NGEE ANN
SCHOOL OF INFOCOMM TECHNOLOGY

MAD2 Diploma in IT Year 2 (2018) Semester 4	Week **2**
	3 hours
Practical 2: Swift Classes	

Objectives

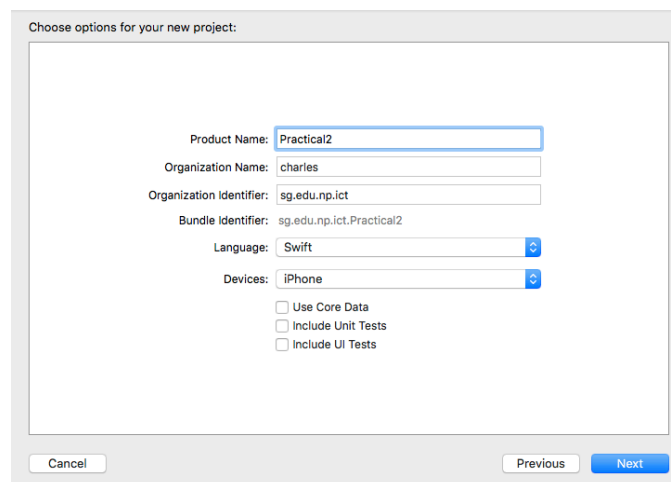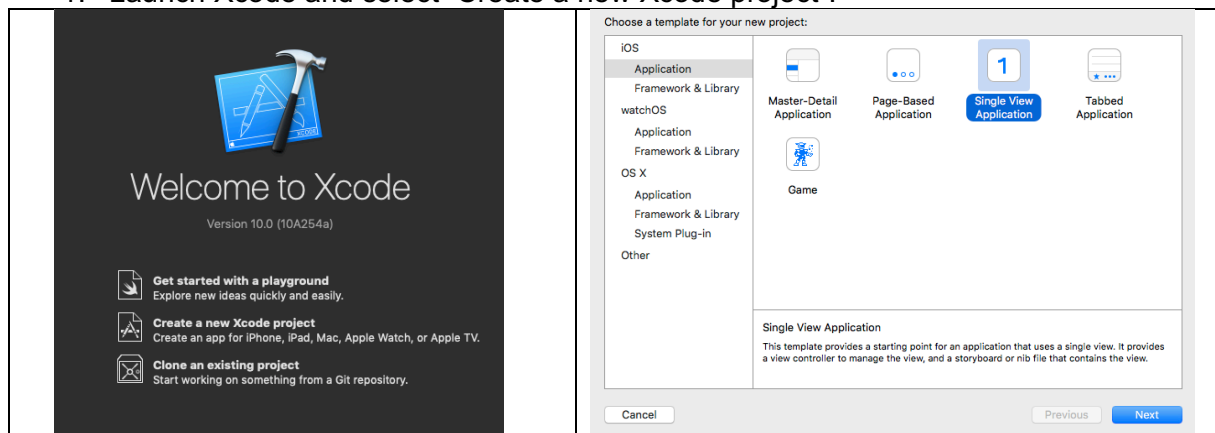At the end of this practical exercise, the students should be able to:
◆ Define and implement a Swift class
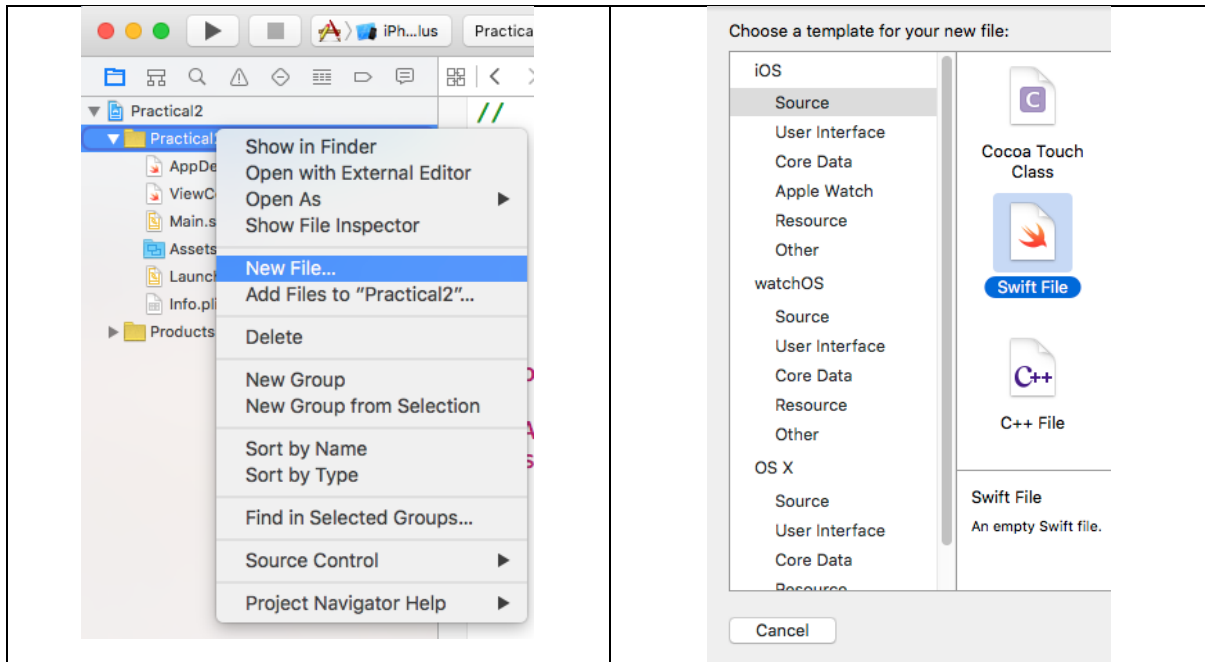◆ Write and compile a Swift program

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IMPORTANT
- Continue working on the project file you created in the last practical session.
- At the end of the session, copy this folder (all your work) to MAD2 network folder so that your tutor may assess your work.
- The path of MAD2 network folder is **\\ictspace.ict.np.edu.sg\MAD2**
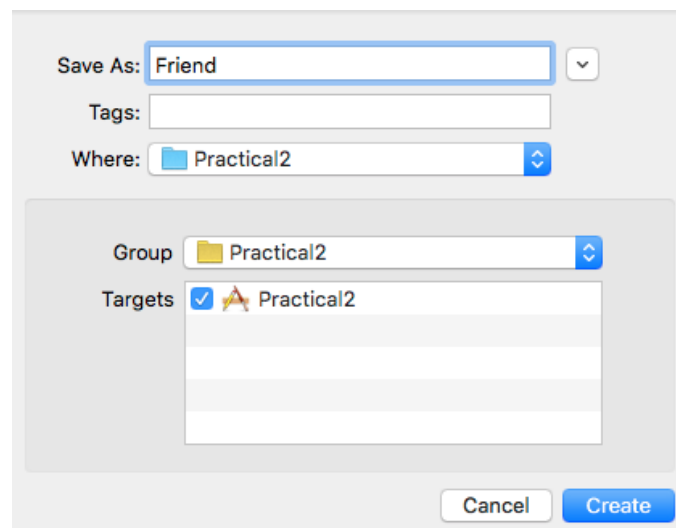

Example 1

1. Launch Xcode and select "Create a new Xcode project".

2. File\New\New File and choose "Swift File", make sure the file is in the Practical 2 folder. Click Next.

3. Enter the details as shown below.

4. Click Create to save the files in the current project folder.

Example 2

1. Create a Friend class with the following properties: firstName, lastName & age. Add an initializer in the Friend class.

```swift
import Foundation

class Friend {
    var firstName:String = ""
    var lastName: String = ""
    var age:Int = 0

    var description:String = ""

    init(firstname:String, lastname:String, age:Int) {
        self.firstName = firstname
        self.lastName = lastname
        self.age = age
    }
}
```

2. You will now be ready to launch the iPhone emulator for the first time. Run the app and observe the iPhone emulator. You should see a blank white screen. (Try out some feature of the iPhone emulator. E.g. Screen capture)

Exercise 1 Declare an instantiate 5 more `Friend` objects in ViewController, viewDidLoad function. Add them to the Array `friendsList`.

Exercise 2 Implement a Swift function to display all the `Friend` objects in `friendsList`.

Exercise 3 Write a method to display the names of Friend objects whose age is less than 20. The method signature in ViewController.swift is

```
func displayFriendsUnder20(){ }
```

Observe the Console window.

Exercise 4 Write a method to return the average age of all Friend objects. The method signature in ViewController.swift is

```
func findAverageAge()->Double { }
```

Observe the Console window.