

# **UITableView Changes, Tips and Tricks**

**Session 125**

**Jason Beaver**

iOS Frameworks

These are confidential sessions—please refrain from streaming, blogging, or taking pictures

# Introduction

- What's New
  - Automatic Dimensions
  - Automatic Animation Style
  - New Update Methods
  - Menu Support
  - Multiple Selection
  - Automatic Cell Loading
  - Static Table Views
- Tips and Tricks

# What's New

## Automatic Dimensions

# Automatic Dimensions



# Automatic Dimensions



# Automatic Dimensions



```
- (CGFloat)tableView:(UITableView *)tableView  
heightForHeaderInSection:(NSInteger)section
```

# Automatic Dimensions



```
- (CGFloat)tableView:(UITableView *)tableView  
heightForHeaderInSection:(NSInteger)section
```

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# Automatic Dimensions



CGFloat UITableViewAutomaticDimension

# What's New

## Automatic Animation Style

# Automatic Animation Style



```
insertRowAtIndexPath: [NSIndexPath indexPathForRow:0 inSection:0]
withRowAnimation: UITableViewRowAnimationBottom
```

# Automatic Animation Style



```
deleteRowAtIndexPath: [NSIndexPath indexPathForRow:0 inSection:0]
withRowAnimation: UITableViewRowAnimationBottom
```

# Automatic Animation Style



```
insertRowAtIndexPath: [NSIndexPath indexPathForRow:3 inSection:0]
withRowAnimation: UITableViewRowAnimationTop
```

# Automatic Animation Style



```
deleteRowAtIndexPath: [NSIndexPath indexPathForRow:3 inSection:0]
withRowAnimation: UITableViewRowAnimationTop
```

# Automatic Animation Style



```
insertRowAtIndexPath: [NSIndexPath indexPathForRow:0 inSection:0]
withRowAnimation: UITableViewRowAnimationTop
```

# Automatic Animation Style



```
deleteRowAtIndexPath: [NSIndexPath indexPathForRow:0 inSection:0]
withRowAnimation: UITableViewRowAnimationTop
```

# Automatic Animation Style



```
insertRowAtIndexPath: [NSIndexPath indexPathForRow:3 inSection:0]
withRowAnimation: UITableViewRowAnimationBottom
```

# Automatic Animation Style



```
deleteRowAtIndexPath: [NSIndexPath indexPathForRow:3 inSection:0]
withRowAnimation: UITableViewRowAnimationBottom
```

5

# Automatic Animation Style



`UITableViewRowAnimationAutomatic`

# What's New

## New Update Methods

# New Update Methods



# New Update Methods



# New Update Methods



# New Update Methods

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`- (void)moveSection:(NSInteger)section  
toSection:(NSInteger)newSection`

# New Update Methods



- `(void)moveSection:(NSInteger)section  
toSection:(NSInteger)newSection`

# New Update Methods

- `(void)moveSection:(NSInteger)section  
toSection:(NSInteger)newSection`
- `(void)insertSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)deleteSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)reloadSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`

# New Update Methods

- `(void)moveSection:(NSInteger)section  
toSection:(NSInteger)newSection`
- `(void)insertSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)deleteSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)reloadSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`

# New Update Methods

- `(void)moveSection:(NSInteger)section  
toSection:(NSInteger)newSection`
- `(void)insertSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)deleteSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)reloadSections:(NSIndexSet *)sections  
withRowAnimation:(UITableViewRowAnimation)animation`

# New Update Methods

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`- (void)moveRowAtIndexPath:(NSIndexPath *)indexPath  
toIndexPath:(NSIndexPath *)newIndexPath`

# New Update Methods



- `(void)moveRowAtIndexPath:(NSIndexPath *)indexPath  
toIndexPath:(NSIndexPath *)newIndexPath`

# New Update Methods

- `(void)moveRowAtIndexPath:(NSIndexPath *)indexPath  
toIndexPath:(NSIndexPath *)newIndexPath`
- `(void)insertRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)deleteRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)reloadRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`

# New Update Methods

- `(void)moveRowAtIndexPath:(NSIndexPath *)indexPath  
toIndexPath:(NSIndexPath *)newIndexPath`
- `(void)insertRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)deleteRowsAtIndexPaths:(NSArray *)indexPaths  
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- `(void)reloadRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`

# New Update Methods

- `(void)moveRowAtIndexPath:(NSIndexPath *)indexPath  
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withRowAnimation:(UITableViewRowAnimation)animation`
- `(void)reloadRowsAtIndexPaths:(NSArray *)indexPaths  
withRowAnimation:(UITableViewRowAnimation)animation`

# Demo

**Luke Hiesterman**  
iOS Frameworks Engineer

# What's New

## Menu Support

# Menu Support



# Menu Support

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- (BOOL)tableView:(UITableView \*)tableView  
shouldShowMenuForRowAtIndexPath:(NSIndexPath \*)indexPath

# Menu Support

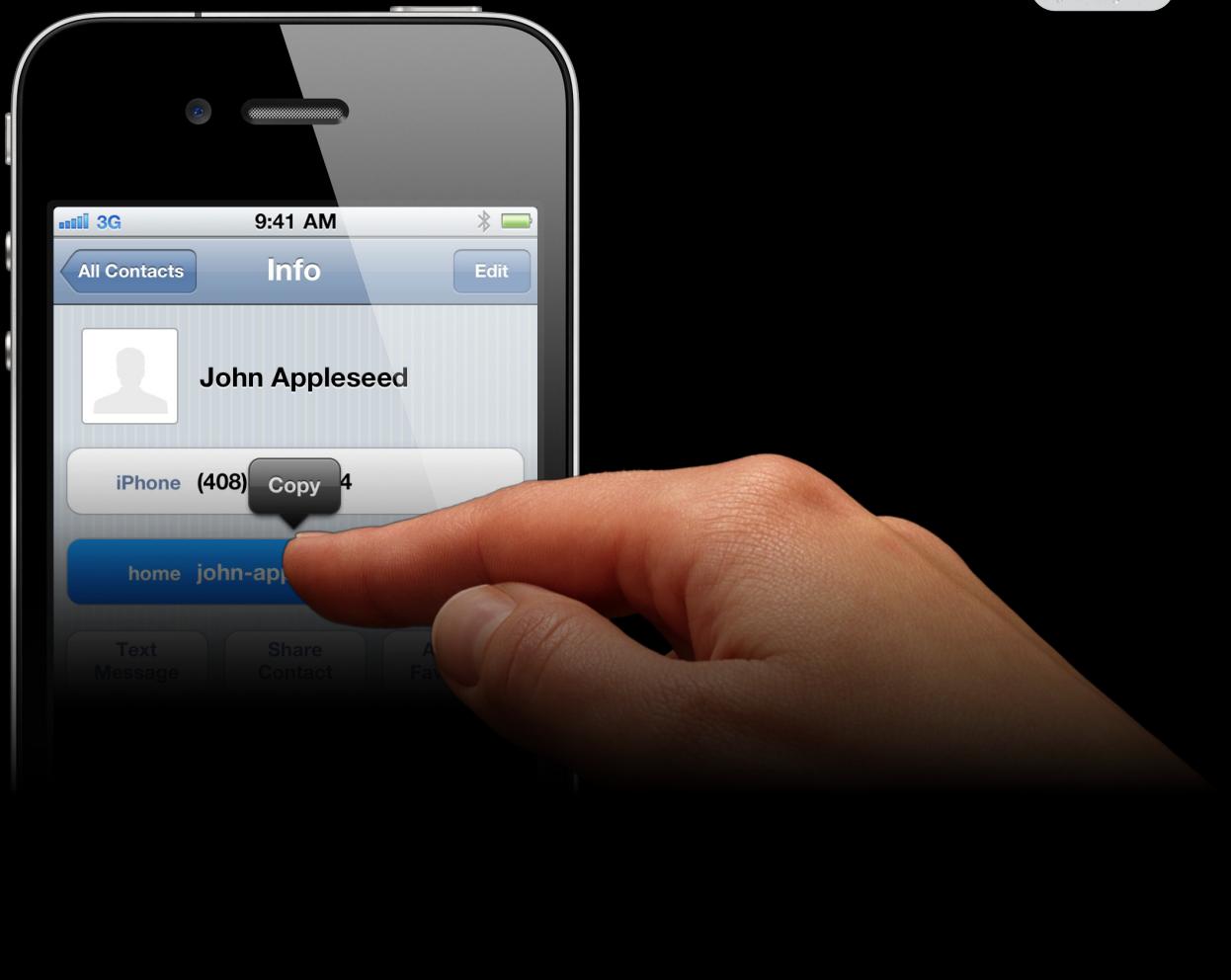
5



```
- (BOOL)tableView:(UITableView *)tableView  
canPerformAction:(SEL)action  
forRowAtIndexPath:(NSIndexPath *)indexPath  
withSender:(id)sender
```

# Menu Support

5



# Menu Support

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```
- (void)tableView:(UITableView *)tableView  
    performAction:(SEL)action  
forRowAtIndexPath:(NSIndexPath *)indexPath  
    withSender:(id)sender
```

# What's New

## Multiple Selection

# Multiple Selection



# Multiple Selection



Table View Properties

BOOL allowsMultipleSelection

BOOL allowsMultipleSelectionDuringEditing

# Multiple Selection

Table View Properties

BOOL `allowsMultipleSelection`

BOOL `allowsMultipleSelectionDuringEditing`

BOOL `allowsSelection`

BOOL `allowsSelectionDuringEditing`

# Multiple Selection



Table View Properties

BOOL `allowsMultipleSelection`

BOOL `allowsMultipleSelectionDuringEditing`

Table View Method

- (`NSArray *`)`indexPathsForSelectedRows`

# Multiple Selection

Table View Properties

BOOL `allowsMultipleSelection`

BOOL `allowsMultipleSelectionDuringEditing`

Table View Method

– `(NSArray *)indexPathsForSelectedRows`

– `(NSIndexPath *)indexPathForSelectedRow`

# Multiple Selection



Table View Cell Property

`UIView *multipleSelectionBackgroundView`

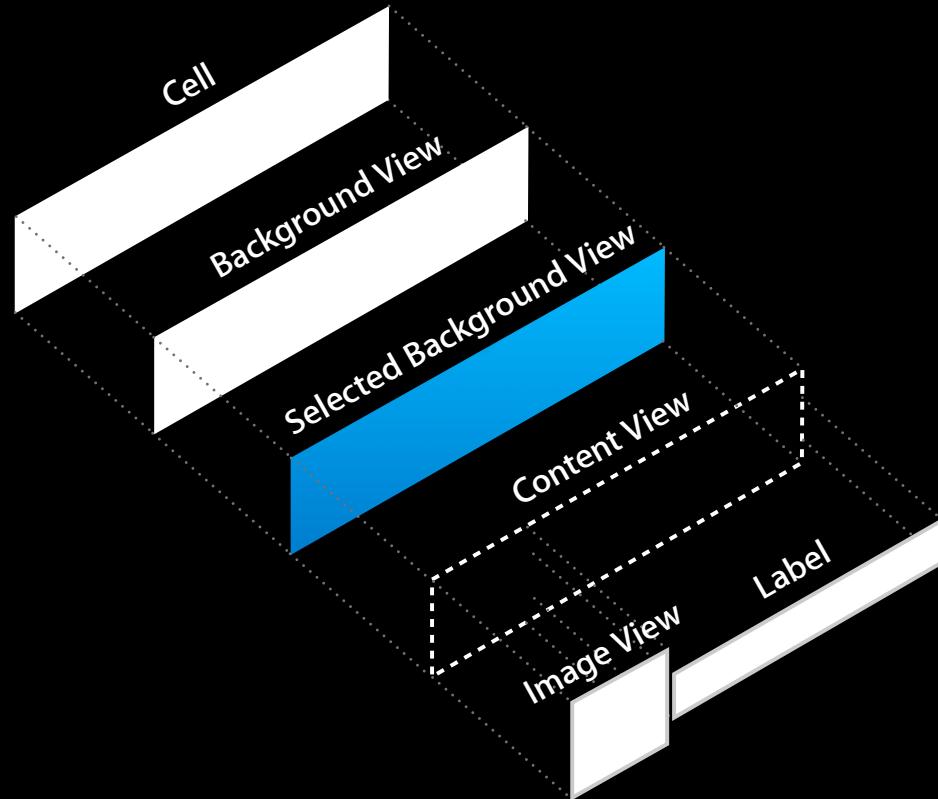
# Multiple Selection

Table View Cell Property

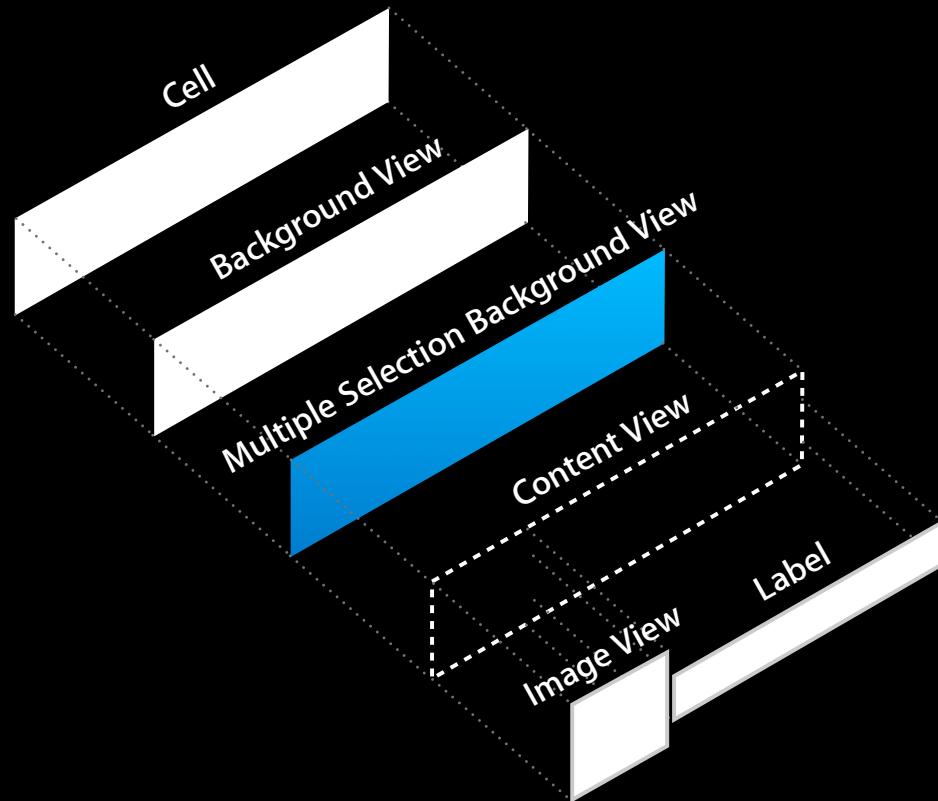
`UIView *multipleSelectionBackgroundView`

`UIView *selectedBackgroundView`

# Single Selection



# Multiple Selection



# What's New

## Automatic Cell Loading

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
    cellForRowAtIndexPath:(NSIndexPath *)indexPath
{
    NSString *reuseID = [self reuseIdentifierForRow:indexPath];
    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:reuseID];

    if (cell == nil) {
        if ([reuseID isEqualToString:@"Reuse Identifier 1"]) {
            cell = [[UITableViewCell alloc] initWithStyle:UITableViewCellStyleDefault
                                         reuseIdentifier:reuseID];
            // Setup cell
        } else if ([reuseID isEqualToString:@"Reuse Identifier 2"]) {
            cell = [[UITableViewCell alloc] initWithStyle:UITableViewCellStyleSubtitle
                                         reuseIdentifier:reuseID];
            // Setup cell
        } ...
    }

    // Configure cell
}

return cell;
}
```

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
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{
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        } ...
    }

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# Automatic Cell Loading

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# Automatic Cell Loading

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            cell = [[UITableViewCell alloc] initWithStyle:UITableViewCellStyleDefault
                                         reuseIdentifier:reuseID];
            // Setup cell
        } else if ([reuseID isEqualToString:@"Reuse Identifier 2"]) {
            cell = [[UITableViewCell alloc] initWithStyle:UITableViewCellStyleSubtitle
                                         reuseIdentifier:reuseID];
            // Setup cell
        } ...
    }

    // Configure cell
}

return cell;
}
```

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
    cellForRowAtIndexPath:(NSIndexPath *)indexPath
{
    NSString *reuseID = [self reuseIdentifierForRow:indexPath];
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        } else if ([reuseID isEqualToString:@"Reuse Identifier 2"]) {
            cell = [[UITableViewCell alloc] initWithStyle:UITableViewCellStyleSubtitle
                                         reuseIdentifier:reuseID];
            // Setup cell
        } ...
    }

    // Configure cell
    return cell;
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```

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
    cellForRowAtIndexPath:(NSIndexPath *)indexPath
{
    NSString *reuseID = [self reuseIdentifierForRow:indexPath];
    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:reuseID];

    // Configure cell
    return cell;
}
```

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
    cellForRowAtIndexPath:(NSIndexPath *)indexPath
{
    NSString *reuseID = [self reuseIdentifierForRow:indexPath];
    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:reuseID];
    // Configure cell
    return cell;
}
```

# Automatic Cell Loading



```
- (void)registerNib:(UINib *)nib  
    forCellReuseIdentifier:(NSString *)identifier
```

# Automatic Cell Loading

```
- (void)registerNib:(UINib *)nib  
    forCellReuseIdentifier:(NSString *)identifier
```

## Nib Constraints

- Nib must contain a single table view cell

# Automatic Cell Loading

```
- (void)registerNib:(UINib *)nib  
    forCellReuseIdentifier:(NSString *)identifier
```

## Nib Constraints

- Nib must contain a single table view cell
- Cell's reuse identifier must match the one specified above (or be nil)

# Automatic Cell Loading

```
- (UITableViewCell *)tableView:(UITableView *)tableView
    cellForRowAtIndexPath:(NSIndexPath *)indexPath
{
    NSString *reuseID = [self reuseIdentifierForRow:indexPath];
    UITableViewCell *cell = [tableView dequeueReusableCellWithIdentifier:reuseID];
    // Configure cell
    return cell;
}
```

# What's New

## Static Table Views

# Static Table Views



# Static Table Views



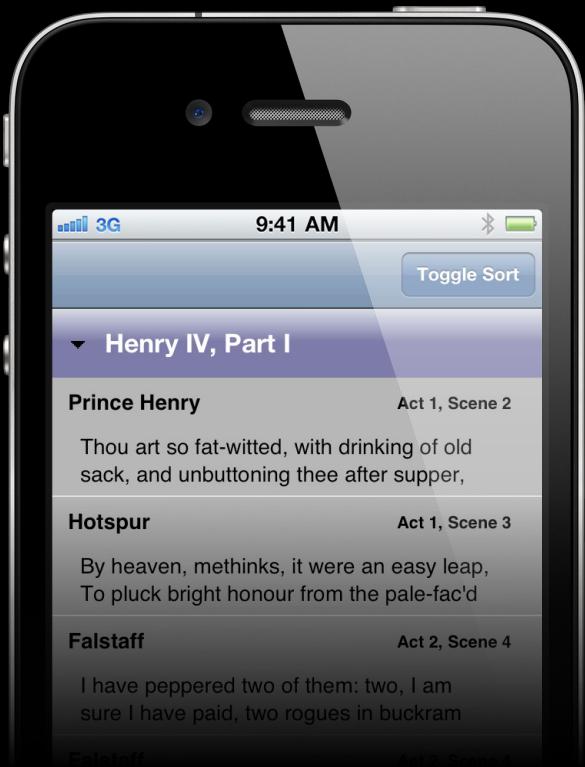
Introducing Interface Builder Storyboarding

Presidio  
Wednesday 11:30AM

# Tips & Tricks

## Action Row

# Action Row



# Demo

**Luke Hiesterman**  
iOS Frameworks Engineer

# Tips & Tricks

## Floating Views

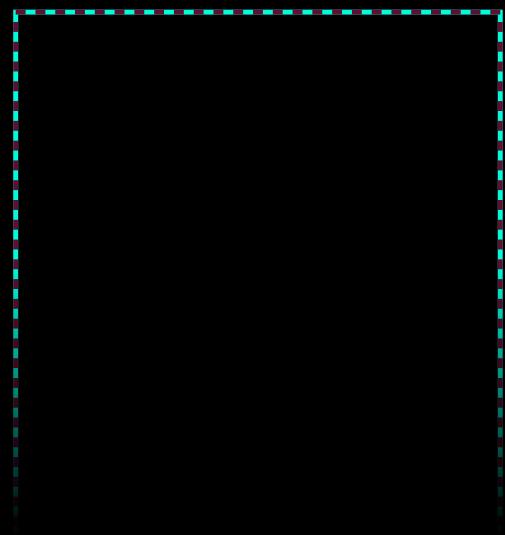
# Floating Views



# Floating Views



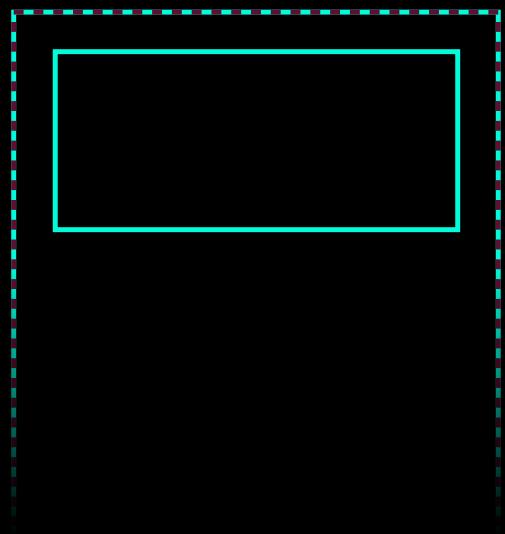
# Floating Views



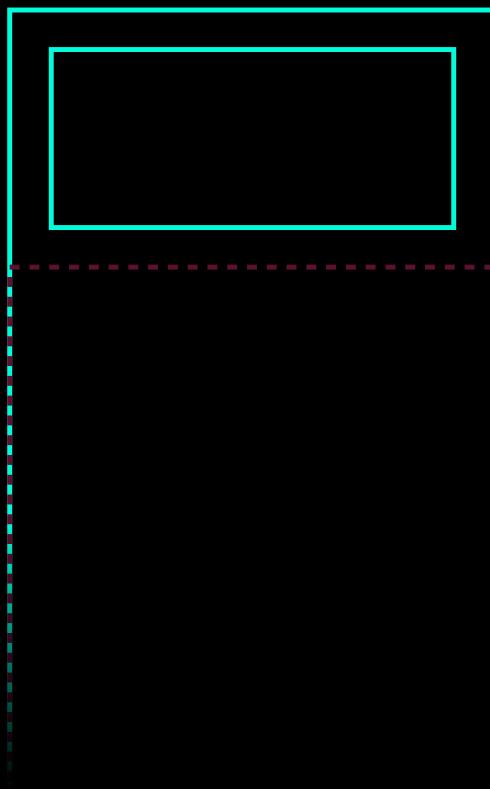
# Floating Views



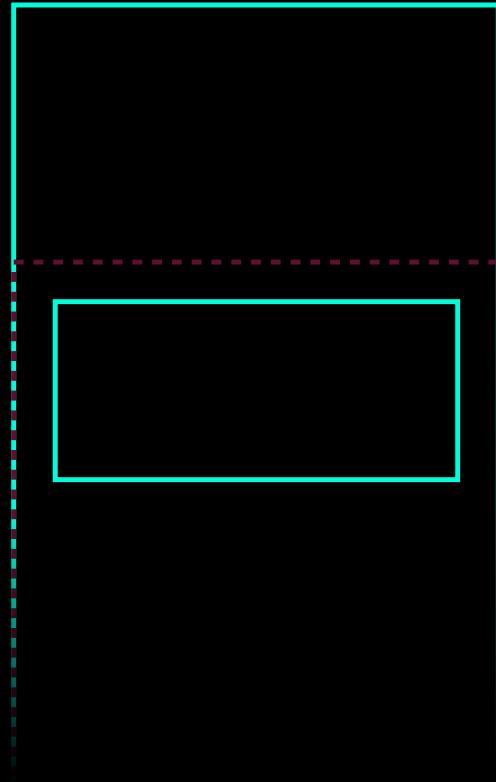
# Floating Views



# Floating Views



# Floating Views

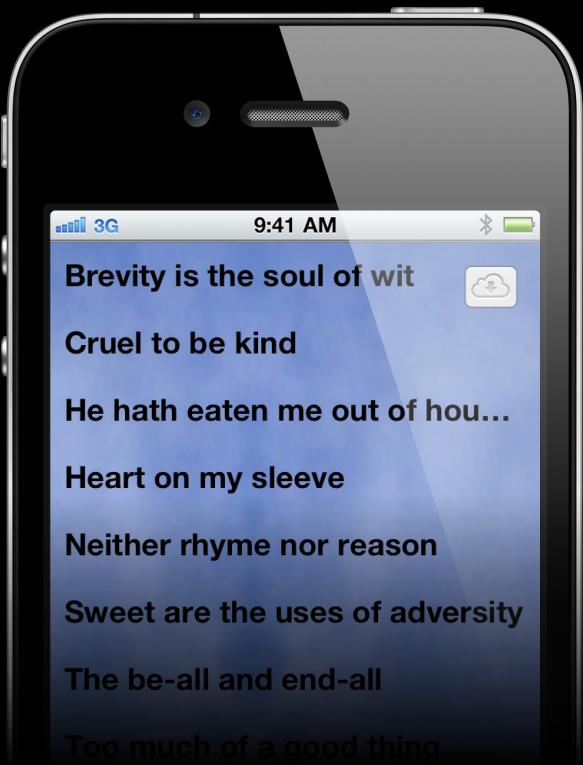


- (void)scrollViewDidScroll:(UIScrollView \*)scrollView

# Tips & Tricks

## Dynamic Background View

# Dynamic Background View



# Demo

**Luke Hiesterman**  
iOS Frameworks Engineer

# Summary

- New Features
  - Automatic Dimensions
  - Automatic Animation Style
  - New Update Methods
  - Menu Support
  - Multiple Selection
  - Automatic Cell Loading
  - Static Table Views
- Tips and Tricks

# More Information

**Bill Dudney**

Application Frameworks Evangelist

[dudney@apple.com](mailto:dudney@apple.com)

## Documentation

UITableView Class Reference

[http://developer.apple.com/library/ios/#documentation/uikit/reference/UITableView\\_Class](http://developer.apple.com/library/ios/#documentation/uikit/reference/UITableView_Class)

## Apple Developer Forums

<http://devforums.apple.com>

# Related Sessions

Simplifying Touch Event Handling with Gesture Recognizers

Pacific Heights  
Wednesday 3:15PM

Advanced Gesture Recognition

Pacific Heights  
Wednesday 4:00PM

