

# **ASSESSMENT 02**

# **CODING WITH SWIFT**

Complete all TODOs in the provided playgrounds. They contain a series of exercises going over Swift basics and control flow. By completing these exercises you will gain confidence and familiarity with variables, functions, and control flow in Swift. You will also gain more hands-on experience with Playgrounds.

## **GOALS OF ASSESSMENT**

- Be able to read and write basic Swift statements, expressions, and control flow.
- Be able to use and understand common programming terminology (e.g. "variable," "function", "constant").
- Translate simple application logic into Swift code.

## **REQUIREMENTS**

- Successfully meet all tasks outlined in the given playgrounds (Part A and Part B).
- · Write code consistently and with clear variable and function names that reflect their use.
- · Add comments when necessary, but don't leave commented code.

## **DELIVERABLES**

• The two playgrounds zipped together and uploaded as a single file to Dropbox.

## **WAYS TO GET STARTED**

## Answer the following questions:

- · What is a variable? A constant? How are they different?
- · When might you use a for loop? A while loop?
- · What is a function? When might you use one?
- · What is a conditional? A boolean?
- What are types?

# **RESOURCES**

## Links:

- Apple's guide to Swift control flow.
- · Apple's guide to writing functions in Swift.

## **EVALUATION**

Your assignment will be evaluated regarding the extent to which you meet the above requirements using this rubric:

### **Assignment readiness**

Exceed (2): All exercises complete and fully functional. App does not crash under common or edge use cases.

<u>Pass (1)</u>: All but one or two exercises complete and fully functional. App does not crash under common use cases.

Doesn't pass (0): Many exercises incomplete. App crashes under common use cases.

### Stability & performance

Exceed (2): Manual inspection of code does not have obvious major or minor bugs. No obvious crashes on manual code inspection. Little copy/pasted code.

Pass (1): Code indicates a few small bugs. Some code duplication.

 $\underline{\text{Doesn't pass (0)}}$ : Code frequently exhibits bugs. Edge cases would cause code to crash. Duplicated functionality/code abounds.

### Style and readability

<u>Exceed (2)</u>: Code has consistent style throughout codebase in a manner that is consistent with other sample code. Commented well in all unclear areas. Variables and function names clear and consistent.

<u>Pass (1)</u>: Code is mostly styled consistently, with a few outliers. A few comments peppered throughout the codebase. Variables and function names make sense and are relatively consistent.

<u>Doesn't pass (0)</u>: Code is inconsistently styled throughout codebase, or styled in a non-Swift/non-iOS manner. Commented out code abounds. No comments about unclear code. Variable and function names inconsistent and unclear.