

IOS ANTI-PATTERNS

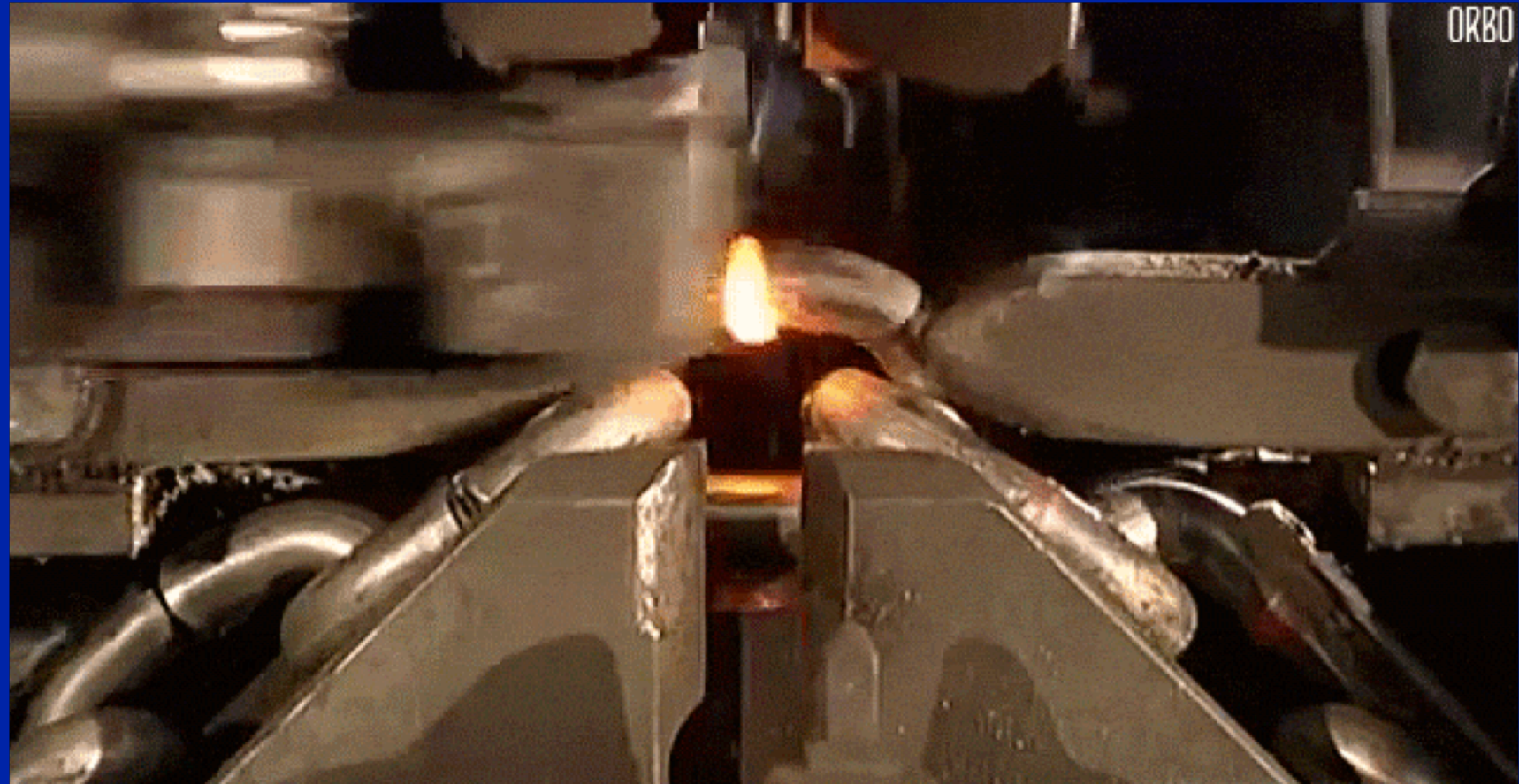
Learning by repeated failure

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Hello
my name is



**MOBILE APPS ARE
EVERYWHERE**

**APPS ARE MORE
COMPLEX**

**APPS STAND
ALONE**

FAILURES

(and successes)

HUGE VIEW CONTROLLERS

VIEW CONTROLLERS ARE GLUE

@implementation YMFeedViewController

#pragma mark - Header view
#pragma mark - fetching helper methods
#pragma mark - View lifecycle
#pragma mark - private methods
#pragma mark - Table view delegate
#pragma mark - Table view data source
#pragma mark - UIScrollViewDelegate
#pragma mark - YMFeedCellDelegate
#pragma mark - YMCardCellDelegate
#pragma mark - YMScrollableImageAttachmentViewDelegate
#pragma mark - YMThreadViewControllerDelegate
#pragma mark - iPad group transitions
#pragma mark - YMFetchedResultsTableControllerDelegate

@end

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Work Email

Password

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MOVE VIEW CODE OUT OF THE VIEW CONTROLLER

SignupViewController => SignupViewController
+ SignupView

SPLITTING RESPONSIBILITIES IS GOOD

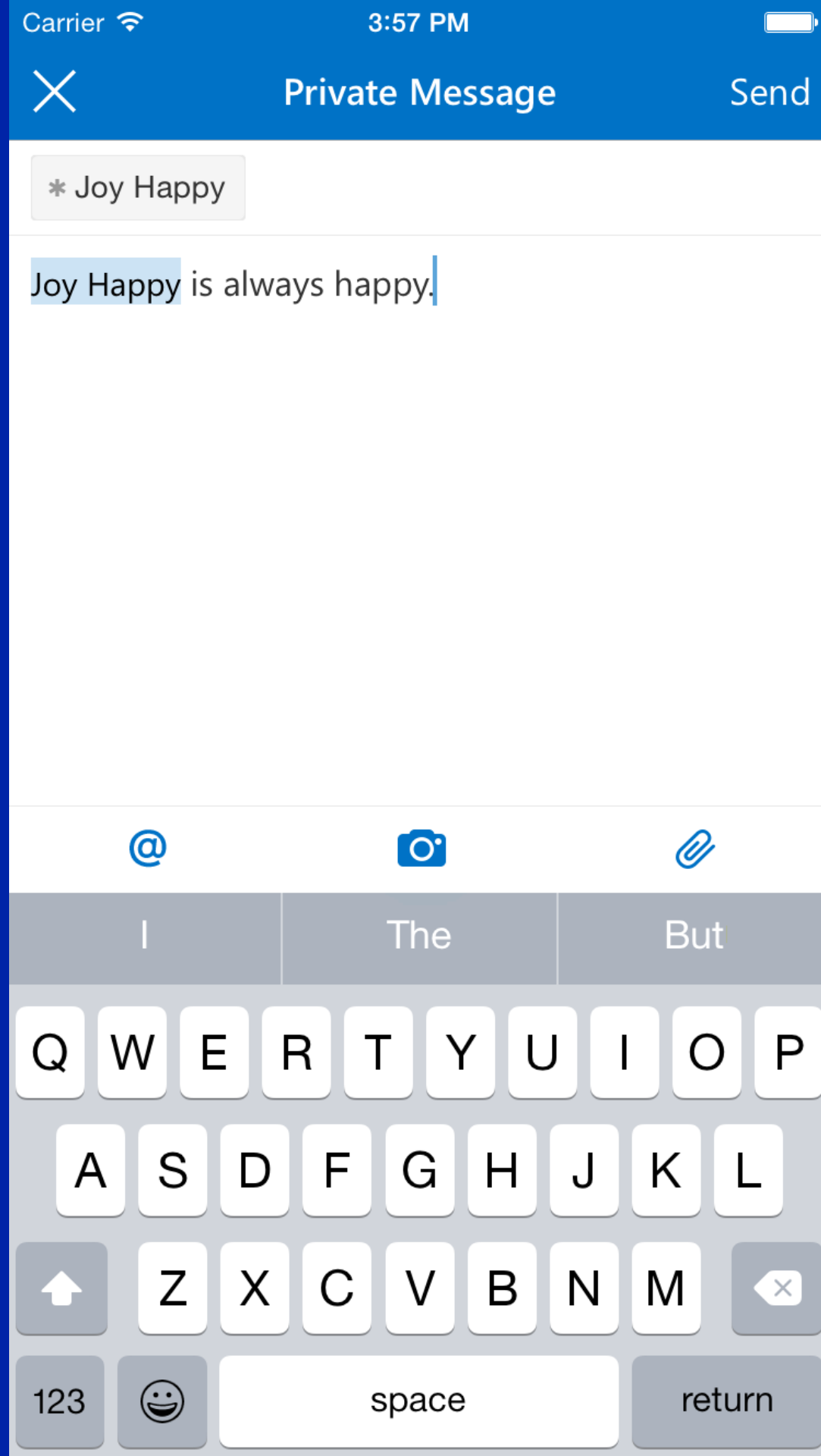
```
@interface YKSignupView : UIScrollView

@property (nonatomic, strong) UILabel *firstNameLabel;
@property (nonatomic, strong) UILabel *lastNameLabel;
@property (nonatomic, strong) UILabel *emailLabel;
@property (nonatomic, strong) UILabel *passwordLabel;
@property (nonatomic, strong) YKErrorLabel *firstNameError;
@property (nonatomic, strong) YKErrorLabel *lastNameError;
@property (nonatomic, strong) YKErrorLabel *emailError;
@property (nonatomic, strong) YKErrorLabel *passwordError;
@property (nonatomic, strong) YKSimpleTextField *firstNameField;
@property (nonatomic, strong) YKSimpleTextField *lastNameField;
@property (nonatomic, strong) YKSimpleTextField *emailField;
@property (nonatomic, strong) YKSimpleTextField *passwordField;
@property (nonatomic, strong) YKSimplePrimaryButton *signupButton;
@property (nonatomic, strong) UILabel *termsOfUseLabel;
@property (nonatomic, strong) UIButton *termsOfUseButton;
@property (nonatomic, strong) YMKeyboardLayoutHelperView *keyboardHelper;

- (void)centerOnView:(UIView *)view;

@end
```

... DO I DETECT A HOWEVER?



AND NOW THE COMPOSER

- ▶ Address bar at the top
 - ▶ Text view
- ▶ Tool bar at bottom


```
- (void)mentionableTextView:(YMMentionableTextView *)mentionableTextView didAddMentionedUser:(YDUser *)user
{
    [self.composeViewDelegate composeView:self didAddMentionedUser:user];
}

- (void)mentionableTextView:(YMMentionableTextView *)mentionableTextView didRemoveMentionedUser:(YDUser *)user
{
    [self.composeViewDelegate composeView:self didRemoveMentionedUser:user];
}

- (void)mentionableTextView:(YMMentionableTextView *)mentionableTextView didPasteImageData:(NSData *)data{
    [self.composeViewDelegate composeView:self didPasteImageData:data];
}
```


OTHER SOLUTIONS?

**SEPARATE DATA SOURCES FROM VIEW
CONTROLLERS**

PARENT/CHILD VIEW CONTROLLER RELATIONSHIPS

VIEWS THAT UNDERSTAND THE MODEL LAYER

WE'RE DOOMED

WE'RE ALL DOOOOOOOMED

NSObject **CONTROLLERS**

TESTS

PLAN 1

KIF (KEEP IT FUNCTIONAL)

PLAN 2

KIWI (BDD TESTING)

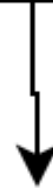
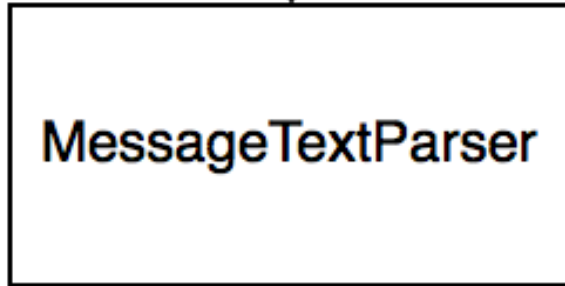
```
describe(@"Math", ^{  
  context(@"Addition", ^{  
    it(@"is commutative", ^{  
      [[theValue(3+2) should] equal:theValue(2+3)];  
    });  
  });  
});
```

MORE/BETTER TESTING
HOW TO IMPROVE TEST COVERAGE?

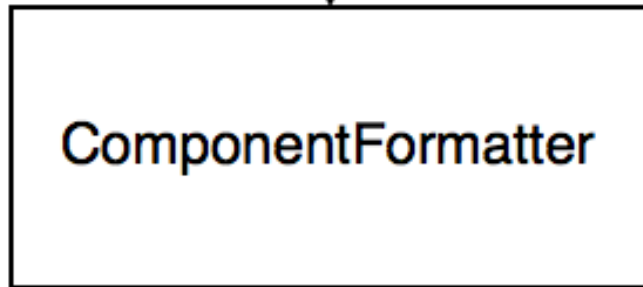
TWO OPTIONS

- ▶ bigger tests, more setup
- ▶ smaller units to be tested

@ "Hi [[user::12347890]]!"



TEXT(@ "Hi "), REF(@ "user", @ "12347890"), TEXT(@ "!")



Hi **Dave Weston!**

MESSAGE FORMATTING

MENTION DETECTION

```
describe(@"YMMentionDetector", ^{  
    it(@"detects mentions due to capitalization", ^{  
        ...  
    });  
  
    it(@"detects mentions due to @ symbol", ^{  
        ...  
    });  
  
    it(@"detects mentions when the cursor is moved back", ^{  
        ...  
    });  
  
    it(@"detects symbol mentions when they are at the beginning of the text.", ^{  
        ...  
    });  
});
```



**NOT ALL CODE CHANGES HAPPEN
AT THE SAME RATE**

SCIENCE

🔍 Search

Apply experiments to this app

OVERRIDEN BY USER

ios_inline_at_mentioning_v3
31373 inline @mentioning and @button toggle
[*inline mentioning with @ button](#)

OVERRIDEN BY NETWORK

iphone_upload_your_photo_v1
31217 iPhone upload your photo v1
Enabled

external_user_education_popups_talk_to_banner
31349 Flexternal - Education Popups (Talking to Banner Se...
Enabled

external_user_education_popups
31264 Flexternal - Education Popups
Enabled

mobile_growth_show_feed_ad
31214 Mobile Growth: Show Mobile Ad in the Feed
Enabled

ios_pending_users_in_autocomplete
31313 Apps Team - Adding pending users to autocomplet...

EXPERIMENTS

QED

SMALLER CLASSES => MORE CLASSES => LESS BUGS => HAPPIER USERS

WORLD PEACE