Building Apps for Both iPhone & Android With Ionic 4

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iPhone and Android are usually built completely separately!

iPhone programmers would use a Mac, the XCode app builder, and the Swift programming language to build an app. Android programmers would use Windows (or Mac or Linux), the Android Studio app builder, and the Java language to build an app.

Using Ionic 4, we can build an app for **both** iPhone and Android at the same time. We will use Mac or Windows, the VSCode editor, and web programming languages (HTML, JavaScript, CSS) to build an app. *And the only part that would cost money is when you put your app in an app store.*

Install tools on your computer

1. Download and install Node/NPM from www.nodejs.org
2. Install VSCode to write the code from code.visualstudio.com/download
3. Install Ionic and Cordova at the command prompt: **npm install -g ionic cordova**

Create a new app

1. Command prompt:
    a. **cd ~/Documents**
    b. **ionic start myNewApp**
    c. **cd myNewApp**
    d. **ionic serve**
        i. This will open your browser with the blank app running. You should resize the window to phone size while you work on it.

Coding steps

1. Run VSCode and open the Documents/myNewApp folder
2. Download pokemon data
3. Add pokemon list to home page
4. Add pokemon detail page with command prompt: **ionic generate page detail**
   a. Download pokemon details, and add to page
5. Click list to go to detail, and click "back" on detail to go back to the list

Run it on your phone

1. Ionic Devapp
   a. Download Ionic Devapp from app store
   b. Command prompt:
      i. **ionic cordova prepare android**
      ii. **ionic serve --devapp**
   c. Make sure your computer and phone are on the same WiFi
2. Publish it on a website (requires setup in the Google Firebase console)
   a. Command prompt:
      i. **firebase init**
         1. Select only "Hosting" (use arrow keys, then the spacebar to select it, then the enter key to continue)
         2. The public directory is "www"
         3. Single page app is "y" (for yes)
         4. Select your firebase project and press enter
      ii. **ionic build --prod**
      iii. **firebase deploy**
   b. Load in your browser: pokeapp2019.web.app
3. Build true app on your phone
   a. Create google developer account
   b. *…a bunch of other stuff…*
   c. Connect your phone to your computer
   d. Use Android Studio to install the app on your connected phone

Q&A

What else should the app do? What other apps would you want to build?

Where to learn more

1. [The source code for this project on GitHub](#)
2. [Simon Grimm's YouTube videos](#)
3. [Fireship's YouTube videos](#)
4. [Paul Halliday's YouTube videos](#)
5. [Josh Morony's YouTube videos](#)
6. [Javebratt's website](#)
7. [Ionic docs & instructions](#)
8. [Complete Ionic video course on Udemy from Maximilian Schwarzmüller](#) (only $12 when on sale, normally $180)
9. [Ionic Utah Meetup](#) (club/training)
10. [MTech programming class](#)