

Mastering Auto Layout May 17 2018 · Video Course (1 hr, 6 mins) · Intermediate Dive a little deeper into auto layout. Learn more about creating complex constraints and creating universal layouts for all devices.

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2.7/5 ★ ★ ★ ★ ★ 21 Ratings

Version

Swift 4, iOS 12, Xcode 10

iOS & Swift Tutorials User Interface



Constraints



Join us for a tour of the Auto Layout features that will allow you to create universal layouts that work great on all devices.

Constraint Inequalities 4:40

Sometimes you'll want a property to be constrained not equal to another, but greater than or equal or to it, or less than!

Constraint Priorities 3:46

Satisfy ambiguous or conflicting constraints by defining priorities for them, to match your intended design.

Create an Auto Layout-based treasure map using scroll views, combined with what

else you've learned in this course.

UILayoutGuide 3:57 Instead of using empty views to control the spacing of views, when you're not using

NSLayoutAnchor 6:27

on layout guides!

Stack Views, you can use UILayoutGuides!

Challenge: Stack View Conversion 3:48

Use your Auto Layout coding skills along with your knowledge of Stack Views in

order to simplify your layout code.

Visual Format Language 8:02 The Visual Format Language allows you to create many Auto Layout constraints,

Challenge: Visual Format Language 2:47

Create the constraints necessary to achieve a simple three-view layout using the Visual Format Language.

Conclusion 0:23

You're well on your way to mastering constraints. It's time to begin doing the same for adaptive layout!

Adaptive Layout

Introduction 1:02

Adaptive layout is about dealing with different screen sizes, but it's also a lot more than that! Let's learn how deep this water is!

Size Classes 3:42 Use size classes to create universal layouts: ones that take advantage of the

smallest iPhone to the largest iPad!

Challenge: Size Classes 3:25 Create an adaptive layout, combining your new knowledge of size classes with what

you know about constraints.

Images and Other Properties 3:36

Views and constraints aren't the only things you might want to vary by size class. Learn how to adjust fonts, images, and more.

Challenge: Add Variations 0:59 Use the techniques learned in the last video to add a layout variation to two buttons based on environment width.

Adaptive Layout Environment 7:09

Learn about the types and protocols that form the basis for adaptive layout in iOS, for greater control in code.

Adaptive Presentation 3:59 View controllers can adapt how they are presented based on the adaptive environment. Learn what the framework does for you and how to modify default

behavior.

Let's have a recap of what you've learned in this course. Soon you'll be telling your own Auto Layout tales!

Conclusion 1:44

Contributors



Fascinated by technology consistently making learning easier, Jessy enjoys

Jessy Catterwaul

software... **INSTRUCTOR**

exploring new techniques involving creative



Apple tech in collaboration with her husband, <u>Jessy</u>! She is inspired by everyone at...

Catie Catterwaul

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Catie makes things for, with, and about



Vicki is Ray's wife and business partner. She is a digital artist who creates illustrations, game art, and a lot of other art...

Victoria Wenderlich

ILLUSTRATOR

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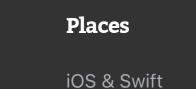
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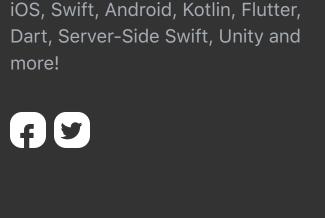
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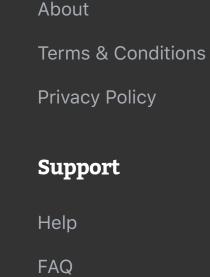


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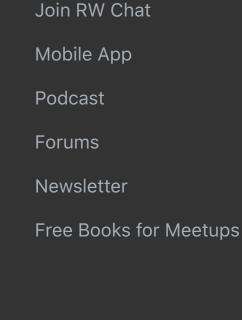




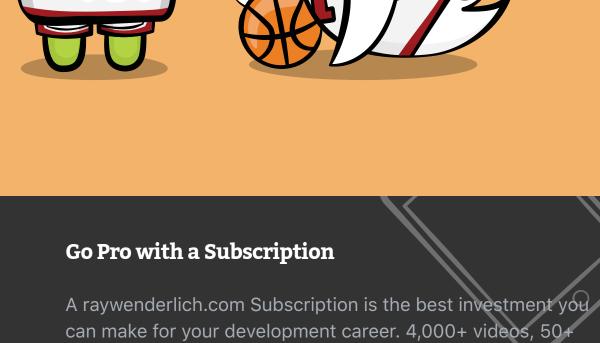


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Challenge: Constraints in Scroll Views 4:32

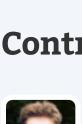
Layout anchors are used for creating constraints on views, in code. They also work

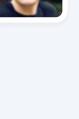
without requiring many lines of code.

















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There is an updated version of this course available, created for Swift 5.1, iOS 13, Xcode 11.2. View Latest Version

Beginning Collection

Views



Learn all about using collection views in iOS, starting with the

basics, such as setting up a collection view in Interface Builder, and then move right through to some more advanced topics, like creating and manipulating custom cells and layouts.



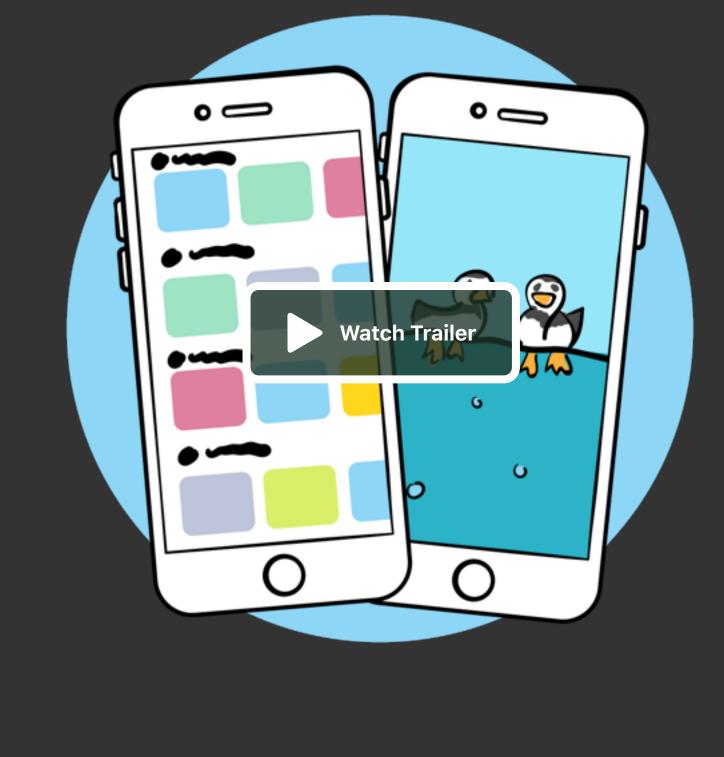
Version

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Swift 4, iOS 12, Xcode 10

Core Concepts

User Interface



The Basics



What are Collection Views? Find out how Collection Views compare to their close

relative, the Table View, in this introductory video.

iOS & Swift Tutorials

Getting Started 11:13

Start building a new Collection View focused app from scratch! Use the

UICollectionView Delegate and Data Source protocols to set up your first Collection View. **Customize Collection Views** 7:29

Start customizing the appearance and functionality of your Collection View with column numbers, cell size, spacing, and scroll direction.

Challenge: Selecting Cells 3:28

What happens when you tap on a cell? In this challenge, implement basic cell

selection using your knowledge of Table Views.

Handling Segues 8:26 Add a detail view to your app. Find out how to navigate to a new view when a cell is tapped using Segues in Interface Builder.

Challenge: Segues in Code 2:32 In this challenge, combine the two approaches you've already learned to wrap up

Inserting Cells 7:24

the cell selection functionality.

Deleting Cells 11:31

Begin the process of creating an editing mode for your Collection View to allow

Find out how to add items to a data model and update a Collection View to display

new cells. Bonus: Batch addition and pull-to-refresh controls!

users to remove multiple cells at once.

Challenge: Deleting Cells 6:07

It turns out deleting cells can be quite involved! Try your hand at implementing the

Cleaning up the UI 9:07

remaining functionality for deleting cells.

Take some time to clean up the user interface for your collection view for a more polished experience.

Conclusion 1:54 Wrap up this section by reviewing what you've learned about Collection Views, and

find out what's coming up in the Section 2.

Customization

Introduction 2:59

In this video, get some ideas about collection view customization, and find out how we cleaned up our app from Section 1.

Starter Project Review 3:20 A lot has changed in the starter project in both content and code. This video will

walk you through all the changes.

Build up a custom Collection View Cell class in an updated collection view featuring images of National Parks.

Custom Cells 6:39

Challenge: Add a Label 5:59

In this challenge you'll add a label to a custom collection view cell and populate it

with Park data.

Headers to separate parks by state.

Multiple Sections 9:42 In this video you'll learn how to add multiple sections to the app using Section

Challenge: Enhance Section Headers 8:12 Customize your section headers to display more information about each section and

better organize your collection view.

Subclassing Collection View Layout 9:57 Subclass UICollectionViewFlowLayout to get custom functionality such as animating cells that are added.

Challenge: Cell Deletion Animation 6:45

In this challenge, you'll animate the deletion of cells on your own and get a peek at view animations, while you're here.

Moving Cells 3:41

Learn about a cool property which allows you to long press on a cell in a collection

view and move it around.

Conclusion 2:45

In this conclusion video, you'll review what you learned in this section, and get some advice about where to go next.

Brian Moakley

Contributors



Brian is an instructor at Razeware who develops courses and screencasts on a

wide variety of topics of iOS development. When... **INSTRUCTOR**



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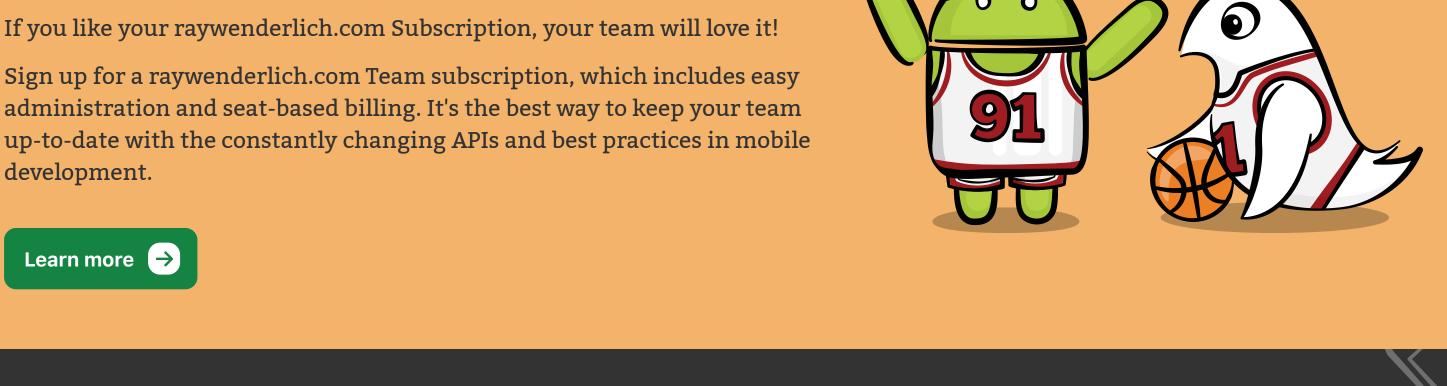
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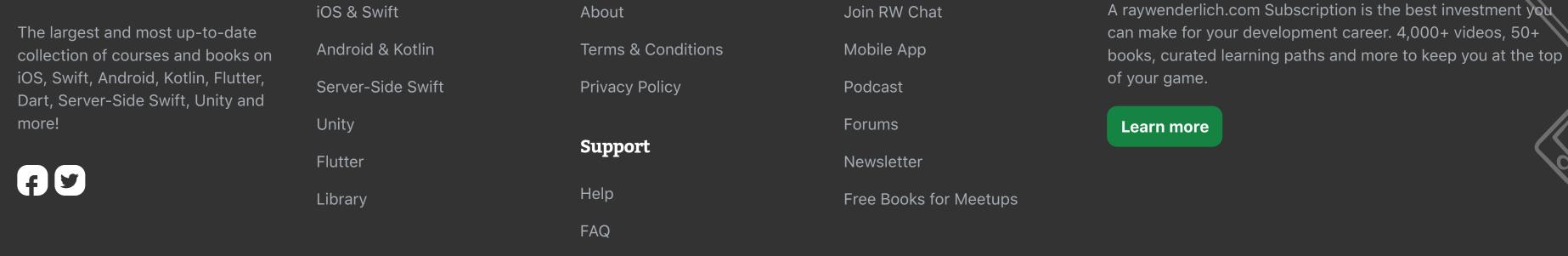
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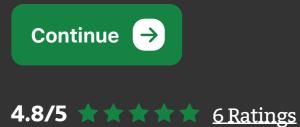
This is part of the "iOS IDEs and Tools" learning path. <u>View Path</u>



Xcode Tips and Tricks

Sep 5 2017 · Video Course (1 hr, 53 mins) · Beginner

Ensure that you're using Xcode to the max! Improve your IDE proficiency with techniques such as keyboard shortcuts, editing, and debugging.



Version

Swift 4, iOS 11, Xcode 9

Core Concepts

Software Engineering

iOS & Swift Tutorials



Introduction 4:44

This video will introduce you to the topics covered in the course and how they will improve your Xcode proficiency.



Keyboard Shortcuts 10:58

Being able to navigate your project with keyboard shortcuts is your best road to proficiency in Xcode. In this video you'll learn the most-used shortcuts.



Preferences and Editing 11:56

Learn how to use Markdown for README files and create custom file headers.



Workspaces and Frameworks 15:22

Find out how to manage project dependencies with workspaces. You'll also create a reusable framework for a checkbox control.



Schemes and Targets 14:39

Manage building your projects using schemes, configurations and targets. You'll create a lite version of the sample app in a new target.



Storyboards and Visual Debugging 11:51

Learn how to control complex storyboards with storyboard references. You'll also debug the sample app using the visual debugger.



Breakpoints 13:55

Go beyond debugging basics using breakpoints. Find out how to use exception breakpoints to your advantage.



Code Snippets 14:24

Create a library of code snippets which you can use for general coding or for giving presentations. You'll also complete a fun quiz using code snippets.



Behaviors 12:46

Set up your perfect coding environment using behaviors and tabs. Learn how to create a script to open a Terminal window at the project folder.

Conclusion 2:53

Review what you learned in the course and discover where you can learn more.

Contributors



Caroline Begbie

I'm an indie iOS developer. When I'm not developing, I'm playing around with 2D and 3D animation software, or learning Arduino...

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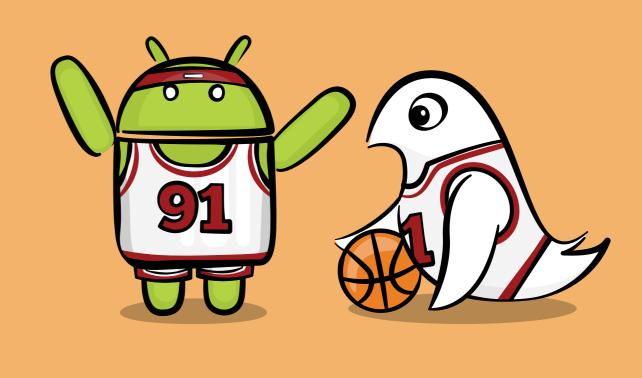
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Beginning iOS Animations

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Get started with iOS Animations! Learn about animating Auto Layout constraints, views, and custom view controller transitions.

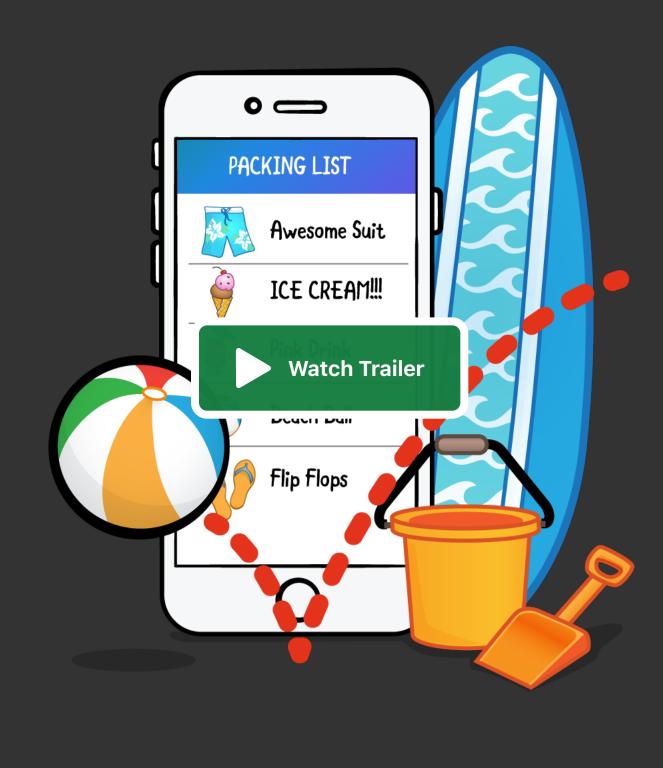
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Version

Swift 4, iOS 11, Xcode 10

Core Concepts

iOS & Swift Tutorials **Graphics & Animation**



Introduction 2:10

Animating Constraints

In this section you'll learn how to animate Auto Layout constraints in iOS. Find out what animation is and how it can help your apps in this introductory video!

Animating Constraint Constants 8:14

Animate the constant property of an Auto Layout constraint as you create your first view animation for the Packing List app.

Challenge: Animate Position with Constants 4:14

Try animating another constraint on your own, and get a sneak peek at animating

view properties directly.

Animating Dynamically Created Views 4:56 Learn how to animate the constraints of views you create dynamically and constrain entirely in code.

Challenge: Animate a View Offscreen 2:25

Animating Constraint Multipliers 7:53

In this challenge, animate constraint constants to move a view offscreen. Try using the delay parameter to start the animation after a short wait.

Learn the differences between animating constants and multipliers, then try animating a multiplier using a search and replace approach.

Challenge: Toggle Constraints 2:39

Try your hand at another way to animate constraint multipliers: toggling between

Adding Springs 5:39

ways to trigger them.

two constraints with IBOutlets.

animations and customize their effects. **Using View Transitions** 7:23

It's time to add a little fun to your animations! Learn how to make spring-driven

quickly add and remove views with style.

Challenge: Triggering View Transitions 3:36 In this challenge, have another try at using view transitions and explore the different

Learn to use view transitions; a set of predefined view animations that can help you

Conclusion 0:34

Animating View Properties

In this video you'll review what you've learned in this section, and find out what's

Introduction 1:47

next in your animation journey.

In this section you'll start animating views directly. What's the difference between animating constraints and animating view properties?

Animating View Properties 8:18

Build an animation to cross-fade between two views using three different view

properties and some new techniques.

Challenge: Create a Fade Animation 1:58 Try adding another animation using a view property. This time, use alpha to fade a

Animating Transform Properties 7:32

Learn how to scale, translate, and rotate views with the powerful, but sometimes confounding, transform property.

Challenge: Add Variety 2:16 In this challenge add variation to your last animation to slide labels to and from different directions.

single view in and out.

Concatenating Transforms 8:24 Experiment with combining changes in multiple transform properties to create

complex animations, and find out how they can go wrong.

Create a complex animations that encompasses multiple properties and multiple steps with a keyframe animation.

keyframe animation to your project.

Animating with Keyframes 8:01

Challenge: Practice Keyframes 3:03 In this challenge, solidify your keyframe animation skills by adding one more

Conclusion 0:25 Review what you've learned in this section, and prepare to take your animation skills to the next level.

View Controller Transitions

Introduction 1:08 Learn about view controller transitions and why you should consider customizing

them with unique animations in your apps.

Setting up the animator 4:35 Take a tour of the Beginning Cook app and set it all up for custom view controller transition animations.

Challenge: Plan the Presentation Animation 1:44 Now that you have several view animations under your belt, try to plan out the steps

needed to build the presentation animation. **Presentation Animation** 7:44

Follow through on your plan from the previous challenge by implementing all of the

steps to create a custom presentation animation. **Challenge: Plan the Dismiss Animation** 1:36

In this challenge, plan the steps required to take the presentation animation you've completed, and run it in reverse as a dismiss animation.

Take your plan for the dismiss animation and put it into action to create a completey customized view controller transition animation.

Dismiss Animation 6:55

Adding Polish 4:18 Wrap up your custom view controller transition with a few final steps to make the animation really shine.

Conclusion 1:37 Review what you've learned in this section and the course, and find out what more there is to learn about animating in iOS.

Jessy Catterwaul

Fascinated by technology consistently

exploring new techniques involving creative

making learning easier, Jessy enjoys

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Contributors

Christine Sweigart Christine is Razeware's administrative assistant and video editor. For many years

software...

she fostered a strong dislike of green... **EDITOR**

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team.



Catie makes things for, with, and about

husband, <u>Jessy</u>! She is inspired by everyone

Apple tech in collaboration with her

Catie Catterwaul

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Katie Collins

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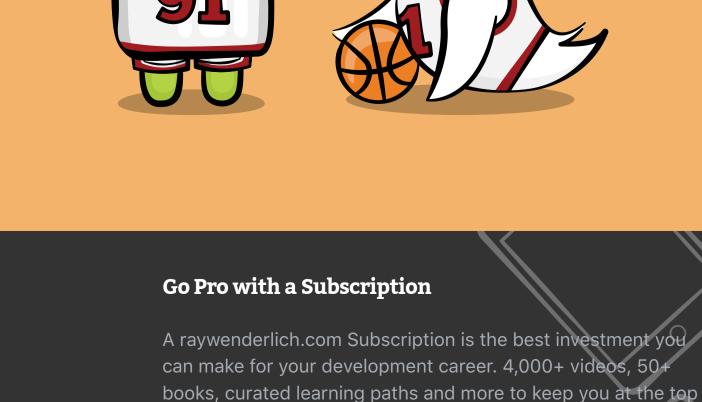
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