Reading Assignment III: Finishing off Swift

Objective

We finish up the reading assignment with some miscellaneous topics including some stuff that was deferred to try to keep the previous assignments manageable in size and some esoterica that's not anywhere near as important as the previous two assignments.

This week yellow means "this is still important, read this carefully" and red means "this is important and might be more difficult to understand." If it's not yellow or red this week, it's much less important than if it did not have a color in previous weeks (you should make sure you know the material with no color from previous weeks, that stuff *is* important, it's just less difficult to understand than the topics marked with a color).

It is time to fully master the Swift API Guidelines. Make sure you **thoroughly** understand this document.

Read all of the material referenced here by the start of Lecture 7. There will be no more reading assignments this quarter.

Materials

- The reading in this assignment comes from two on-line documents: the Swift Programming Language and the Swift API Guidelines.

Swift Programming Language

Read the sections described below in the Swift Programming Language. To better utilize your valuable time and to emphasize important concepts, the sections in the reading have been annotated with three colors:

Red sections are VERY IMPORTANT and/or might be more difficult to understand. Read these carefully.

Yellow sections are important but probably won't be that difficult to understand.

Grayed-out sections are not required reading (this week). They may be in future weeks.

Don't gloss over reading any NOTE text (inside gray boxes)—many of those things are quite important. However, if a NOTE refers to Objective-C or bridging, you can ignore it.

If there is a link to another section in the text, you don't have to follow that link unless what it links to is also part of this week's reading assignment.

Note that a random sampling of the topics in the list below have links. There are not link destinations available for all topics, unfortunately, but for ones that exist, the link is included. This is just a way to help you jump to the "ballpark" of where a topic is. Linked topics are not any more or less important than any other topic.

In the **Language Guide** area, read the following sections in the following chapters:

The Basics

Error Handling

Control Flow

Control Transfer Statements
Continue
Labeled Statements
Checking API Availability

Functions

Function Argument Labels and Parameter Names
In-Out Parameters (optional, do not use these in this course)
Escaping Closures
Autoclosures

Enumerations

Raw Values
Recursive Enumerations

Subscripts

Subscript Syntax
Subscript Options

Deinitialization

Optional Chaining

Error Handling

Type Casting

Extensions
Subscripts

Protocols

Checking for Protocol Conformance
Optional Protocol Requirements

Automatic Reference Counting

Memory Safety

Advanced Operators

Swift API Guidelines

Read and master the Swift API Guidelines document in its entirety.

Be sure to click everywhere that it says "MORE DETAIL".

Pay special attention to the "Write a documentation comment" section.

Pay special attention to the "Follow case conventions" section.

Pay special attention to the entire "Argument Labels" section.