Functions

Use the ‘func’ keyword to specify a function

Named parameters

Default parameter values

Multiple returns values with tuples
Closures

- Equivalent to Lambdas
- Also known as Blocks in Objective-C
- Anonymous functions (can be assigned to var/let)
- Captures values from enclosing lexical scope
- Trailing closure syntax when used as the last parameter

Classes

- Stored properties (var / let)
- Stored property observation (willSet / didSet)
- Computed properties (var)
- Methods (func)
- Initializers / Deinitializers (init() / deinit())
- All properties must have a value after init()
Classes, continued

Polymorphism via inheritance
Use ‘override’ keyword in subclasses to override methods and properties
Use ‘final’ keyword to prevent overrides or subclasses
Classes are reference types

Structs

Similar to classes, but without polymorphism / inheritance
Member-wise initializer provided by default
Mutating keyword required for methods that change values
Structs are value types
Enums

- Can have a raw value assigned to each case
- Raw values can be of any type
- Associated values

Extensions

- Applicable to classes, structs, and enums
- Add methods and properties to existing types without subclassing
Generics

- Create classes that handle any type with strong type safety
- Create methods that can operate on any type with strong type safety
- Possible to constraint generic type

Documentation

"The Swift Programming Language"