iOS Dev Accelerator
Week 2 Day 5

- Social Sharing
- Stack Data Structure
- Week Wrap up

Social Sharing

SLComposeController

- SLComposerController class presents a view to the user to compose a post for the supported social networking services
- First check if the service type(s) you are going to offer are available on the user's device (aka they are signed in) by calling isAvailableForServiceType
- The available service types are facebook, twitter, weibo, and tencentWeibo.

SLComposeController Workflow

1. Check if the service type is available
2. instantiate an SLCompViewController object, and use the init that takes in a SLServiceType
3. Add whatever image or URL you are going to share if you have them.
4. Add a completionHandler of type (SLComposeViewControllerResult) -> (Void) (this is optional)
5. Present the view controller

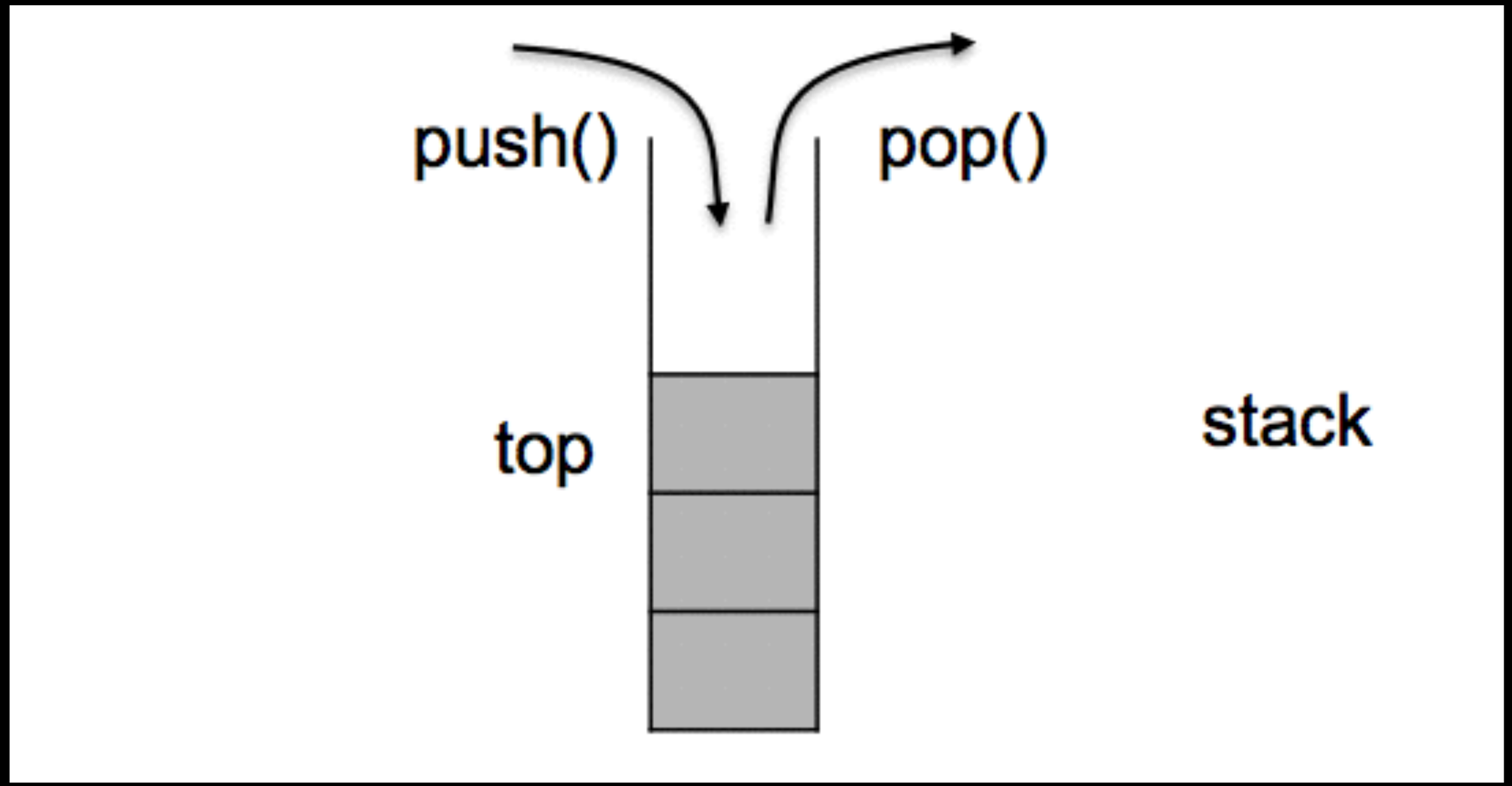
Stack Data structure

- “The stack data structure is one of the most important data structures in computer science” -Wikipedia (so you know its legit)
- Used in navigation controllers!
- And also in pretty much every programming language ever.

Stack Metaphor

- To understand a stack, think of a deck of playing cards that is face down.
- We can easily access the card that is on top.
- There are 2 things we can do to access the card on top:
  - peek at it, but leave it on the deck
  - pop it off the deck. When we pop something off a stack, we are taking it off the stack
- When you want to put something onto the stack, we call it pushing onto the stack
- A stack is considered LIFO. Last in, first out. This means the last thing we added to the deck (pushed) is the first thing that gets taken off (popped)

Stack Visual



Call stack

- “In computer science, a call stack is a stack data structure that stores information about the active subroutines of a computer program.”
- In most high level programming languages, the implementation of the call stack is abstracted away for us, but its still valuable to know what it is and how it works.
- When a function/method is called, it is pushed onto the stack. Any local variables are created and stored on the stack as well. If the called function calls another function, that 2nd function is pushed onto the stack as well. This keeps happening until all the functions have returned and they are all popped off the stack.

call stack demo

Implementing a stack

- There are two easy ways to implement a stack: using an array and using a linked list.
- Since we haven't learned linked lists yet, we will focus on the array way for now.

Week 2 wrap up

Week 2 Patterns

- Crucial design patterns for iOS: Delegation with custom protocols
- Crucial programming principles: Magic Numbers, DRY, Rule of 3
- Functional Programming

Week 2 Frameworks

- Objective-C System frameworks: Foundation, UIKit, Core Image
- Cocoa Frameworks: Photos
- Third Party SDKs: Parse

Week 2 UI Techniques

- More Auto Layout Awesomeness
- Size Classes
- Animating Constraints
- iPad

Week 2 Important Classes

- UITabBarController
- **UICollectionView**
- UIAlertController
- UIGestureRecognizers

Week 2 Swift features

- Property Observers
- First class functions

Extra Credit Features