can find it in the Mac App Store.

+ SETTING UP THE PROJECT

To create a new project, open XCode, and choose the options you want.



KOTLIN

+ PREREQUISITES

For Android Development, we recommend downloading and installing [Android Studio](#) (available on Windows, macOS, and most Linux Distributions)



You may also install Android SDK as a standalone

+ SETTING UP THE PROJECT

To create a new project, open Android Studio, make sure to choose Kotlin as Language and not Java.

CROSS-PLATFORM

+ PREREQUISITES

For Cross-Platform Development, you can either choose *Ionic* or *React-Native*. For both choices, you need to have installed [Nodejs](#).

Make sure *Node* has been correctly installed.

```
Terminal
~/M-MOB-100> node -version
v10.16.3
```

Make sure *NPM* (comes packaged with Node) is correctly installed

```
Terminal
~/M-MOB-100> npm -version
6.9.0
```

IONIC

You need to Install Ionic's CLI, available from NPM.

```
Terminal
~/M-MOB-100> npm i -g ionic
```



REACT-NATIVE

For React-Native, we are using Expo (a React-Native toolchain). You need to install Expo's CLI.

```
Terminal
~/M-MOB-100> npm i -g expo-cli
```



If you have issues installing with NPM, call us

+ SETTING UP THE PROJECT

IONIC

Once Ionic installed, you need to create a new Project.

```
Terminal
~/M-MOB-100> ionic start
```

You may now open the project with your favorite IDE (we recommend VSCode).



Ionic supports both Angular and React, choose which one you want. However we do recommend Angular as the React version was just released

REACT-NATIVE

Once Expo installed, you need to create a new Project.

```
Terminal
~/M-MOB-100> expo init
```

You may now open the project with your preferred IDE (we recommend VSCode).

+ TESTING YOUR PROJECT

For both Ionic and React-Native, you can run the project using NPM.

```
Terminal
~/M-MOB-100> npm start
```



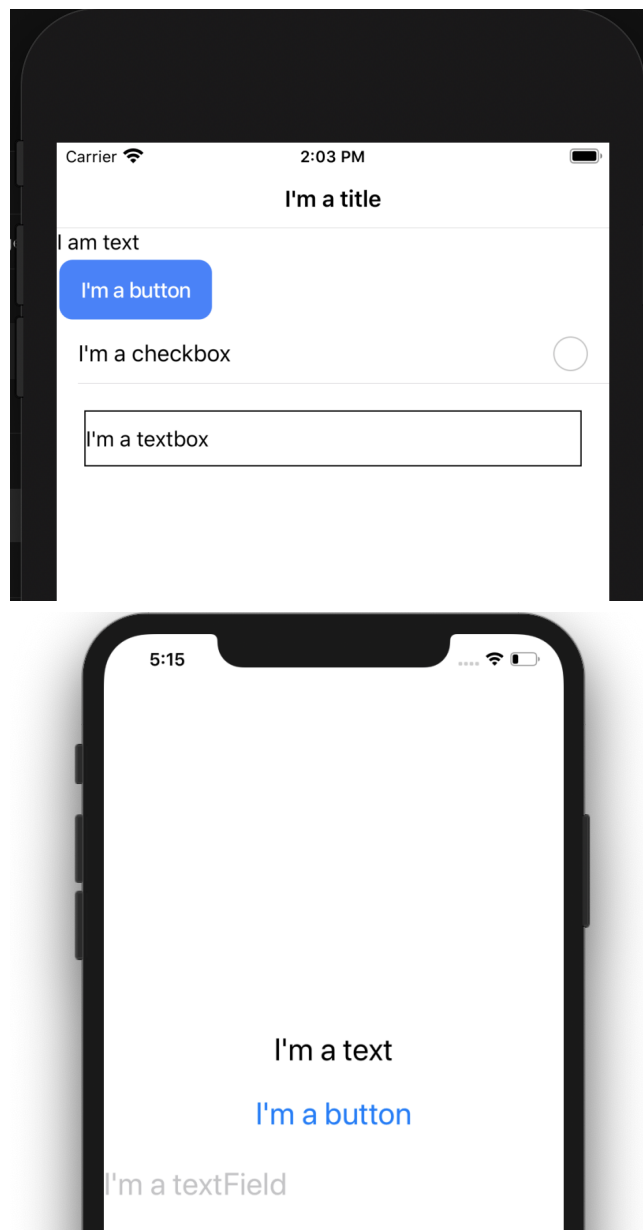
OBJECTIVE

The objective of this session is to get familiar with Mobile Development.

+ COMPONENTS

First of all, try and Print some text on the App (if already present, try and modify the text). You can then continue with adding an image.

To go further, look at some Documentation to see the different elements you can display (ex: Buttons, Title, Input Box).



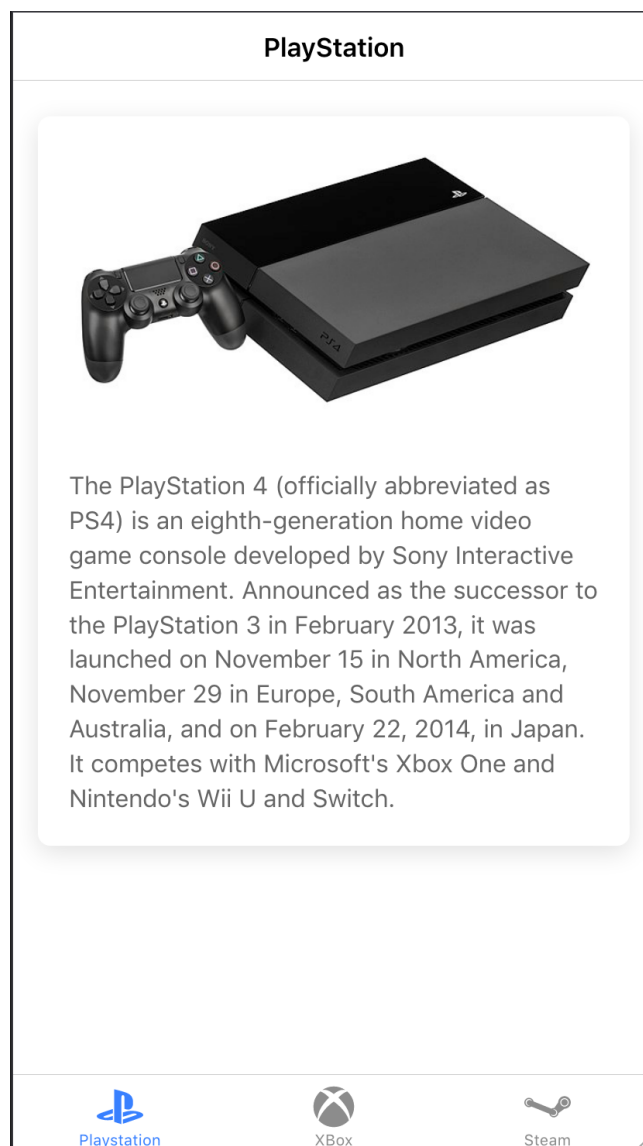


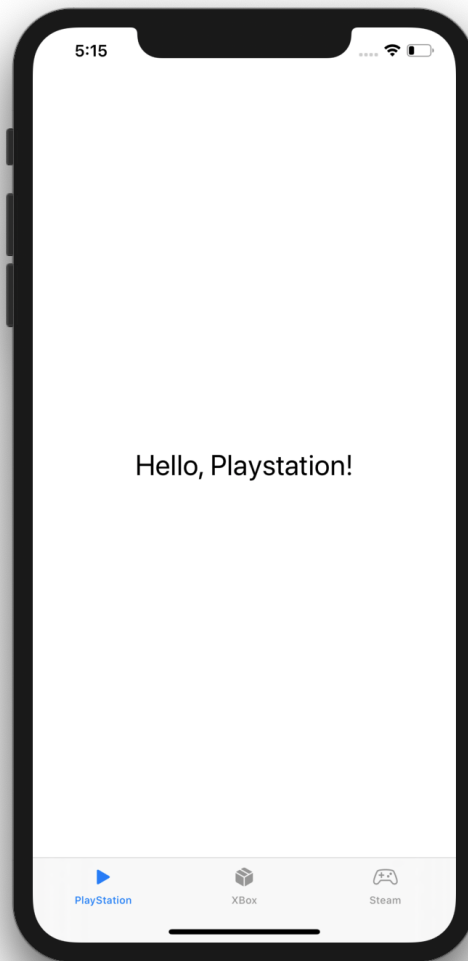
+ NAVIGATION

You should now know the basics and should be able to display text and other kinds of elements. However, Mobile Apps don't use just one page. The next step is creating another page and navigate to it. (ex: Maybe navigate when clicking on a button)

+ GOING FURTHER

You should now know the basics of display and navigation. You can now experiment and implement a Tab bar.





iPhone 11 Pro Max — 13.2.2