//IONIC FRAMEWORK//

1. Ionic is front end HTML framework built on top of AngularJS and Cordova.

2. Ionic is an HTML5 mobile app development framework targeted at building hybrid mobile apps.

Ionic as the front-end UI framework that handles all the look and feel and UI

interactions your app needs in order to be compelling. Kind of like "Bootstrap for Native," but

with support for a broad range of common native mobile components, animations, and

beautiful design.

3. Ionic Framework Features:

Following are the most important features of Ionic:

* AngularJS

Ionic is using AngularJS MVC architecture for building rich single page applications

optimized for mobile devices.

* CSS components

With native look and feel, these components offer almost all elements that mobile

application needs. Components default styling can be easily overridden to accommodate

your own design.

* JavaScript components

These components are extending CSS components with JavaScript functionalities to

cover all mobile elements that can't be done only with HTML and CSS.

* Cordova Plugins

Apache Cordova plugins offer API needed for using native device functions with

JavaScript code.

* Ionic CLI

This is NodeJS utility powered with commands for starting, building, running and

emulating Ionic applications.

* Ionic View

Very useful platform for uploading, sharing and testing your application on native

devices.

Ionic Framework Advantages:

* Ionic is used for hybrid app development. This means that you can package your applications for IOS, Android, Windows Phone and Firefox OS which can save you a lot of working time.
* Starting your app is very easy since Ionic provides useful pre-generated app setup with simple layouts.
* The apps are built in very clean and modular way, so it's very maintainable and easy to update.
* Ionic developers team have very good relationship with Google developers team and they are working together to improve the framework. The updates are coming out regularly and Ionic support group is always willing to help when needed.
* Ionic Framework Limitations
* Testing can be tricky since browser doesn't always give you right information about the phone enviroment. There is so many different devices and platforms and you usually need to cover most of them.
* It can be hard to combine different native functionalities. Lot of time you will run into plugin compatibility issues, which leads to build errors hard to debug.
* Hybrid apps tend to be slower than the native ones, but since the mobile technologies are improving fast this will not be an issue in the near future.

Why We Have to use IONIC Framework??

1. It’s easier to move across platforms:

Language makes your app easily converted from one operating system to another. If you were to choose a native language, rather than hybrid.

1. Android Studio vs IONIC:

Android Studio is an IDE. Android SDK, which is Java based, vs. Ionic Framework, which is based on Cordova and uses JavaScript.   
  
If you use the Android SDK to make an app, it will only work on Android. If you use Ionic, it will also work on iOS. Cordova also supports Windows, Mac and Linux.  
  
But it's harder to get good performance out of Cordova than native. There are other options, though:

Xamarin

NativeScript

React Native

Kivy