iOS Development

dewind@atomicobject.com
@dewind on Twitter

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Developer Community

- ~ 50,000 registered iOS Developers [1]
- 500,000 applications [2]
- Objective-C is the 10th most popular language on GitHub
- Thousands of third party libraries on GitHub
- Of those 400+ appear to be well maintained and popular*

[1] http://www.quora.com/iOS-Development/How-many-registered-iPhone-app-developers-are-there-and-is-there-a-directory-somewhere
[2] http://en.wikipedia.org/wiki/App_Store_(iOS)
* An assumption based on any third party library that has 100+ watchers

How it has impacted Apple

- More developers means more competition, innovation, and *bitching*
- iOS has had 5 major releases in 5 years
- These releases were non-trivial for developers.
- It's a copy-cat-world and Apple is no exception

iOS 5

- iCloud
  - Backup
  - Storage
- ARC (Automatic Reference Counting)
- Storyboard
- Core Image
- GLKit
- Twitter

Third Party Libraries

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  - http://cocoaobjects.com/
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- Focus on the ones that are maintained

Popular Libraries

- Three20
- ASIHttpRequest
- JSONKit
- ShareKit
- EGOTableViewPullRefresh
- MBProgressHUD
- AQGridView
- Tapku
- Cocos2D
- InAppKitSettings
- UIKit-Artwork Extractor
- Mogenerator
- PSStackedView
- BCTabBarController
- EGOImageView
- IPOfflineQueue

Libraries I've Used

- Kiwi
- LRResty
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Objection

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Objection

http://www.objection-framework.org

iOS Basics

- Objective-C
    - Superset of C
    - Dynamically typed
    - Dynamic dispatch (Runtime message passing)
    - Powerful Runtime

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    - Get over it

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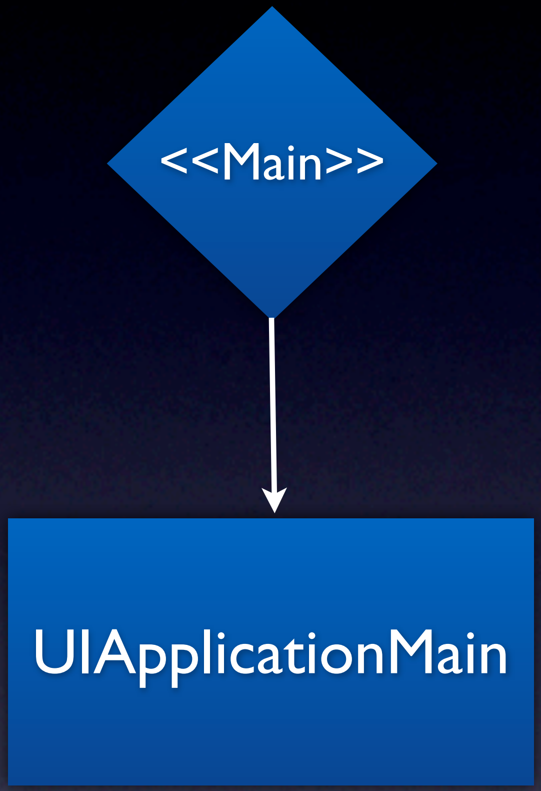

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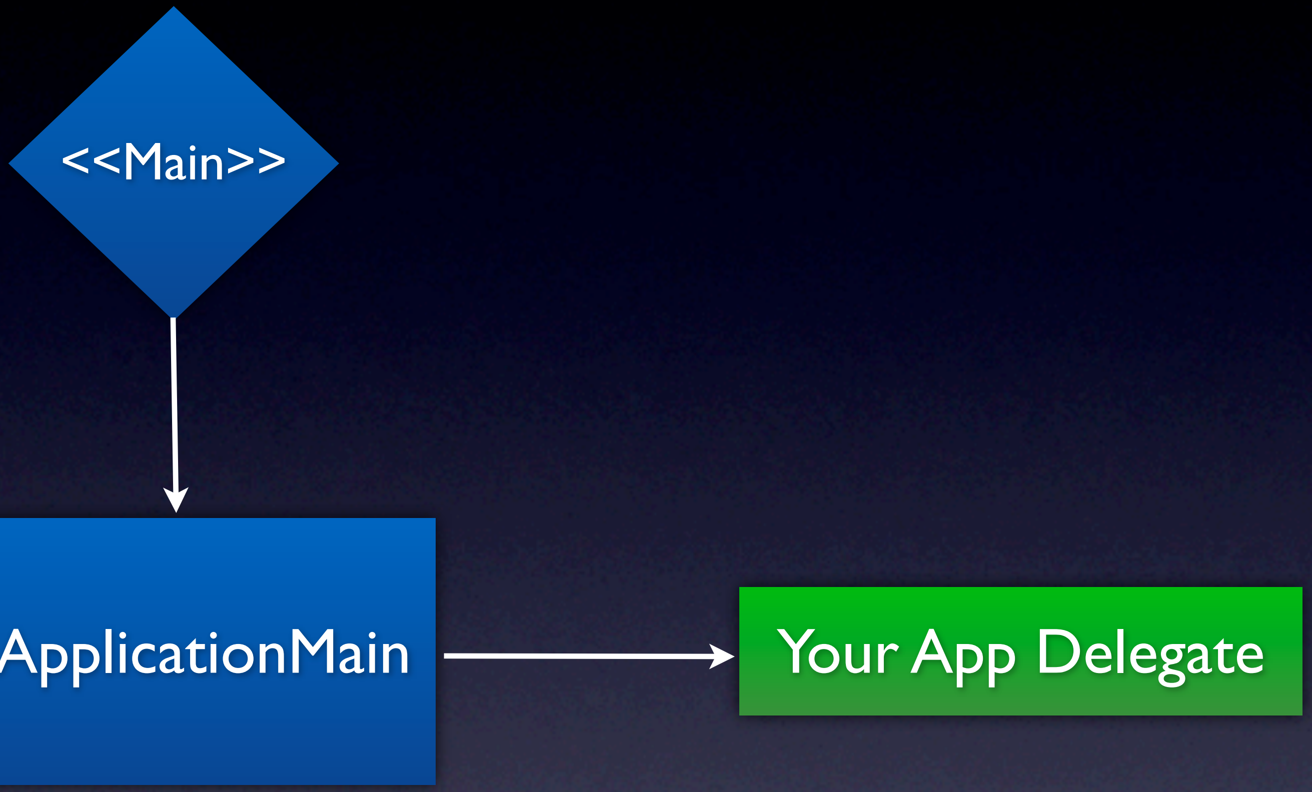

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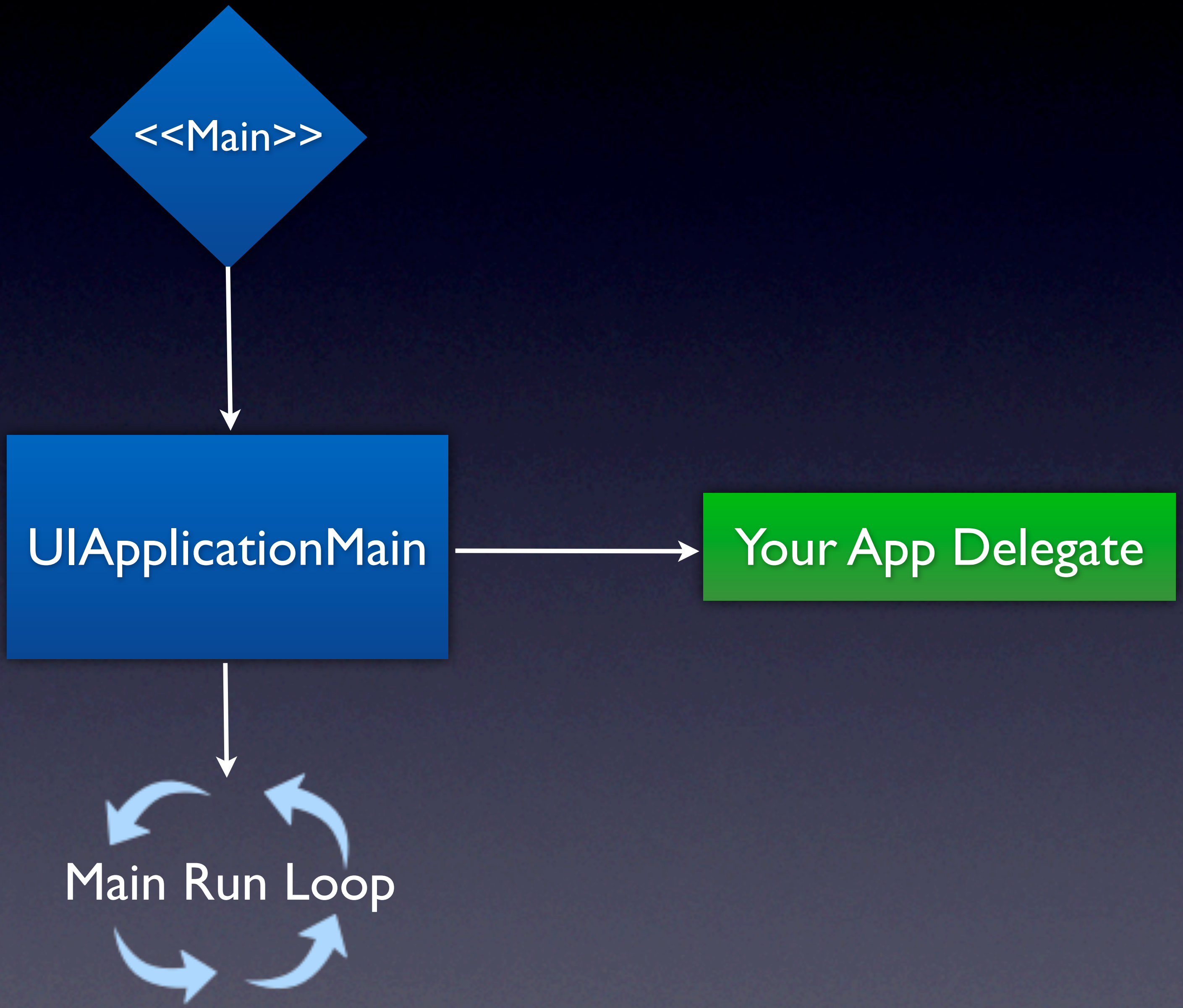

Example

- ARC
- iCloud
- Core Image
- GCD
- Some third party libraries

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- id obj = (__bridged_transfer id)CFCopyValue(...)
  - Transfers ownership by balancing copy with release
  - Otherwise CF object would leak

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- Define key/value and containers
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- Create mobile provisioning profile with iCloud enabled
- Add document types
- And now you can work on actual software

Document Storage

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  - Implement deserialization
  - Wrap directories/files using NSFileWrapper
- Save to app sandbox and then move to iCloud

Core Image

- Provides better mechanisms for image manipulation/filters
- Introduces concept of ‘detector types’ to allow for object detection in an image
  - Such as faces
- Near real-time processing of video

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- dispatch_async(queue, ^{ ...code...})
    - Global queues (priority based)
    - Main Queue (Main Run Loop)
    - Custom serial and concurrent queues