Mobile Application Programming

Design

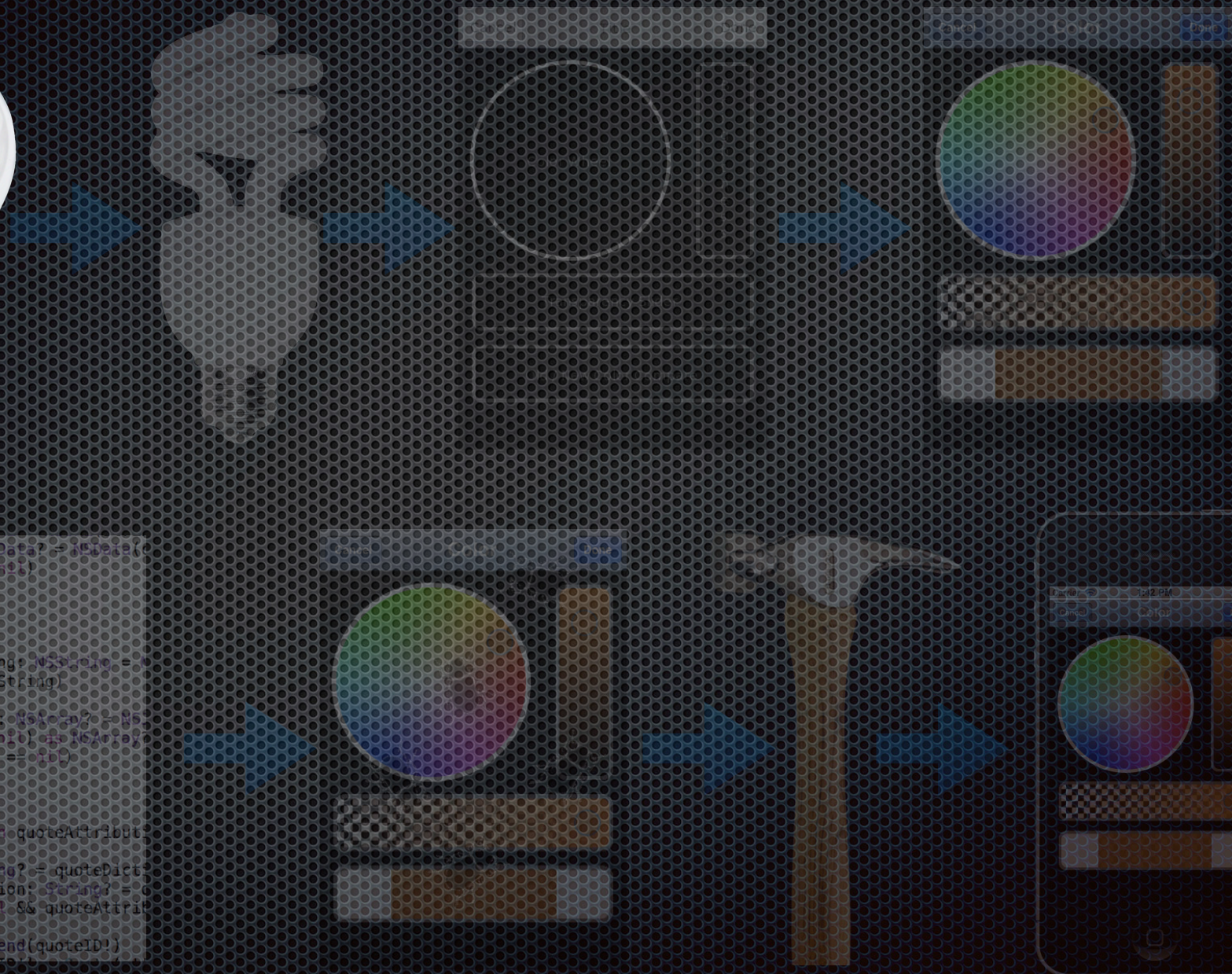
The Iterative Design Process


```
let quoteListJson: NSData? = NSData(c
if (quoteListJson == nil)
{
    return
}

let quoteListJsonString: NSString = N
println(quoteListJsonString)

let quoteAttributions: NSArray? = NSJ
    allZeros, error: nil) as NSArray?
if (quoteAttributions == nil)
{
    return
}
for quoteDictionary in quoteAttributi
{
    let quoteID: String? = quoteDicti
    let quoteAttribution: String? = q
    if (quoteID != nil && quoteAttrib
    {
        _quoteIDs.append(quoteID!)
```

The Iterative Design Process

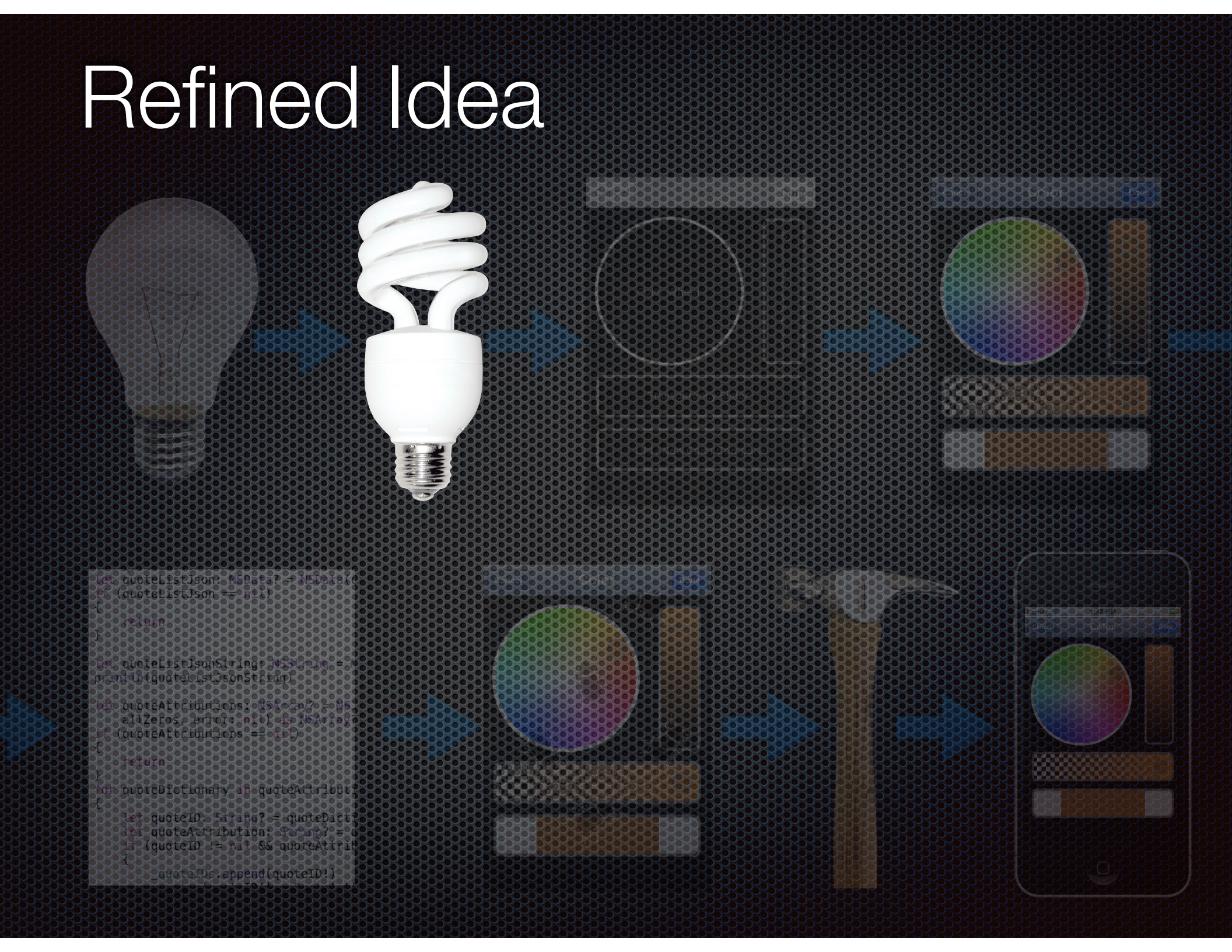

```
let quoteListJson: NSData? = NSData(c
if (quoteListJson == nil)
{
    return
}

let quoteListJsonString: NSString = N
println(quoteListJsonString)

let quoteAttributions: NSArray? = NSJ
    allZeros, error: nil) as NSArray?
if (quoteAttributions == nil)
{
    return
}
for quoteDictionary in quoteAttributi
{
    let quoteID: String? = quoteDicti
    let quoteAttribution: String? = q
    if (quoteID != nil && quoteAttrib
    {
        _quoteIDs.append(quoteID!)
```

Idea



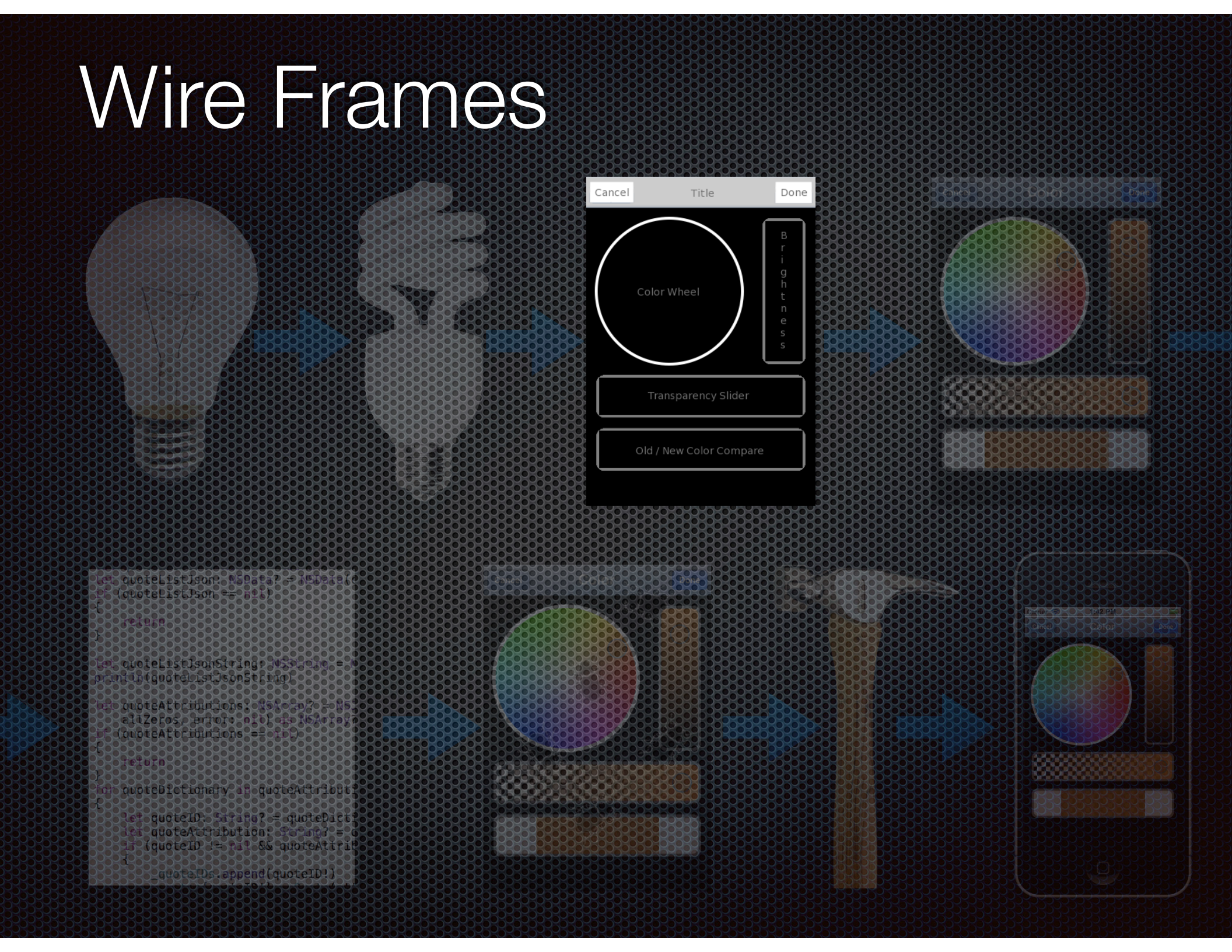
Idea

Refined Idea

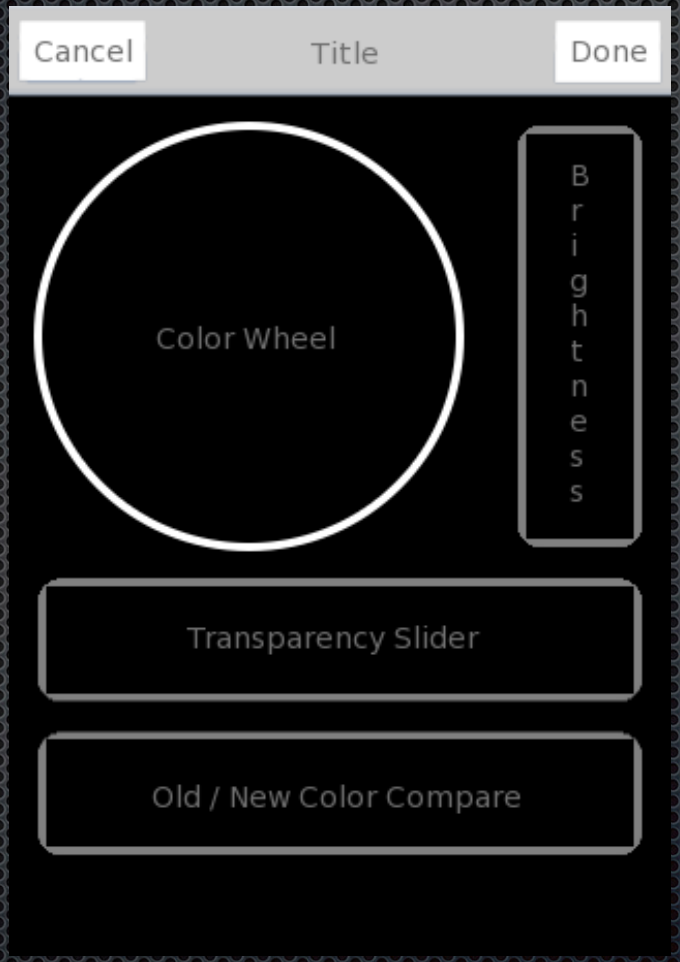


Refined Idea

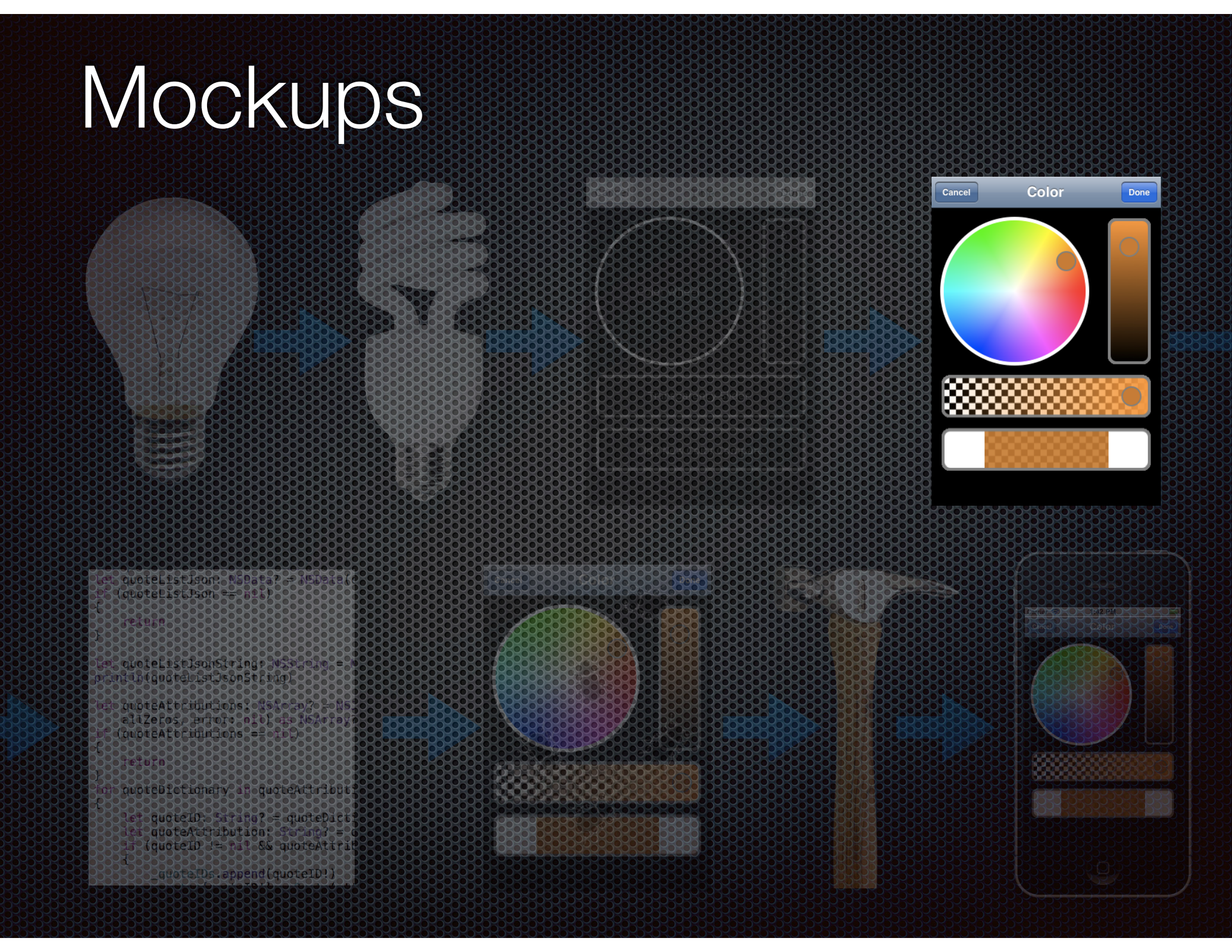
Wire Frames


Cancel
Title
Done
Color Wheel
Brightness
Transparency Slider
Old / New Color Compare

Wire Frames

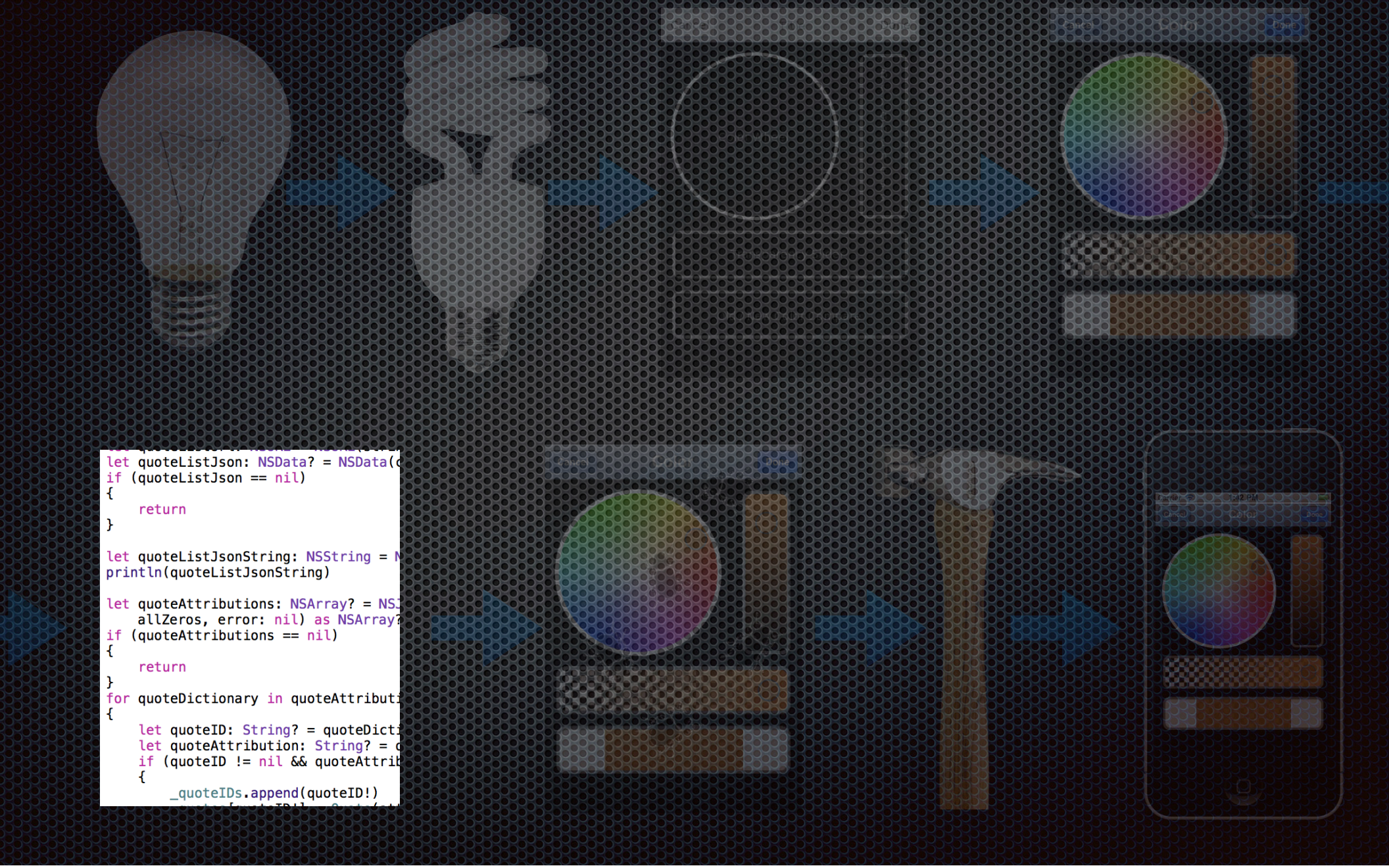

Cancel
Title
Done
Color Wheel
Brightness
Transparency Slider
Old / New Color Compare

Mockups



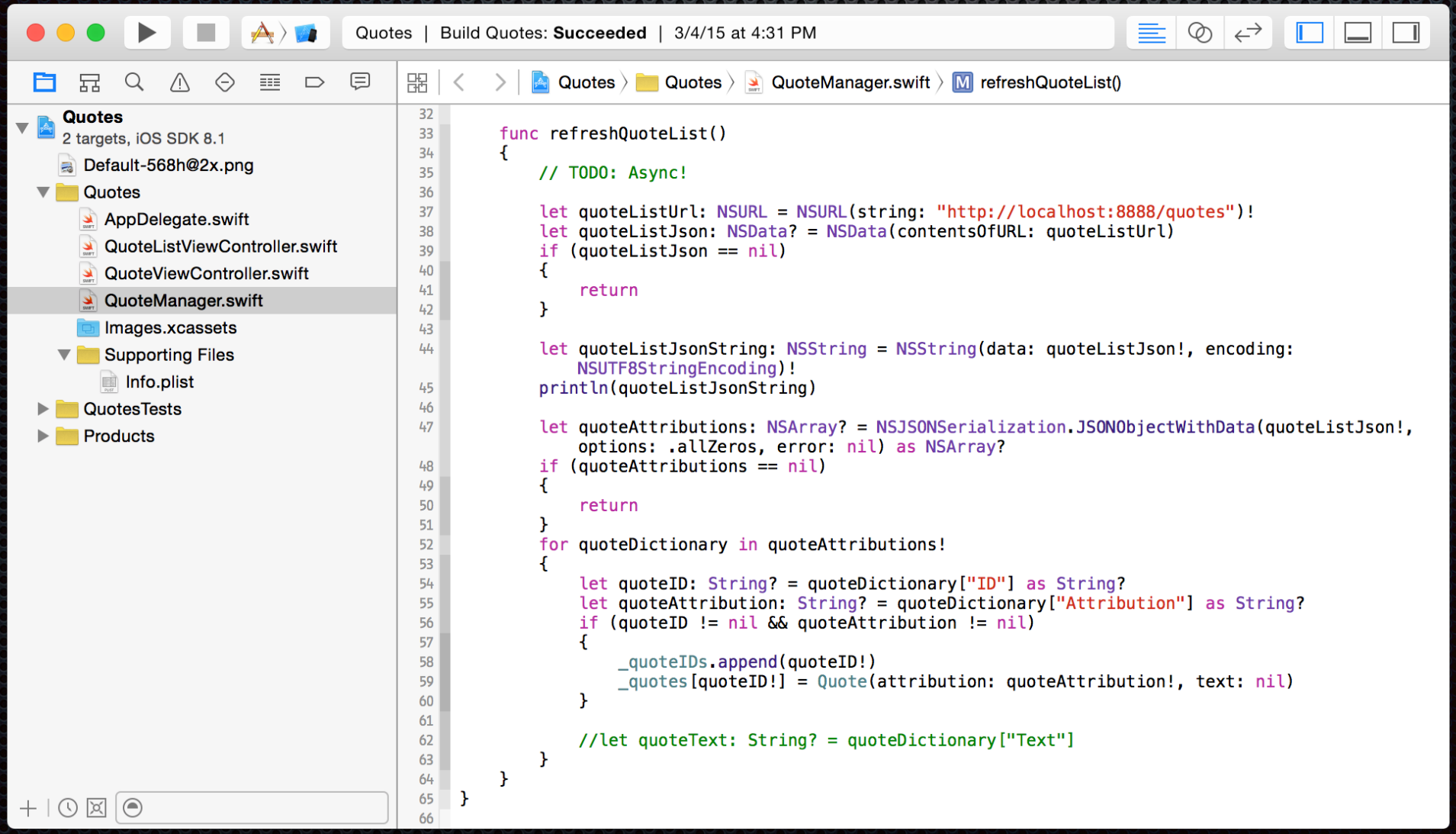
Mockups

Implementation

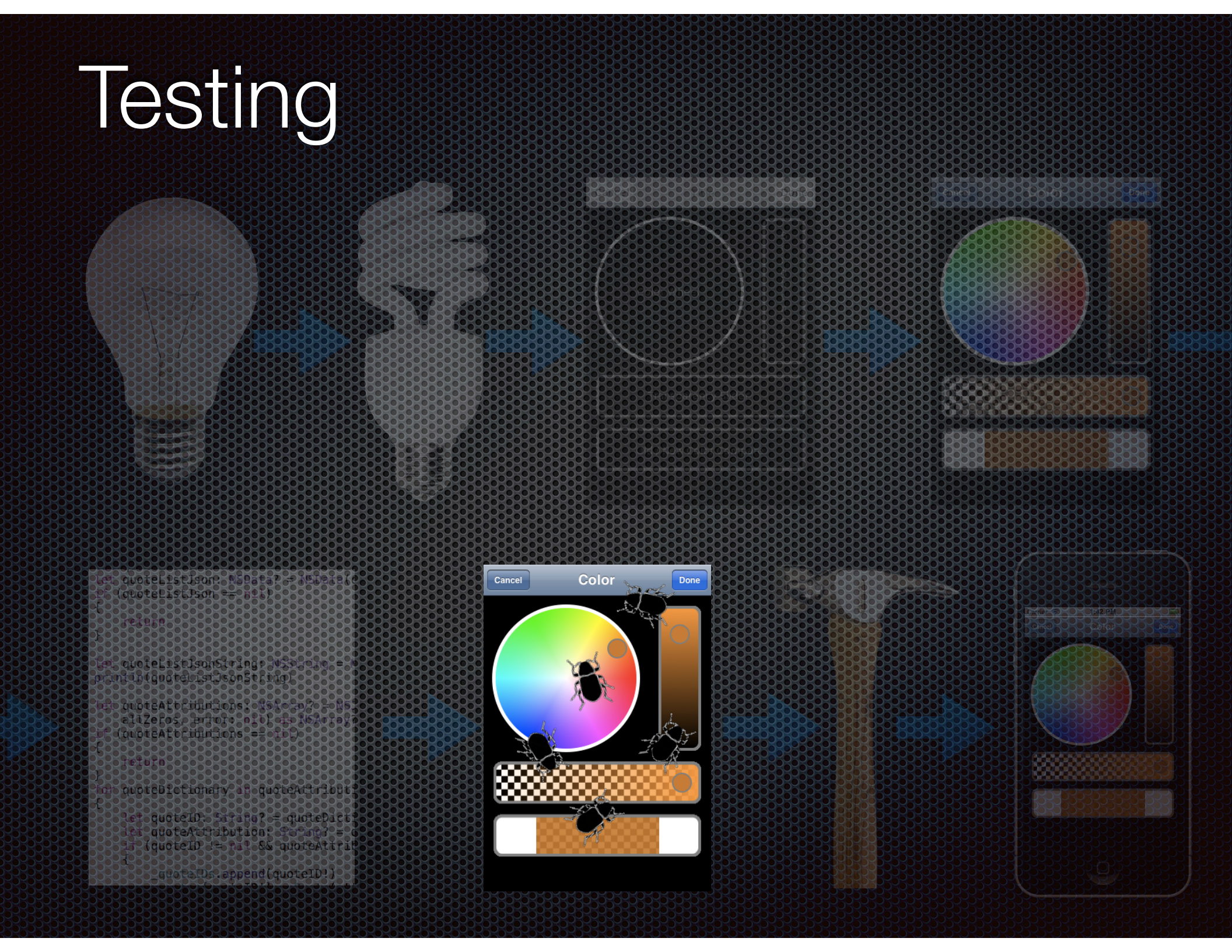


```
let quoteListJson: NSData? = NSData(c
if (quoteListJson == nil)
{
    return
}

let quoteListJsonString: NSString = N
println(quoteListJsonString)

let quoteAttributions: NSArray? = NSJ
    allZeros, error: nil) as NSArray?
if (quoteAttributions == nil)
{
    return
}
for quoteDictionary in quoteAttributi
{
    let quoteID: String? = quoteDicti
    let quoteAttribution: String? = q
    if (quoteID != nil && quoteAttrib
    {
        _quoteIDs.append(quoteID!)
```

Implementation



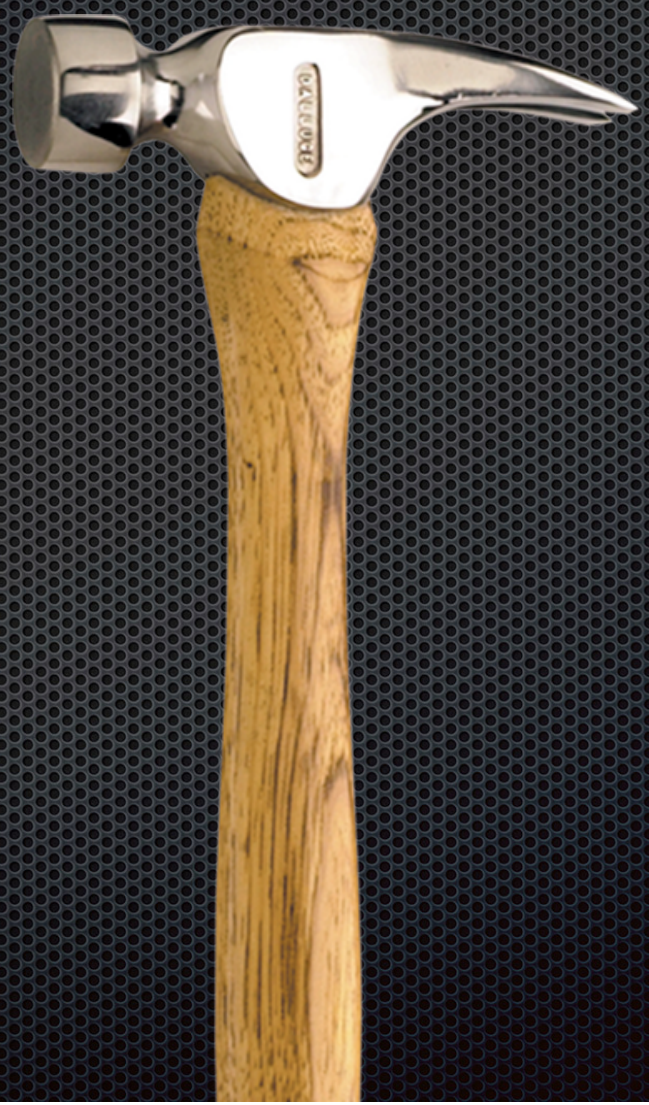
Testing



Testing

Quality Assurance

Quality Assurance



The Beginning

Product Life Cycle

Construction

Maintenance

Marketing

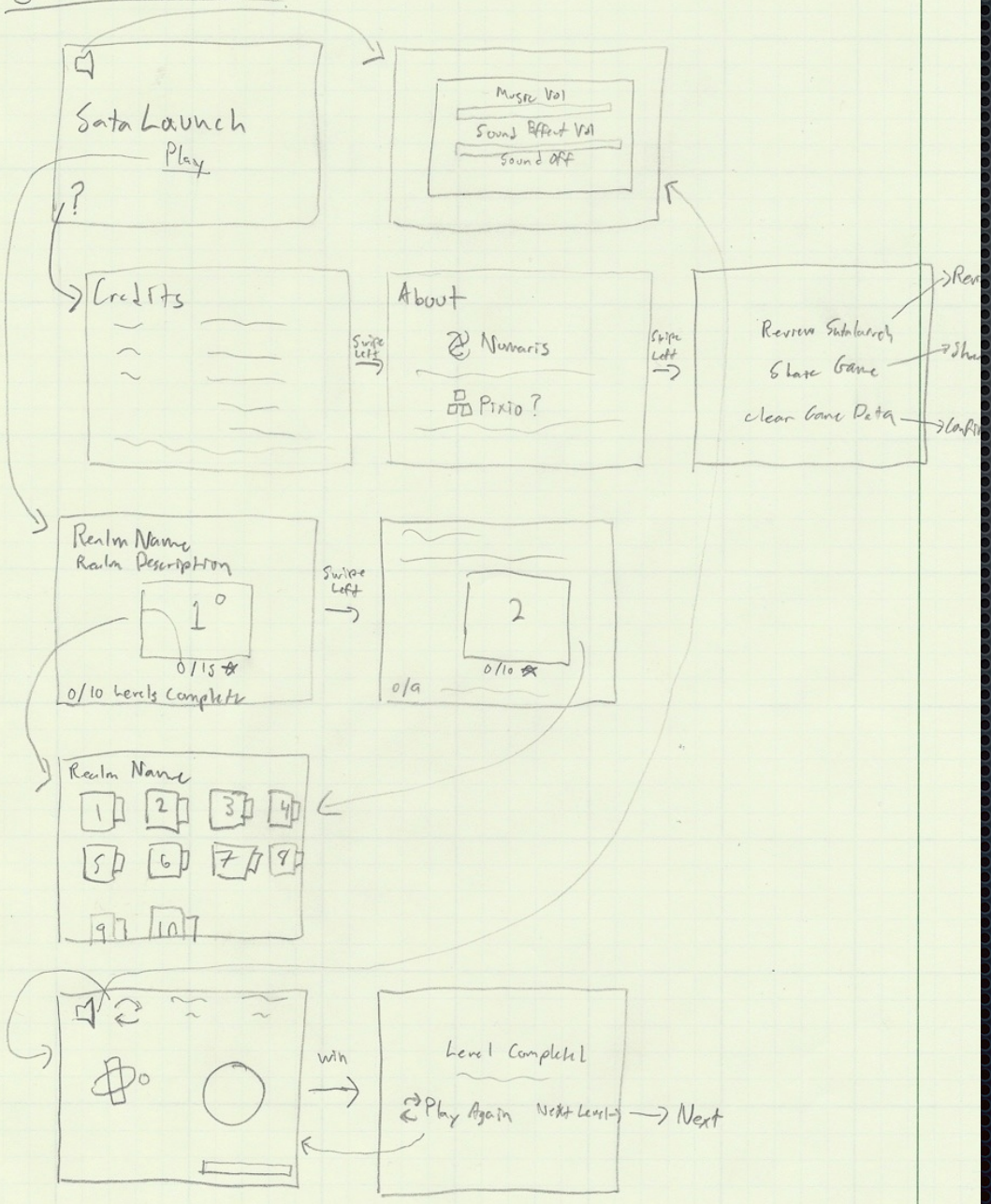
"Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away."

- Antoine de Saint-Exuper

Satalaunch

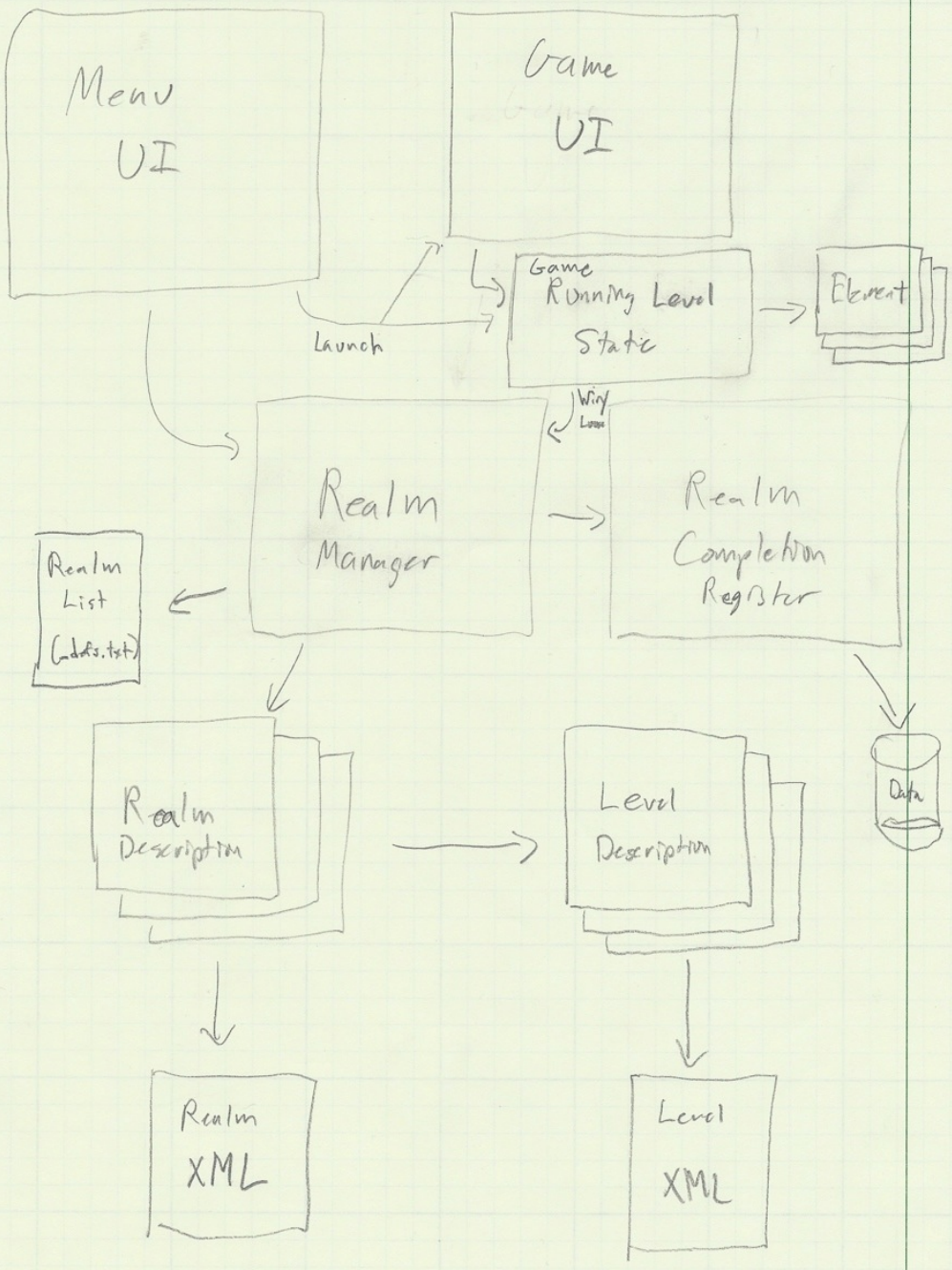
SataLaunch	Feb/24/2011	Matt Slater

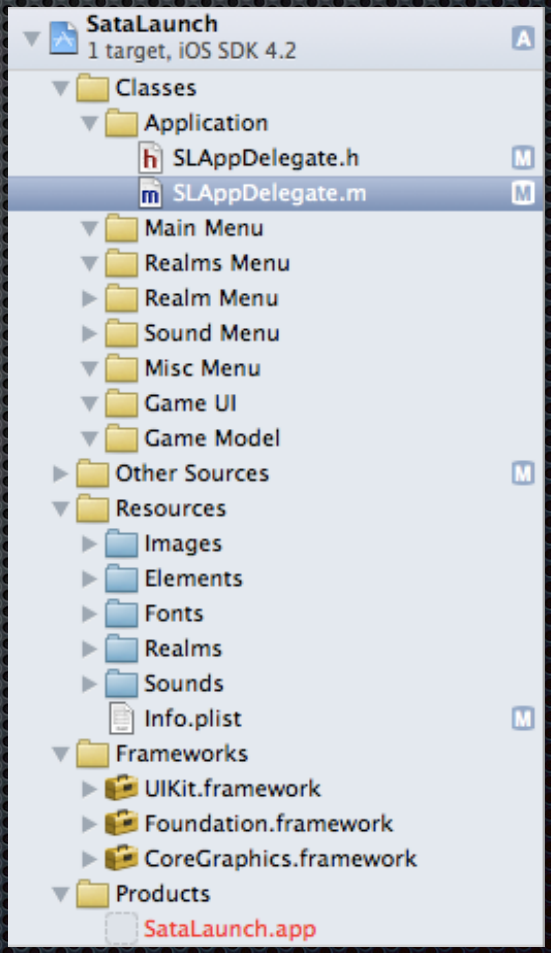
Screen Flow



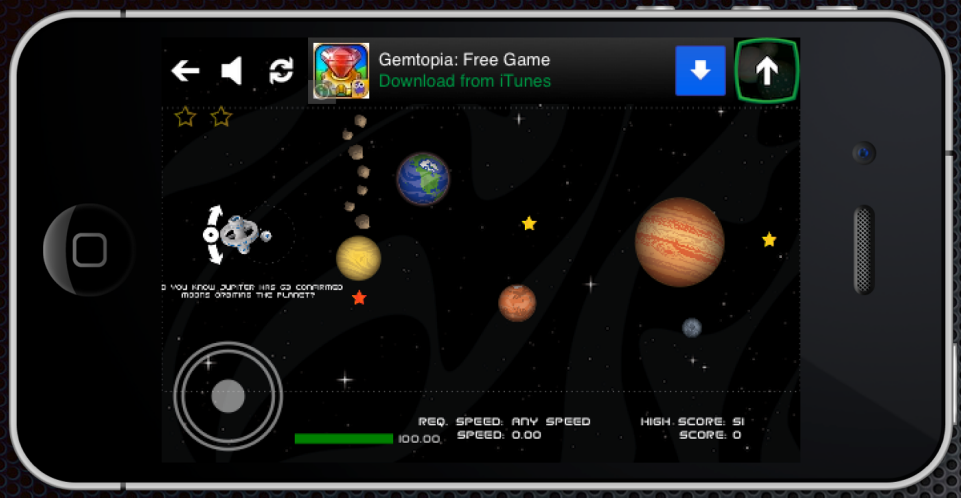
SataLaunch | Feb/24/2011 | Matt Stoker

Subsystems

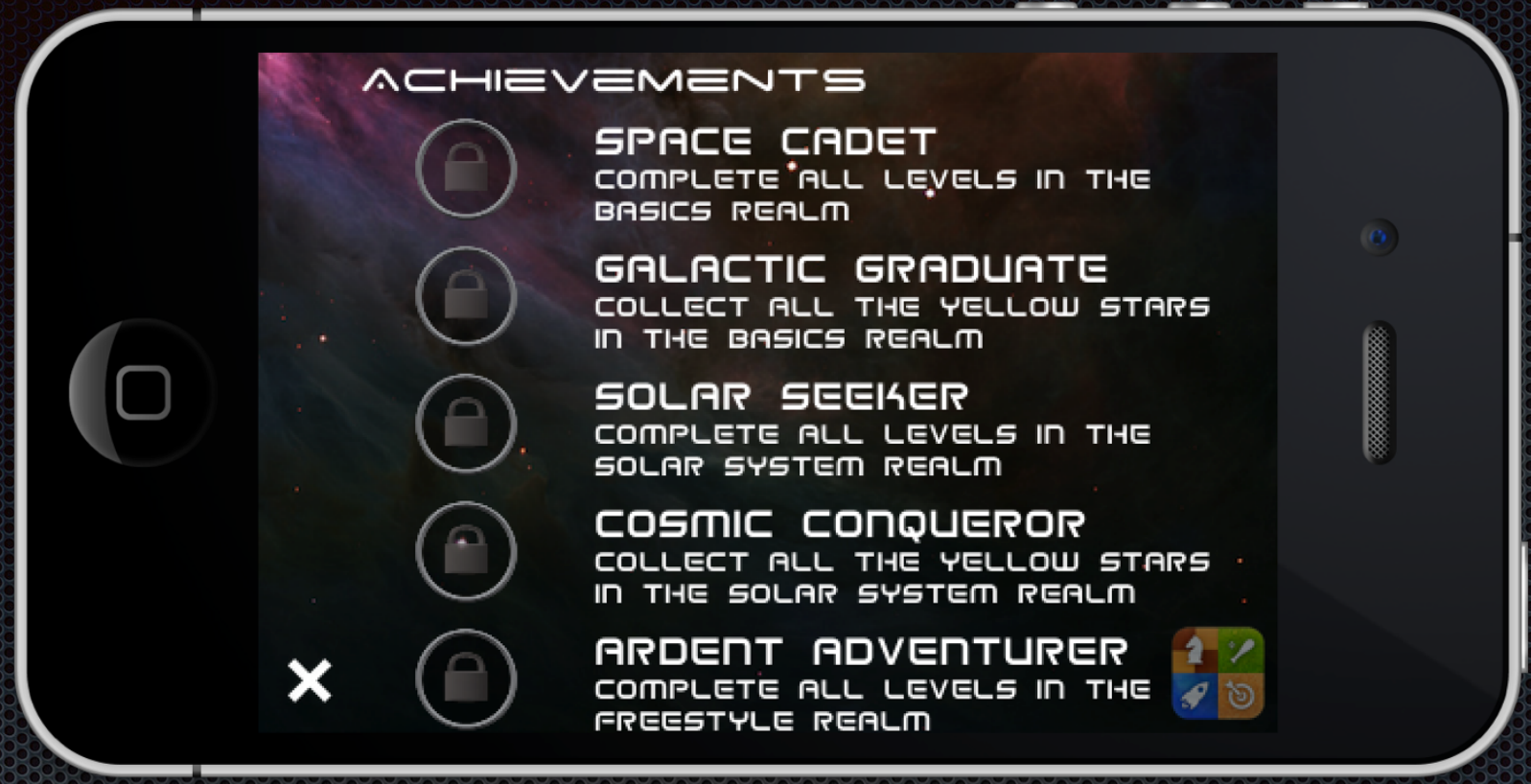




Available on the App Store



Available on the
App Store

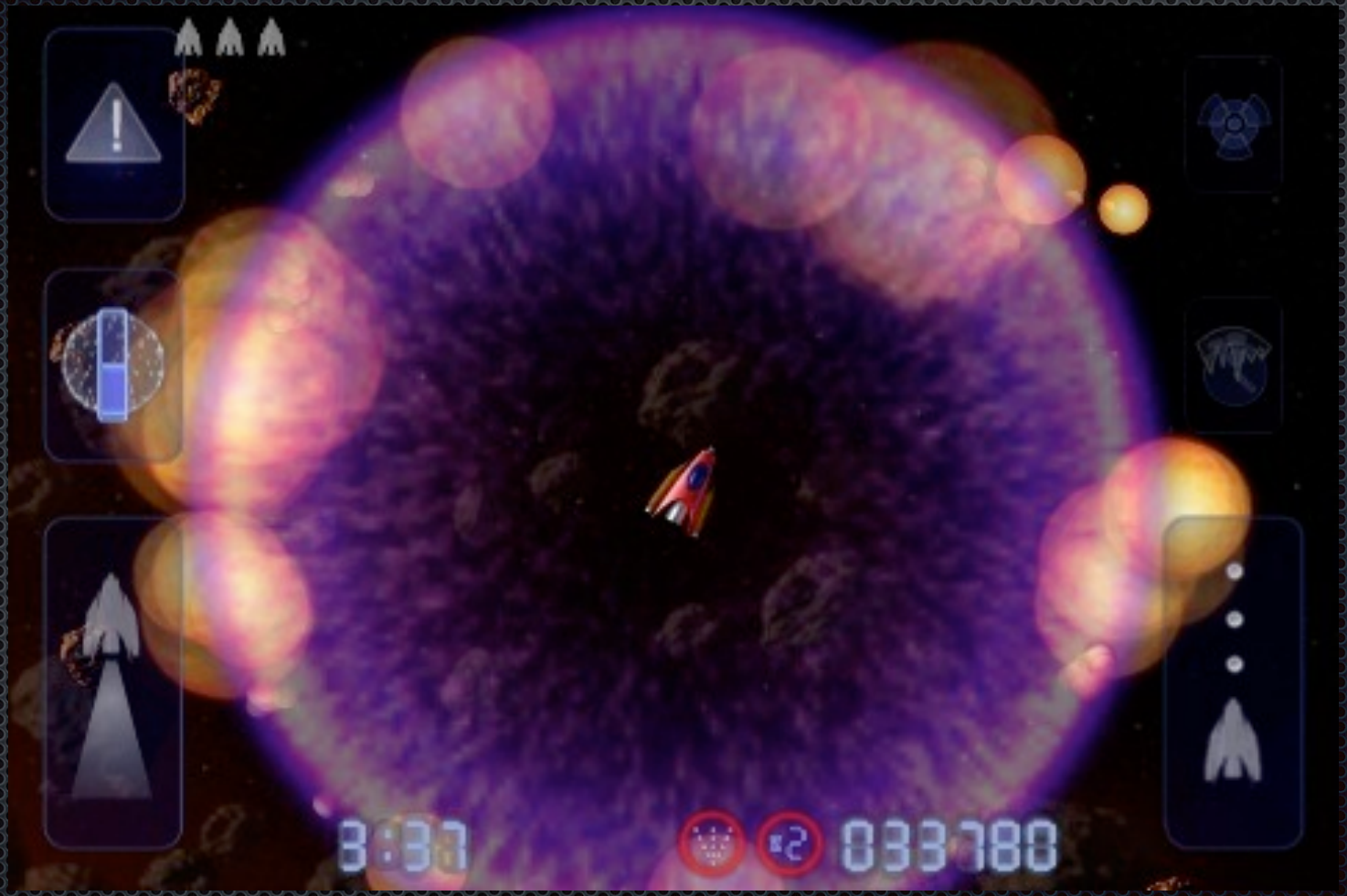


Available on the App Store

Final Projects

- A Final Project is:
  - Large (~? Hrs / Person)
  - Real (Meets Actual Need)
  - Complete (Feature-wise)
  - Polished (Store Quality)
  - Valuable (Someone Would Like to Buy It)
- 1 Programmer Examples
  - Photo App with Filters
  - Networked Social App
  - Asteroids with Pickups
  - Battleship (2 iDevices)
  - Simple OpenGL Game

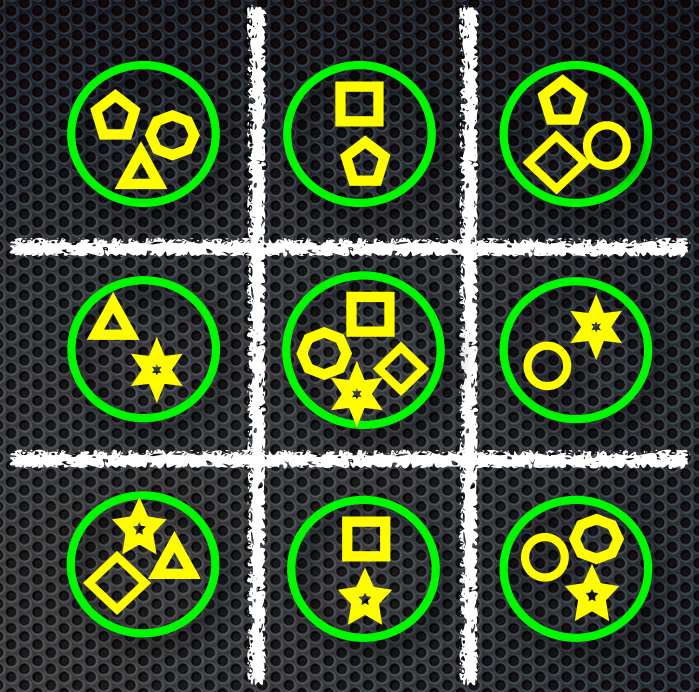
Final Projects



The Iterative Design Process


```
let quoteListJson: NSData? = NSData(c
if (quoteListJson == nil)
{
    return
}

let quoteListJsonString: NSString = N
println(quoteListJsonString)

let quoteAttributions: NSArray? = NSJ
    allZeros, error: nil) as NSArray?
if (quoteAttributions == nil)
{
    return
}
for quoteDictionary in quoteAttributi
{
    let quoteID: String? = quoteDicti
    let quoteAttribution: String? = q
    if (quoteID != nil && quoteAttrib
    {
        _quoteIDs.append(quoteID!)
```

4	9	2
3	5	7
8	1	6



O	X	X
	X	O
O	X	

Matt Stoker | Mar/6/2017 | Tic-Tac-Toe

Abstract

An implementation of the paper & pencil game Tic-Tac-Toe with support for in-progress and completed games.

Game List Screen

Tic Tac Toe	+
X's Turn	2 moves
O's Turn	3 moves
O Won	6 moves
Tie	9 moves

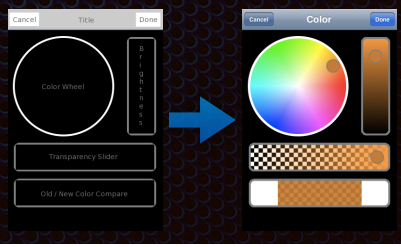
- Tapping '+' opens a new game
- Tapping a row opens that game
- Games can be deleted by right-swipe

Game Screen

Back | O's Turn | Delete

		X
X		O

- Tapping a cell selects that location for a move
- The title updates to reflect who's turn it is
- Tapping 'Back' returns to the game List Screen
- Tapping 'Delete' deletes this game
- When a player wins, tapping a cell informs
- the user that the game has ended.




let quoteListJson: NSData? = NSData(
if (quoteListJson == nil)
{
return
}
let quoteListJsonString: NSString =
println(quoteListJsonString)
let quoteAttributions: NSArray? = NS
allZeros, error: nil) as NSArray
if (quoteAttributions == nil)
{
return
}
for quoteDictionary in quoteAttributi
{
let quoteID: String? = quoteDict
let quoteAttribution: String? =
if (quoteID != nil && quoteAttri
{
_quoteIDs.append(quoteID!)
Cancel
Color
Done
Carrier
1:42 PM
Cancel
Color
Done