

Modern Frameworks

Session 416
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Engineer

Identity and Type

Name

Type

Location

RootViewController.m

Full Path

Target Membership

ScreenShotr

ScreenShotrTests

Text Settings

Text Encoding

Line Endings

Indent Using

Widths

Tab Indent

Wrap lines



Touch





Live Views

Extensions

Sharing Code Between Multiple Applications

Publishing a Framework

Choose a template for your new project:

<p>iOS</p> <ul style="list-style-type: none">ApplicationFramework & LibraryOther <p>OS X</p> <ul style="list-style-type: none">ApplicationFramework & LibrarySystem Plug-inOther	<div data-bbox="1227 552 1385 705"></div> <div data-bbox="1186 711 1430 799"><p>Cocoa Touch Framework</p></div> <div data-bbox="1544 566 1670 685"></div> <div data-bbox="1502 711 1714 799"><p>Cocoa Touch Static Library</p></div> <div data-bbox="1186 1176 1582 1216"><p>Cocoa Touch Framework</p></div> <div data-bbox="1186 1236 1866 1276"><p>This template creates a framework that uses UIKit.</p></div>
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Cancel

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What Goes in It?

Choosing Framework Contents

Live views

Views

Controls

Custom appearance

Choosing Framework Contents

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Views

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Custom appearance

View controllers

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Between multiple applications

Views

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Service API

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Choosing Framework Contents

Publishing frameworks

Views

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Custom appearance

View controllers

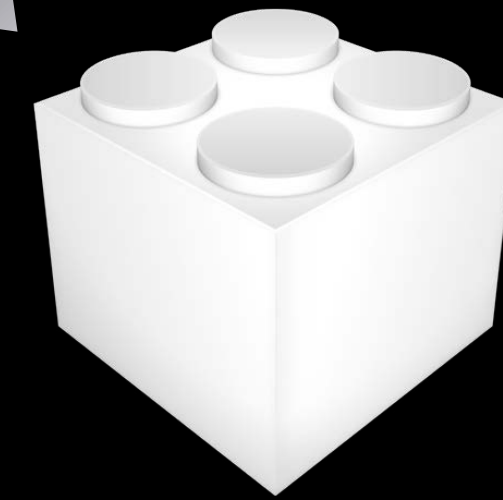
Service API

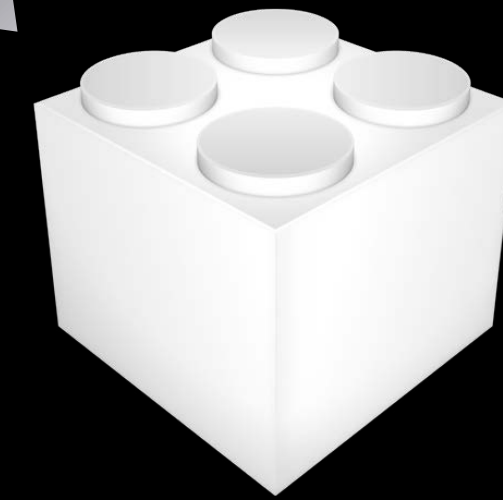
Resources

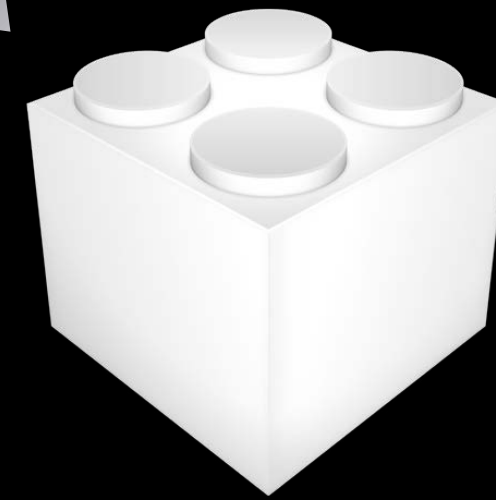


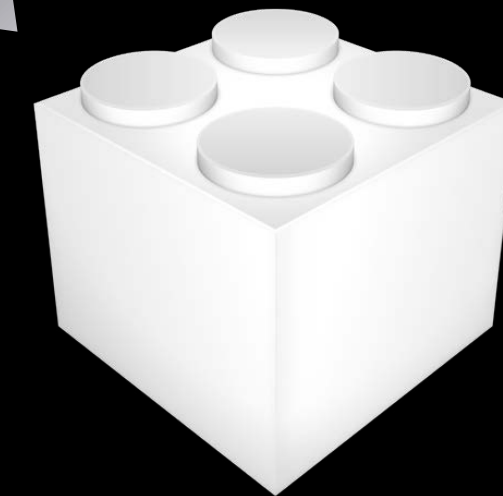












If the code appears more than once,
it probably belongs in a framework.

Frameworks Are API

insert:at:



`insert:at:`

`insertObject: atIndex:`



`insertObject: atIndex:`

setBkgndColor:



setBkgndColor:

setBackgroundCoLor:



setBackgroundCo1or:

displayName:



displayName:

```
- (void)sendAction:(SEL)aSelector  
    : (id)anObject  
    : (BOOL)flag;
```



```
– (void)sendAction:(SEL)aSelector  
    : (id)anObject  
    : (BOOL)flag;
```

– (void) sendAction: (SEL) aSelector
 toObject: (id) anObject
 forAllCells: (BOOL) flag;



```
– (void)sendAction:(SEL)aSelector  
    toObject:(id)anObject  
    forAllCells:(BOOL)flag;
```

```
func containsCharacter  
    (string: String  
     character: Character) -> Bool
```

```
func containsCharacter  
    (string: String  
     character: Character) -> Bool
```

```
containsCharacter("Buddy", "u")
```

```
func containsCharacter  
    (#string: String  
    #character: Character) -> Bool
```



```
func containsCharacter  
    (#string: String  
    #character: Character) -> Bool
```

```
containsCharacter(string: "Buddy",  
                 character: "u")
```

```
- (void)presentPopoverFromRect:(CGRect)r  
    inView:(UIView *)v  
    permittedArrowDirections:  
        (UIPopoverArrowDirection)aD  
    animated:(BOOL)a;
```

```
func presentPopoverFromRect(rect: CGRect,  
                             view: UIView!,  
                             arrowDirections: UIPopoverArrowDirection,  
                             animated: Bool)
```

```
presentPopoverFromRect(someRect,  
                        someView,  
                        .Any,  
                        true)
```

```
func presentPopoverFromBarButtonItem(  
    UIBarButtonItem: UIBarButtonItem,  
    arrowDirections: UIPopoverArrowDirection,  
    animated: Bool)
```

```
func presentPopover(  
    fromRect rect: UIBarButtonItem,  
    inView view: UIView,  
    #arrowDirections: UIPopoverArrowDirection,  
    #animated: Bool)
```

```
func presentPopover(  
fromBarButtonItem item: UIBarButtonItem,  
    #arrowDirections: UIPopoverArrowDirection,  
    #animated: Bool)
```

```
presentPopover(fromRect: someRect,  
              inView: someView,  
              arrowDirections: .Any,  
              animated: true)
```

```
presentPopover(fromBarButtonItem: someItem,  
              arrowDirections: .Any,  
              animated: true)
```

```
func presentPopover(  
    fromRect rect: UIBarButtonItem,  
    inView view: UIView,  
    arrowDirections: UIPopoverArrowDirection =  
        .Any,  
    animated: Bool = true)
```



```
presentPopover(fromRect: someRect,  
              inView: someView,  
              arrowDirections: .Any,  
              animated: true)
```

```
presentPopover(fromBarButtonItem: someItem,  
              arrowDirections: .Any,  
              animated: true)
```

```
presentPopover(fromRect: someRect,  
              inView: someView)
```

```
presentPopover(fromBarButtonItem: someItem)
```

“Coding Guidelines for Cocoa”

developer.apple.com

“The Swift Programming Language”

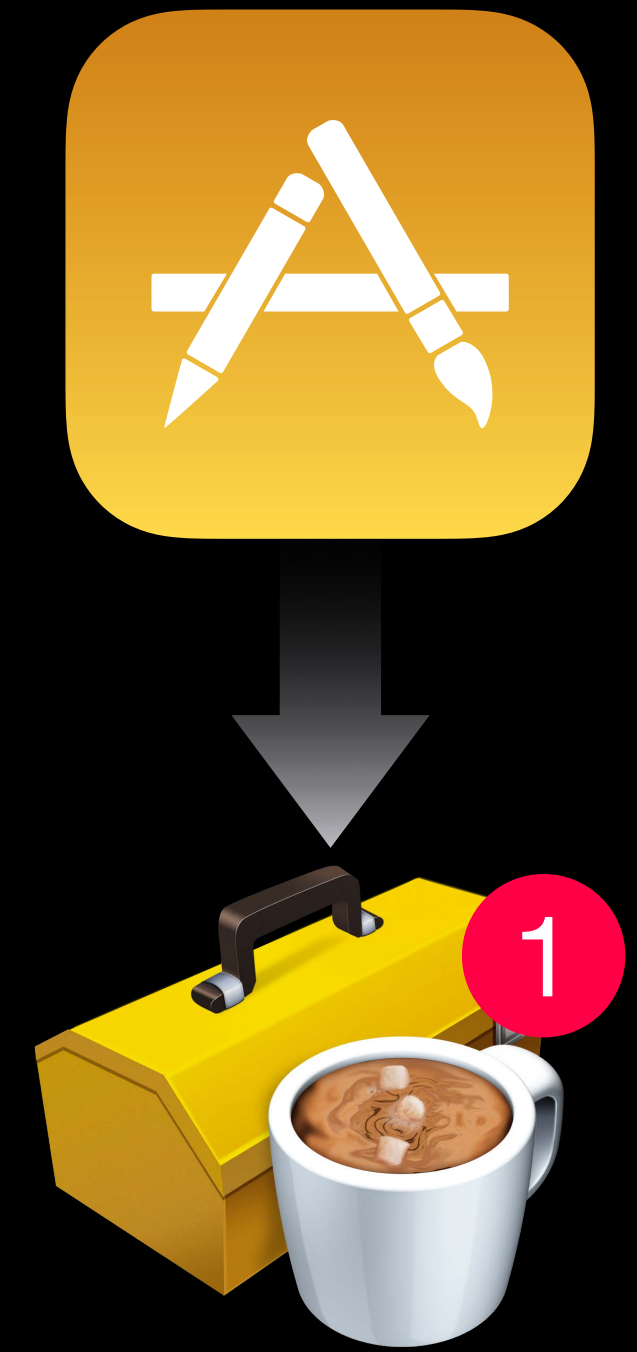
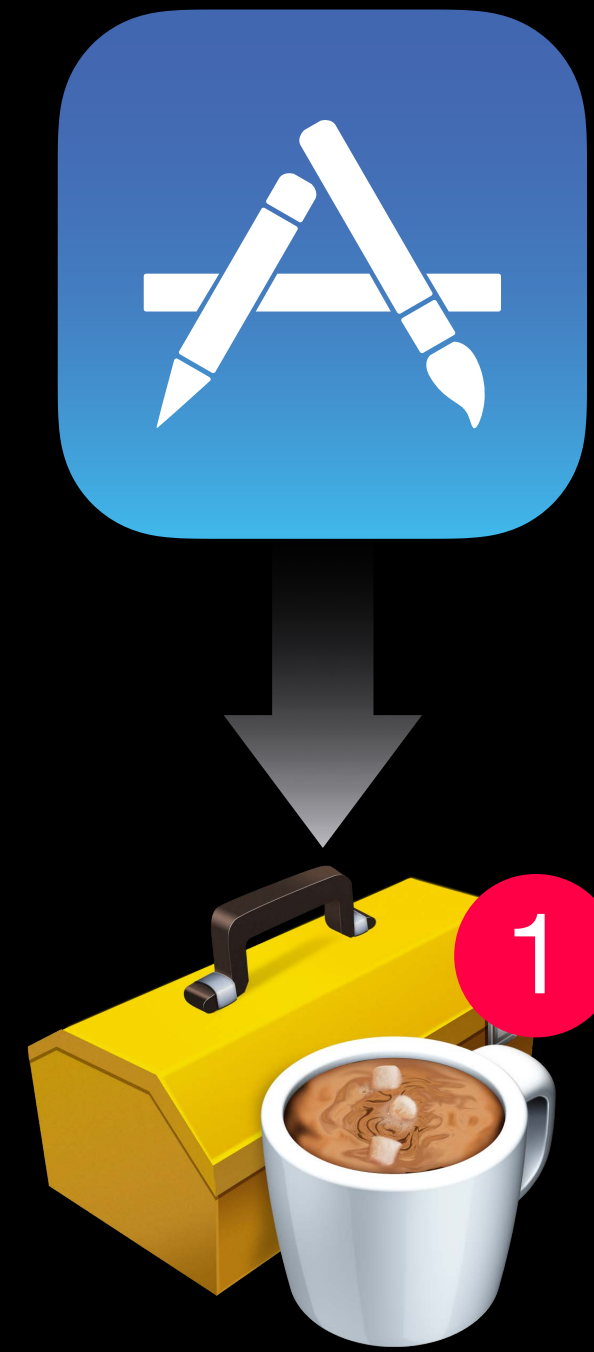
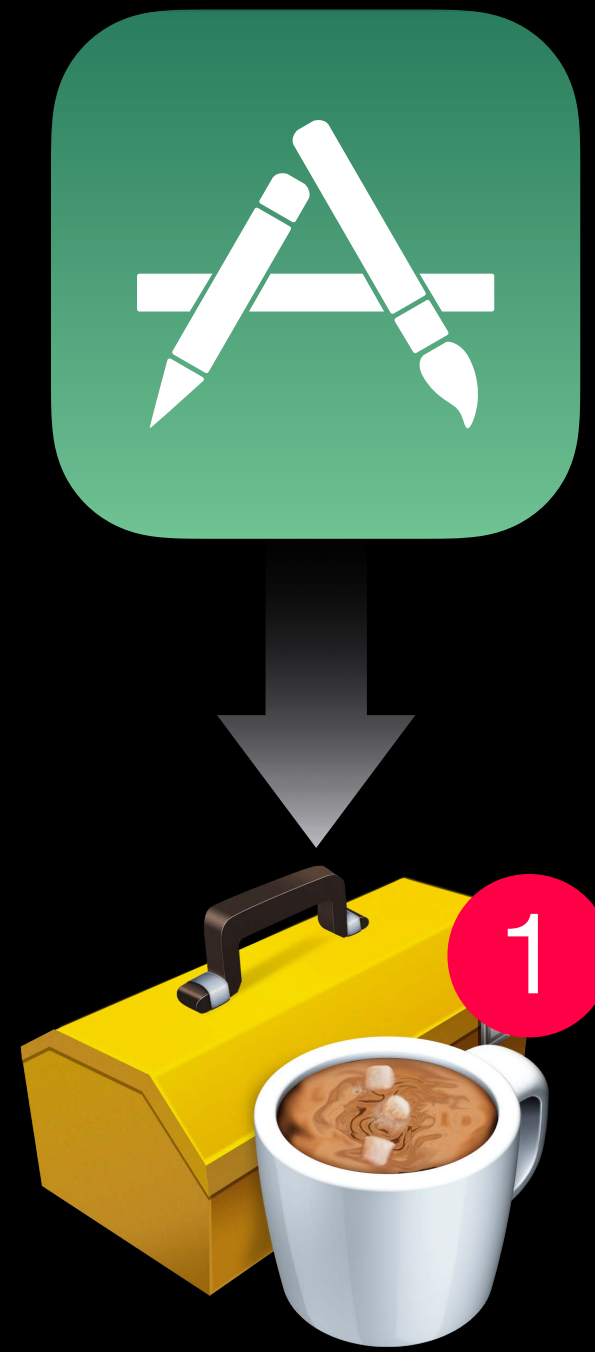
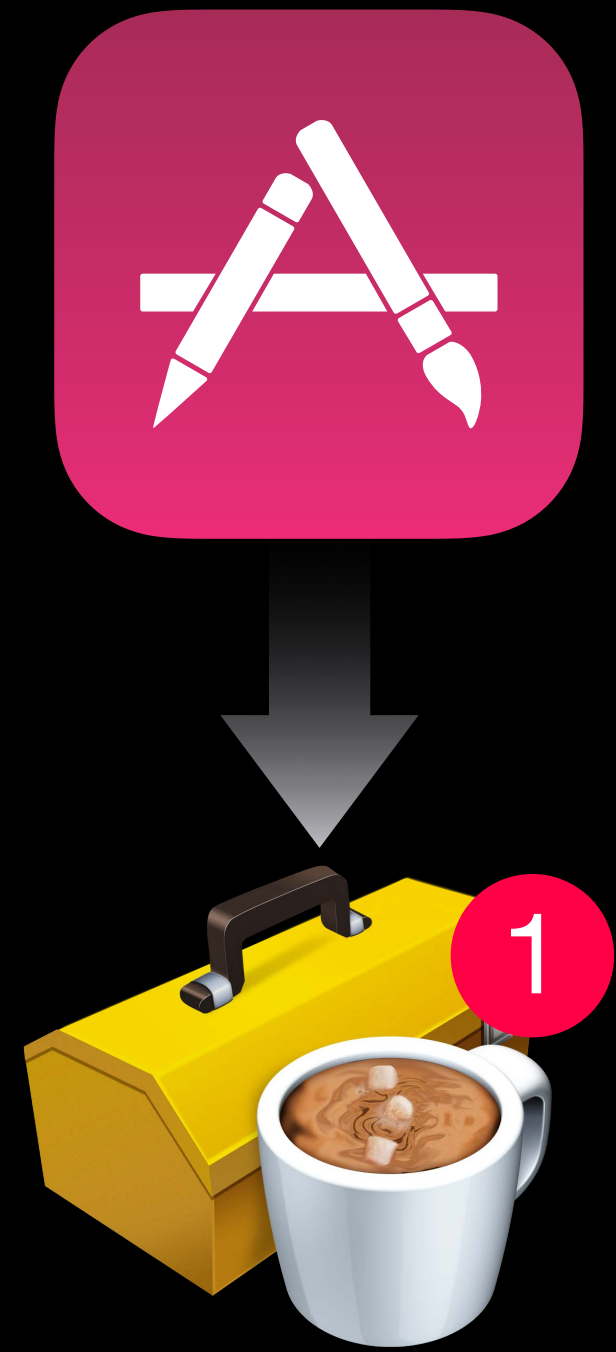
developer.apple.com

Publishing a Framework

Versioning

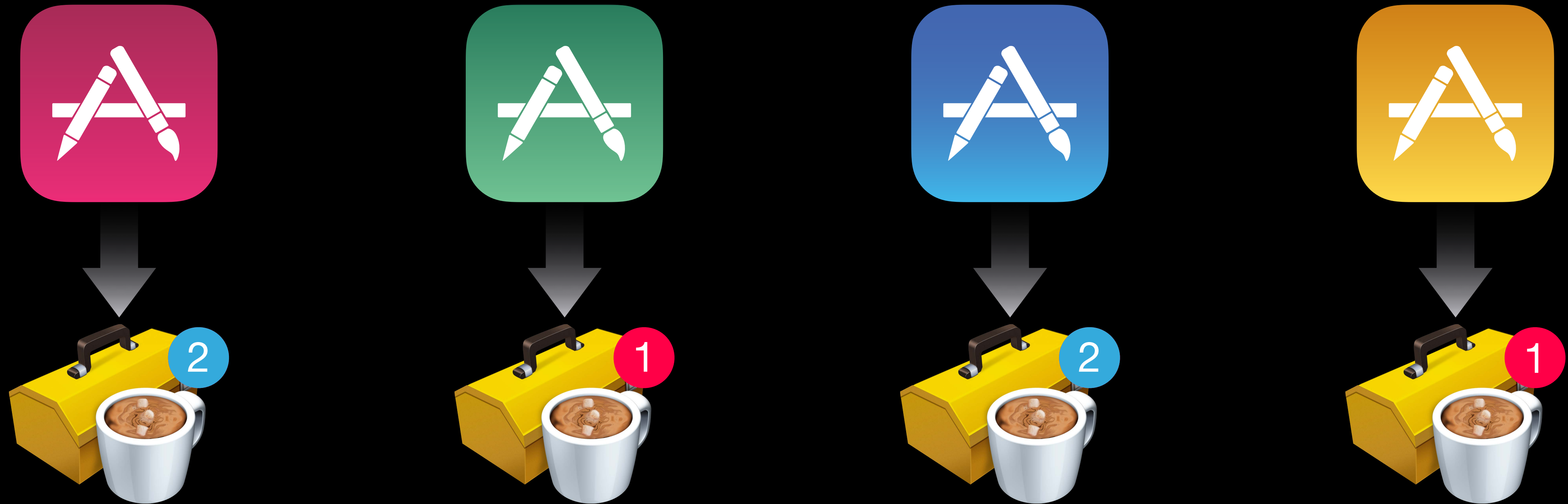
Publishing a Framework

Versioning



Publishing a Framework

Versioning



Publishing a Framework

Versioning

Framework versions

Keyed archiving

- Key-value pair semantics are consistent
- Missing keys return ``nil`` (or the equivalent)
- Compatibility opportunities on encode and decode
- Make keys unique

Feature availability

- `respondsToSelector:`
- `NSStringFromClass()`

Practicum

...or “great, but how does this all work in real life?”



Budstagram





Budstagram

Application

Allows posting and editing of photos

- (as long as there's a picture of Buddy being included)

Allows comments on existing photos (feed)

Shares a posting view controller with the plug-in

Budstagram

Extension

Allows posting and editing of photos from within other applications

Doesn't allow comments on existing photos (no feed)

Shares the posting view controller with the application

Budstagram

Framework

Contains

- Shared posting view controller
- Shared networking code for posting

Demo

Related Sessions

-
- | | | |
|--|----------|-------------------|
| • Creating Extensions for iOS and OS X, Part 1 | Mission | Tuesday 2:00PM |
| • Creating Extensions for iOS and OS X, Part 2 | Mission | Wednesday 11:30AM |
| • Sharing code between iOS and OS X | Presidio | Friday 9:00AM |
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 WWDC14