

## Technical Exam for IOS Developer

First Name

Last Name

Mobile

Address

Date of Exam

Position

### I. Modified Multiple Choice.

Choose the correct letter that best describes the question. Give a short explanation why.

1 - How do you declare mutable arrays in swift?

A - `var peopleArray = [People]()`

B - `var peopleArray = People[]()`

C - `var peopleArray : [People] = []`

C - A&B

☒ D - A&C

2 - Which of the following statements are true about classes and structs?

A – classes are value types and structs are reference types

☒ B – structs are value types and classes are reference types

C – both are reference types

D – both are value types

E – None of the above are true

3 - What are the 5 common execution states for swift ios app?

A – Loaded, Inactive, Active, Background, Suspended

B - Inactive, OnResume, Active, Background, Suspended

☒ C - Not running, Inactive, Active, Background, Suspended

D - None of the above are correct

4 – What is the difference between let and var?

A - var is immutable, let is mutable

B - let is used in structs, var is used in classes

C - var can be used to create arrays, let cannot

☒ D - let is immutable, var is mutable

5 – How to add an item in an array?

A - insert(item)

B - add(item)

☒ C - append(item)

D - increase(item)

6 – How to declare fullName as an optional?

A – let fullName : String?

☒ B – var fullName : String?

C – var fullName? : String

D – let fullName? : String

7 – What will this print?

```
var myString:String?  
  
myString = "Hello, Swift 4!"  
  
if myString != nil {  
    print(myString)  
} else {  
    print("myString has nil value")  
}
```

A - "Hello, Swift 4! has nil value"

B - "myString has nil value"

☒ C - "Hello, Swift 4!"

D - Optional("Hello, Swift 4!")

8 – What will this print?

```
var myString:String?  
  
myString = "Hello, Swift 4!"  
  
if let yourString = myString {  
    print("Your string has - \(yourString)")  
} else {  
    print("Your string does not have a value")  
}
```

☒ A - "Your string has - Hello, Swift 4!"

B - "Your string does not have a value"

C - "Your string has - \(Hello, Swift 4!)"

C - "Your string has - (Hello, Swift 4!)"

9 - What is the universal base class for swift?

A - AnyObject

B - Object

C - NSObject

☒ D - Swift classes do not inherit from a universal base class

10 - How to dismiss a view controller that is pushed from the navigation controller?

☒ A - navigationController?.popViewController(animated: true)

B - navigationController?.dismissViewController(animated: true)

C - navigationController?.dismiss(animated: true)

D - navigationController?.finishViewController(animated: true)

## II. Programming – **Unfinished Task App**

You are given an IOS project that you need to finish and debug. The instructions are on the code.

1. In **ViewController**, you are asked to customize the screen of your own personal preference.

List of task are in the code as comment.

2. In **TasksViewController**, you are asked to complete the task recording app. It uses repository pattern and has an interface to add a task. You need to do the rest of CRUD operations and make the app work with UI.

Submit your work by uploading it to Github and sending us the URL to the repository.

Goodluck!