



AppDev iOS Education Program

Welcome the the Grinnell AppDev iOS Application Development Course!

To access the courses listed in the modules:

<http://teamtreehouse.com/>:



username: appdev@grinnell.edu

password: AppD4v4v

Additional Resources can be found at:

<https://www.google.com/> - Seriously, Google search is the best resource out there for figuring out how to do something new or trying to decipher that wierd error that's making your app crash.

<http://www.lynda.com/> - Long and thorough tutorial videos, access anywhere with Grinnell Wifi

Disclaimer: This is a tentative learning plan, that we thought was a good introduction to the world of iOS application development. Feel free to make use of any and all other resources we've accumulated:

- **codeschool.com**
- **raywenderlich.com**
- **nsscreencast.com**

For all the above, these are the credentials:

- **username:** appdev@grinnell.edu
- **password:** AppD4v4v

Module 1: Getting used to some fundamentals of C Programming and Objective-C

Objectives: Getting started with with X-Code- the ideal Integrated Development Environment (IDE) for programming in Objective-C, learn the basics of functional programming, familiarize with pointers, get the basic feel of Objective-C

Resources:

Essential:

<http://teamtreehouse.com/library/objectivec-basics>

We at Appdev write our iOS apps in Objective-C. Objective-C is an object-oriented programming language which is a superset of the C Programming language. It is mainly used in iOS Programming

<http://teamtreehouse.com/library/ios-7-sdk-highlights-and-features>

A comprehensive introduction to the iOS 7 Software Development Kit and it's features.

Supplementary: <http://www.learn-c.org/>

This will give you the chance to learn about the basic concepts in C, which are

pretty much a decent building block for starters of Objective-C programming. You could learn about variables and types, loops, pointers and all the other basic stuff you'd need to know from C as an Objective-C programmer.

Assignment 1:

An Apple A Day: Getting started on some simple iOS app development

<http://teamtreehouse.com/library/build-a-simple-iphone-app-ios7>

Complete the set of video tutorials and build your first simple and awesome iOS app. This is targeted at getting you familiar with the X-Code environment, Objective-C as well as thinking as an iOS developer

Module 2: Developing the iOS Developer in you!

Objectives: Further your skills and understanding of application development in XCode, Understand Storyboards, Using the simulator

Assignment 2:

Show us your skillz! : Create an awesome Android app to tell us about yourself.

Build a very basic "About Me" app that should contain at least:

- your picture
- your name
- One sentence description.

(feel free to get fancy with it)

It can look like something like this:



Module 3: Version control



Objectives: Learn what version control, create a github account, create your first repository, learn how to push/pull/commit

Essential Resource : <http://teamtreehouse.com/library/git-basics>

Supplemental:

<http://www.git-scm.com/book>

In-depth Git reference

<http://www.vogella.com/tutorials/versioncontrol.html>

Vogella tutorial for Git.

<http://www.wei-wang.com/ExplainGitWithD3/#>

Interactive visual explanations of how git concepts work.

Assignment:

1. Create a Github account.
2. Create a new repository to push your "Crystal Ball" app to.
3. Create a new repository to push your "About Me" app to.
4. Clone a friend's "About Me" app, change their profile picture and push to it.

NB: To successfully push to a friend's repository, they'll need to give you permission.

Module 4: Exploring applications with backend component using Parse®!

Parse

Objectives: Get familiar with building an app with a backend component with Parse.

Resource:

<http://teamtreehouse.com/library/build-a-selfdestructing-message-iphone-app>

Assignment: Build a simple app using Parse as a backend, This is a pretty open ended assignment. However, the app should perform the following in some place:

Create some new data and save it using Parse.

Read in already existing data from Parse.

Update some existing data that's already saved.

An example could be creating a simple blogging application that allows users to save blog posts onto Parse, read them, and edit their blog posts.

Module 5: Going Deeper in Objective-C

Objective: Strengthen understanding of key concepts in iOS application development, get more practical experiences to explore iOS development.

Resource:

<http://www.lynda.com/Objective-C-tutorials/Objective-C-Essential-Training>

This will be a thorough overview of concepts in iOS programming through an interactive video tutorial session as well as projects.

PS: You can have free access to lynda.com video tutorials through your Grinnell accounts. Sign up using your .edu email on the Grinnell WiFi and enjoy the video tutorials!

Assignment: Complete the mini apps in the tutorial, and push them to GitHub

We highly recommend that you get a deeper understanding of Objective-C as a language and its quirks. We recommend you complete this tutorial from beginning to end as viewing them will definitely give you some clarification for all the material you have covered so far.