

Objective-C ==> RubyMotion

A fly in the ointment

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Dnepropetrovsk, Ukraine
2013

RubyMotion is a Buzzword



Marc Lainez @mlainez

Yesterday: Xcode => nothing good came out of it.

Today: Rubymotion => almost finished an app.



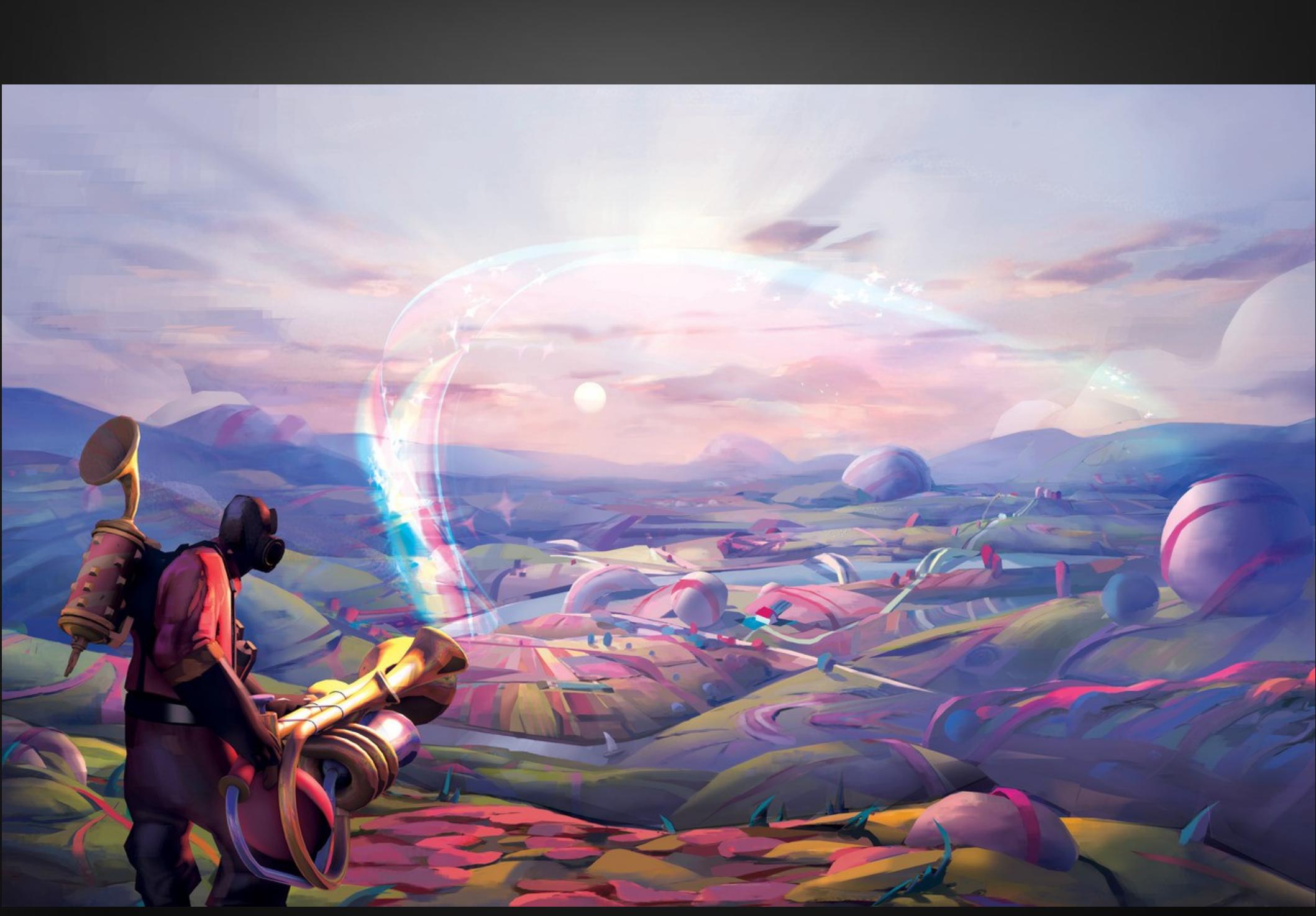
After years of iOS work,
RubyMotion seems like a
thousand kittens playing the
piano while sliding down a
double-rainbow.

Johannes Fahrenkrug
Founder, Springenwerk

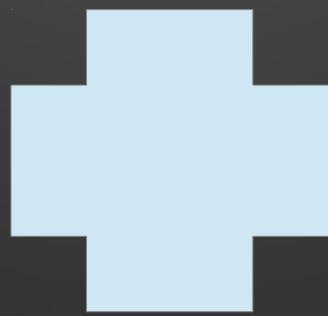


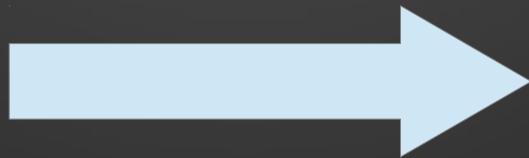
Matt Brewer @macfanatic

@RubyMotion Love,
absolutely needed.

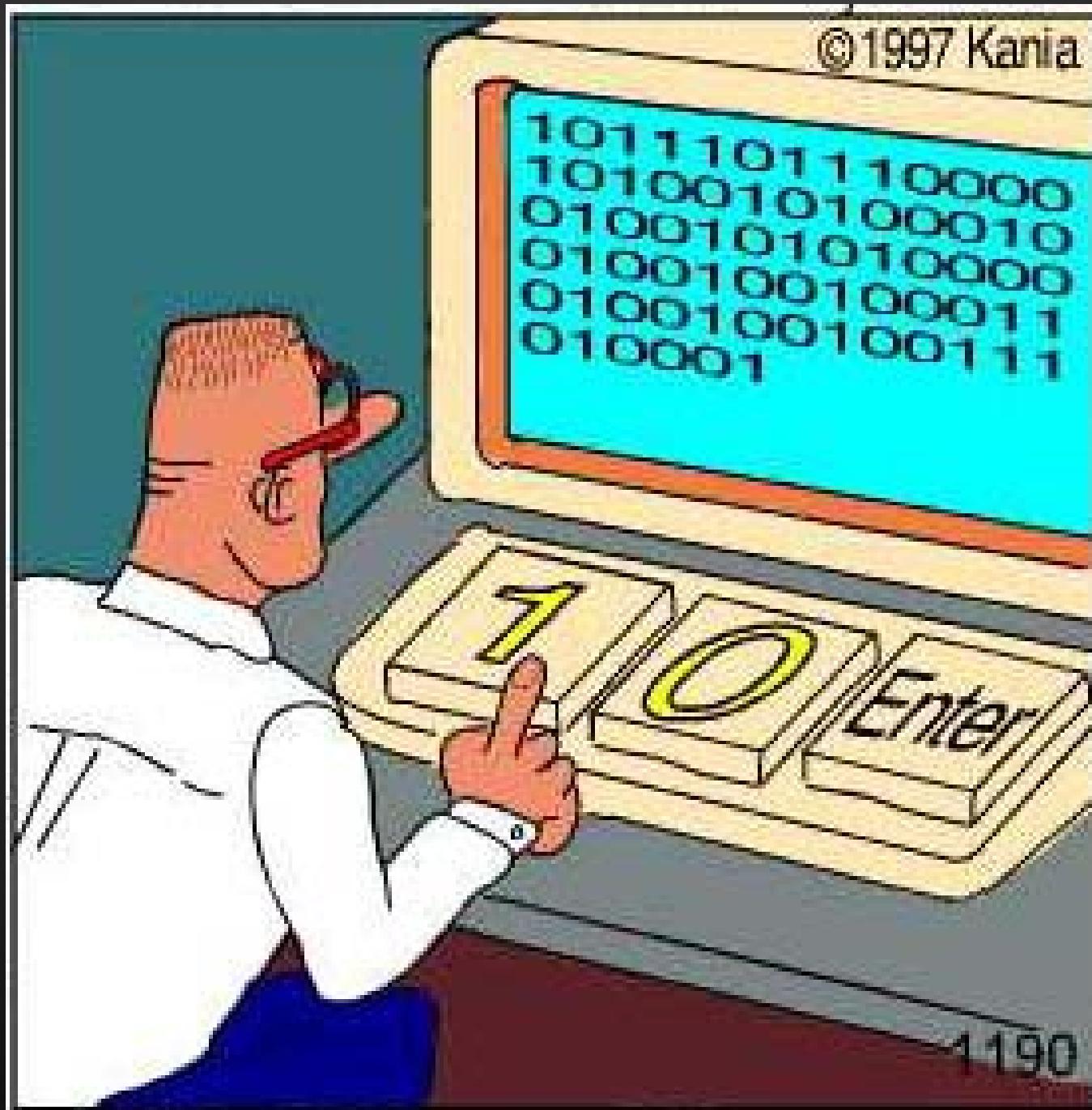


Introducing RubyMotion I had
3 goals in mind





©1997 Kania



Real programmers code in binary.

Preconditions



Sitecore MobileSDK



Choose a template for your new project



iOS

Application

Framework & Library

Other



OS X

Application

Framework & Library

Application Plug-in

System Plug-in

Other



Master-Detail Application



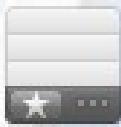
OpenGL Game



Page-Based Application



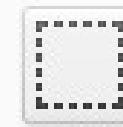
Single View Application



Tabbed Application



Utility Application



Empty Application



Master-Detail Application

This template provides a starting point for a master-detail application. It provides a user interface configured with a navigation controller to display a list of items and also a split view on iPad.

Cancel

Previous

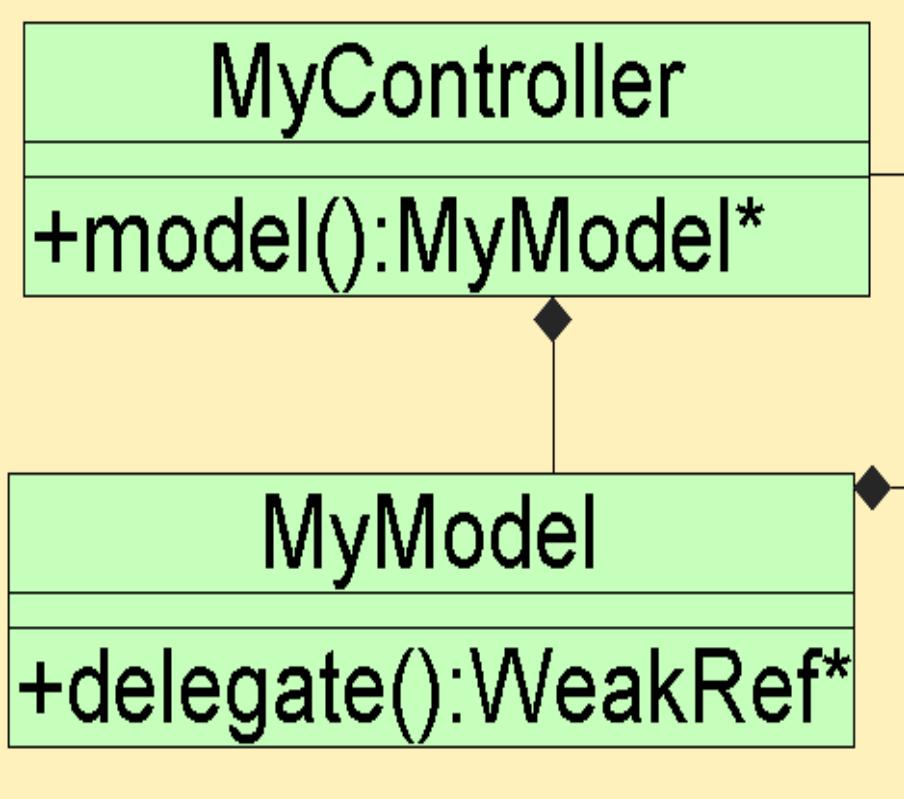
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Problem #1 : Memory leaks



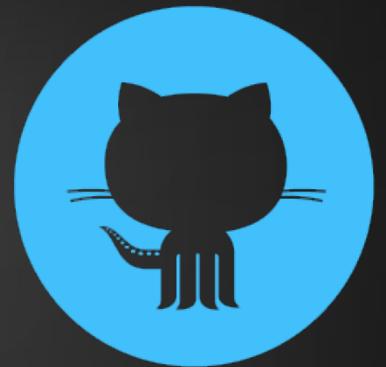
- Object cycles, when two or more objects refer to each other, are currently not handled by the runtime, but will be in future releases.

Ruby



Native



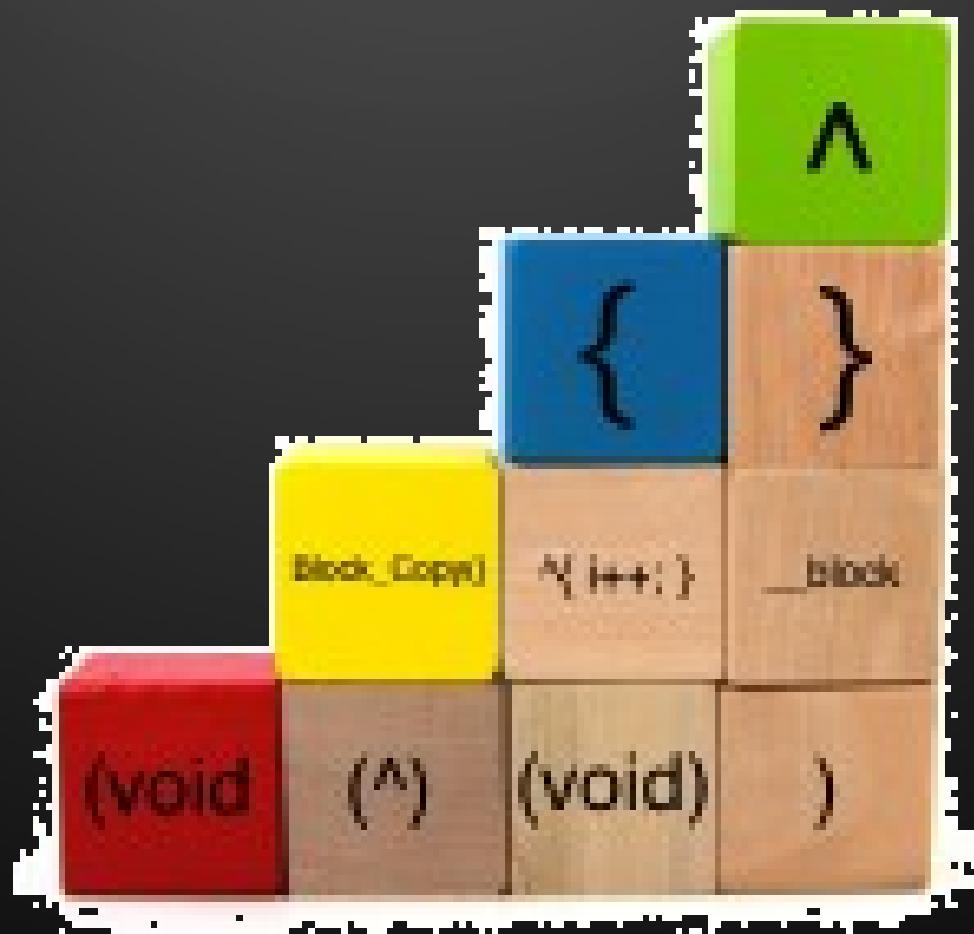


Farcaller/motion-memorymanagement
Dodikk/MotionBlocks

GOALS

Problem #2 :

Block API do not compile



```
typedef void (^BBAsyncOpResult)(id result, NSError  
*error);  
typedef void (^BBAsyncOp)(BBAsyncOpResult handler);
```

```
@interface BlockBuilder : NSObject
```

```
-(BBAsyncOp)itemsReader;  
-(BBAsyncOpResult)itemsReaderCallback;
```

```
@end
```

Objective-C stub for message
`itemsReader' type `@?
@(angry)' not precompiled.

Make sure you properly link
with the framework or library
that defines this message.

Use `id` instead of block
typedefs

```
typedef void (^BBAsyncOpResult)(id result, NSError  
*error);
```

```
typedef void (^BBAsyncOp)(id handler);
```

```
@interface BlockBuilder : NSObject
```

```
- (id)itemsReader;
```

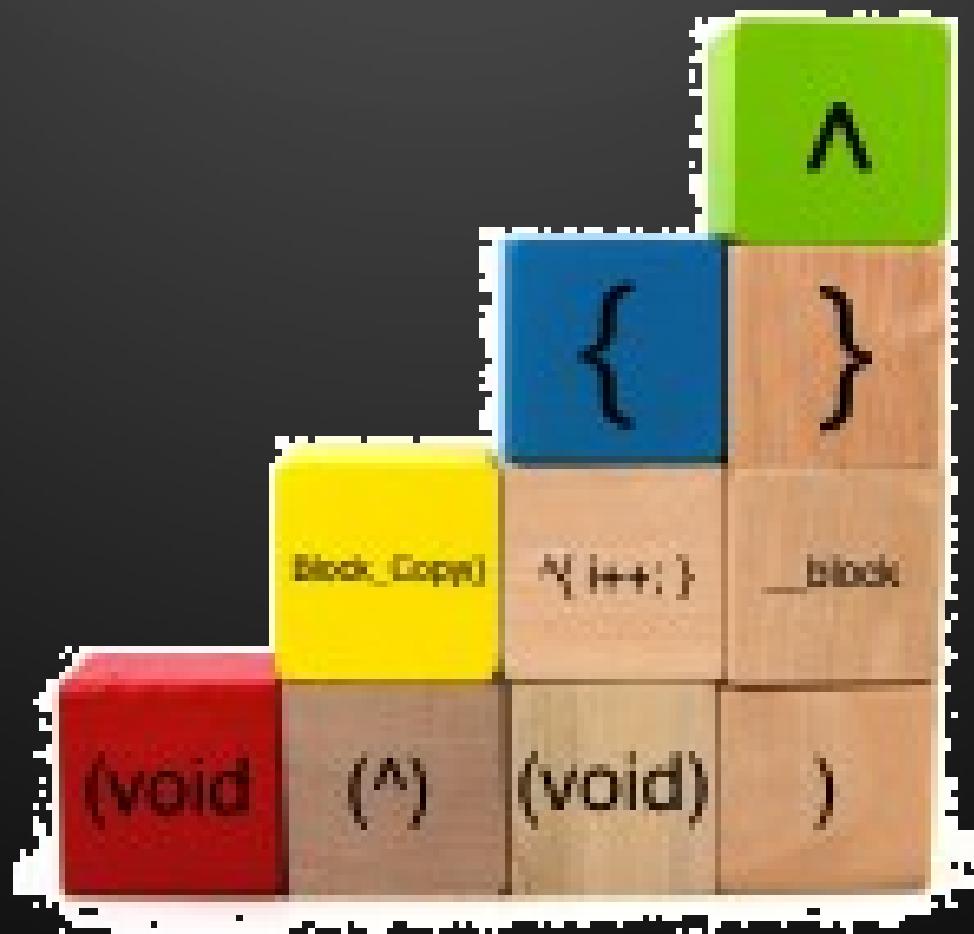
```
- (id)itemsReaderCallback;
```

```
@end
```

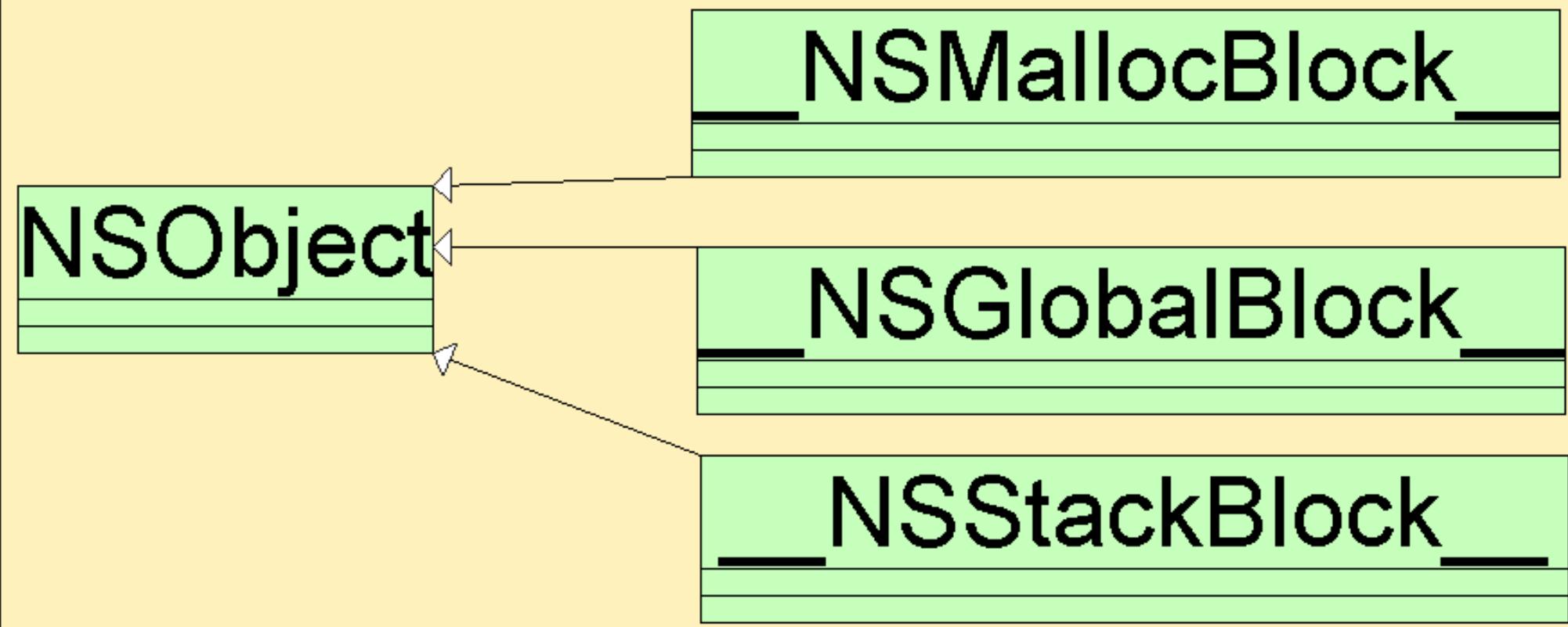
GOALS

Problem #3 :

How to Invoke an ObjC Block?



Foundation



BLACKJACK



AND HOOKERS

```
@implementation NSObject (BlockForRuby)
```

```
- (id)objc_BlockSend1:( id )arg_
```

```
{
```

```
    typedef id(^Block1)( id arg_ );
```

```
    Block1 block_ = (Block1)self;
```

```
    return block_( arg_ );
```

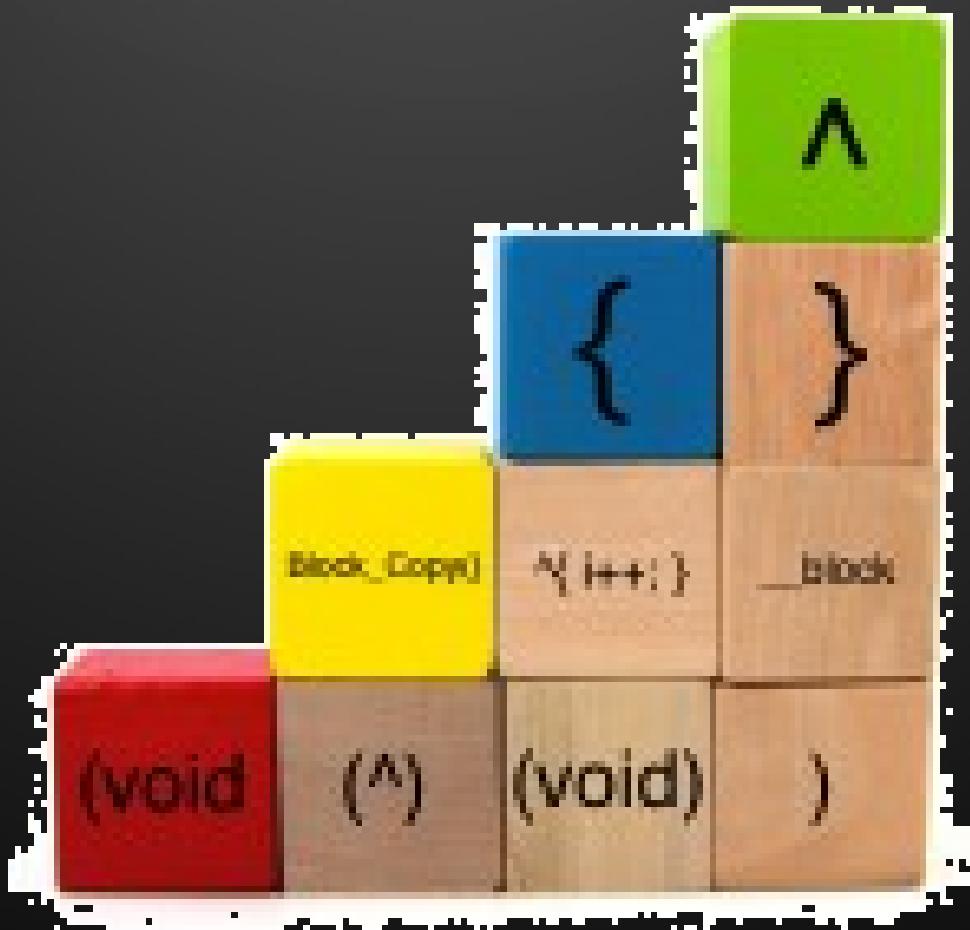
```
}
```

```
-(id)objc_BlockSend:( NSArray* )args_{
    switch ( [ args_ count ] ){
        case 0:
            return [ self objc_BlockSend0 ];
            break;
        case 1:
            return [ self objc_BlockSend1: args_[0] ];
            break;
        default: //TODO : add as many as you want
            break;
    }
    return nil;
}
```

GOALS

Problem #4 :

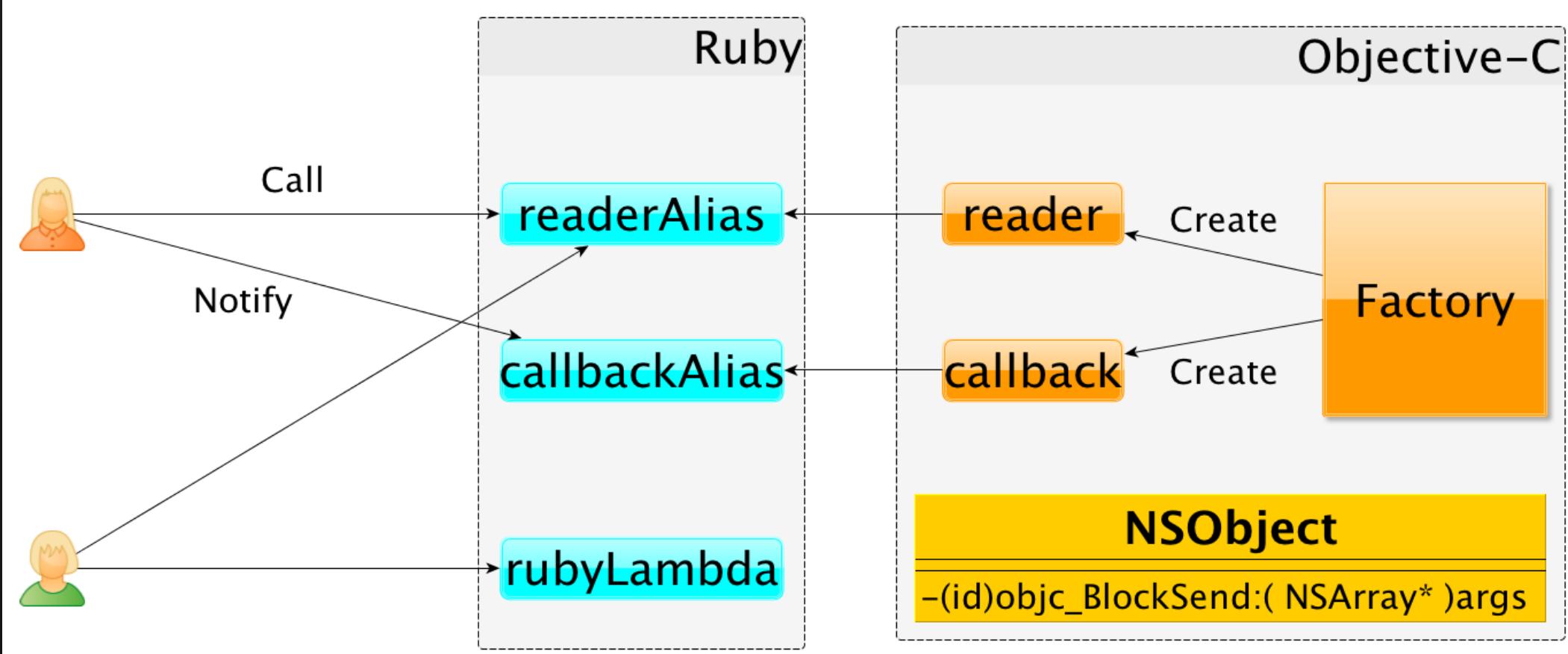
ObjC blocks crash



```
reader =  
blockBuilder.itemsReaderWithRequest()
```

```
callback =  
blockBuilder.itemsReaderCallback()
```

```
reader.objc_BlockSend( [ callback ] )
```



Demo

Just in case you need the full log

```
-----  
reader.class : __NSGlobalBlock__  
callback.class : __NSGlobalBlock__  
2013-03-07 12:35:43.985 HelloMotion[1250:1d903] [EXECUTED]  
itemsReaderWithRequest  
2013-03-07 12:35:43.986 HelloMotion[1250:1d903] handler :  
<__NSGlobalBlock__ : 0x14b500>  
2013-03-07 12:35:43.987 HelloMotion[1250:1d903] handler class :  
__NSGlobalBlock__  
2013-03-07 12:35:43.987 HelloMotion[1250:1d903] [EXECUTED]  
itemsReaderCallback  
2013-03-07 12:35:43.988 HelloMotion[1250:1d903] result : ololo  
((null))> rake aborted!  
Command failed with status (1):  
[DYLD_FRAMEWORK_PATH="/Applications/Xcode.a..."]
```



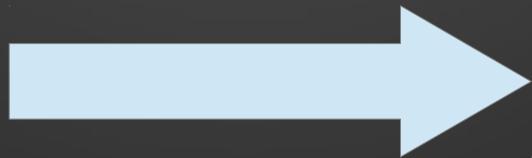
Koniec

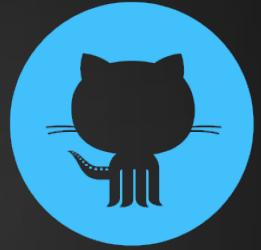
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One More Thing...







TestingWithFrank/PublicAutomation

Unstable. Did not make it work

Demo



Use it for Prototyping Only

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Master-Detail Application



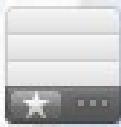
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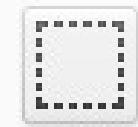
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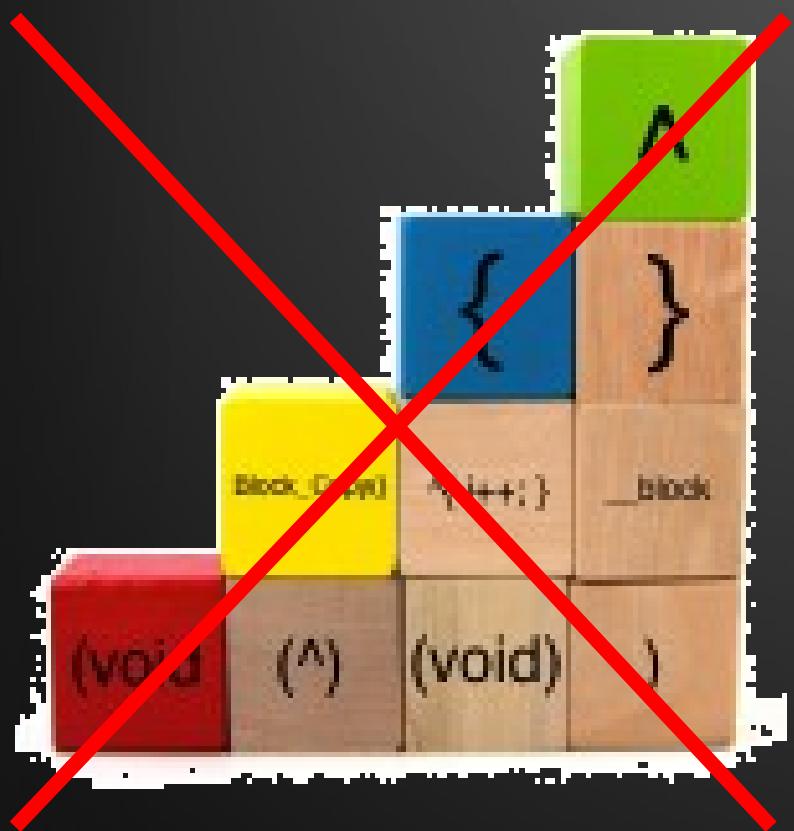
Master-Detail Application

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Stay Native





Oleksandr Dodatko



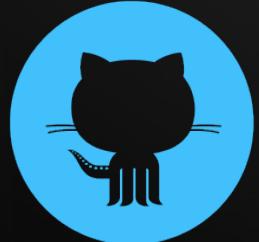
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