

## Setting up the environment

Before we begin with developing any app, we need to make sure that we have the environment ready.

To develop with Ionic, we need NodeJS, Apache Cordova and Ionic framework.

**NOTE** When installing any binaries in windows, make sure that your environment has the path to that binary. Follow this link to see how that can be done: <http://www.java.com/en/download/help/path.xml>

For example, with the android development, you might need to run the *android* binary from the command line. Lets say you downloaded the sdk to *C:AndroidSDK*, there are two folders that you need in your path called the 'platform-tools' and 'tools'. You add 'C:AndroidSDKtools' and 'C:AndroidSDKplatform-tools' to your path as described in the article.

### Platform Specific Notes

#### Android

- Needs the android SDK
- There is **no need** to purchase any license to test the application on your device

#### Windows Phone

- Needs the windows phone sdk
- Testing on your phone requires that your phone is unlocked. If you have dreamspark, you can get this service for free. Otherwise, you have to purchase a license.

#### IOS Platform

- Needs a MAC based computer for any development.
- Needs a Apple Developer Account to download the SDK and Xcode IDE.
- You can test the application on an emulator. But the emulator is not very good at its job.
- Testing the application on the phone **requires that you purchase** a \$100/yr license.

### Installing Android SDK

**NOTE:** This section is only for the people who wish to develop for the android platform.

**NOTE:** Using the android sdk requires that you have a JDK installed. Install that before proceeding.

## Windows

- Link: <http://developer.android.com/sdk/index.html>
- Go to the section with SDK Tools only and download the *installer\_<version>.exe*
- Using the installer will set the *PATH* for you. If you feel adventurous you can download the zip file. If you do so, you HAVE to set up paths as described in the note at the start of this document.

## Linux/Mac

- Ubuntu has a nice article that should work in all Linux and possibly in a Mac (I don't have a Mac, so I can't be sure). Follow the instructions at: <https://help.ubuntu.com/community/AndroidSDK>
- Archlinux users can easily access the sdk through AUR/yaourt

## Installing NodeJs

For windows and mac, download the installer from <http://nodejs.org/download/>

## Macports - An alternative for mac

- Macports is a must have for mac users. For people used to linux distro's like ubuntu, its a package manager like apt-get.
- Go to <http://www.macports.org/install.php> and follow the instructions.

## For linux

- **Use the package manager that your distribution provides.**
  - Ubuntu: apt-get install nodejs
  - Arch: pacman -S nodejs
  - Fedora/Redhat: yum install nodejs

## Installing Cordova and ionic framework

**NOTE:** For windows, there is no need for administrative privileges. But for mac and linux, these commands must be used with superuser privileges.

- **mac/linux:** sudo npm install -g cordova ionic
- **windows:** npm install -g cordova ionic

## Getting started with Ionic

- Ionic has three default templates to make it quick for you to start developing. Follow this link to see how - <http://ionicframework.com/getting-started/>
- The page pointed by the link above tells you how to run the app on ios. The steps are similar for android.

1. *cd* to your app folder
2. *ionic platform add android*
3. *ionic build android*
4. *ionic emulate android*

## Testing the app on your browser

- *cd* to your app folder
- *ionic serve* will start a webserver and should bring up a browser showing your app.
- If you are using Google Chrome, you can download the *Ripple* extension. It will allow you to see how your app looks with different screen size.

## Next Steps:

Teaching Javascript, HTML, or CSS is beyond the scope of this tutorial. Here are some links that might be useful to you want to go beyond this tutorial. You can skip to the AngularJS tutorial if you are already well versed with the HTML/CSS/Javascript combo.

- **(Basics) If you don't know any HTML/CSS/Javascript**
  - HTML - <https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Introduction>
  - CSS - [https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/Getting\\_started](https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/Getting_started)
- **(Intermediate) If you know your HTML but aren't confident about it**
  - CSS (Introductory/Intermediate) - [https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/Getting\\_started](https://developer.mozilla.org/en-US/docs/Web/Guide/CSS/Getting_started)
  - HTML (Intermediate) - <https://developer.mozilla.org/en-US/docs/Web/Guide/HTML>
  - Javascript (Intermediate) - <https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide>
- **(Advanced) Follow the links even if you know and breathe ngular**
  - AngularJS (Intermediate) - <http://blog.revolunet.com/blog/2013/06/01/starting-with-angularjs/>

## Helpful links

Documentation for the components provided by the ionic framework - <http://ionicframework.com/docs/components/>