

Mobile Application Development

LECTURE 14

Capacitor and Cordova

- Till now, we have run our mobile app in the browser.
- Essentially, we are building a web app using Ionic and Angular.
- That's why we're previewing it in the browser all the time

Capacitor and Cordova

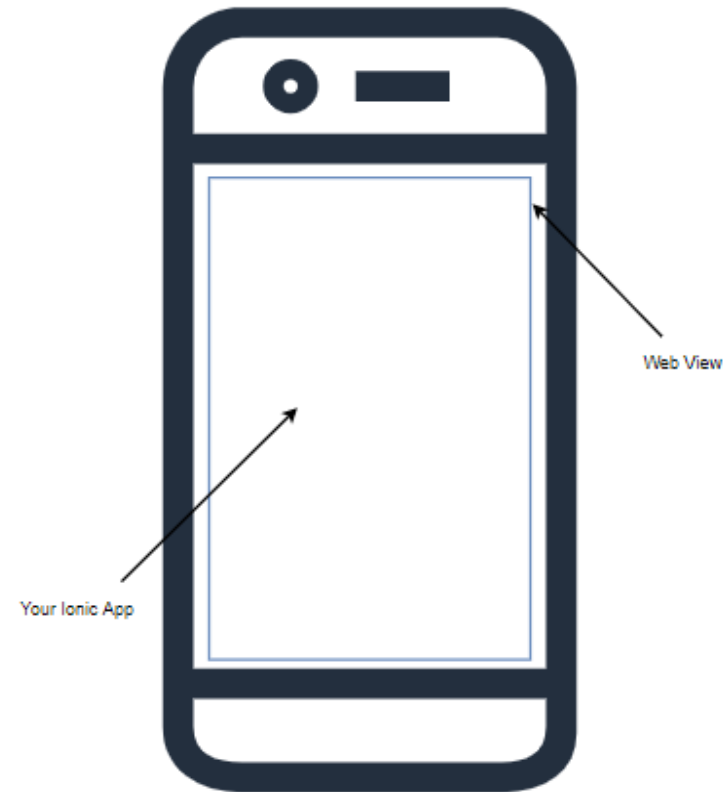
- We need to convert our Web App into a native App.
- Native app means an app will work on iOS or Android (the platforms).
- This is where Capacitor / Cordova comes in

Capacitor and Cordova

- Capacitor / Cordova convert your app into a native mobile app.
- Once you add one of Capacitor / Cordova, you will be able to run it on your platform (Android or iOS).
- Capacitor / Cordova basically create a native app which runs your Ionic app in a webView.
- Remember, we discussed how Ionic app in run inside a webView. This is what it means.

Capacitor and Cordova

- Your native Mobile App on Android wrapped in a web View.
- You won't notice the difference.



Capacitor and Cordova

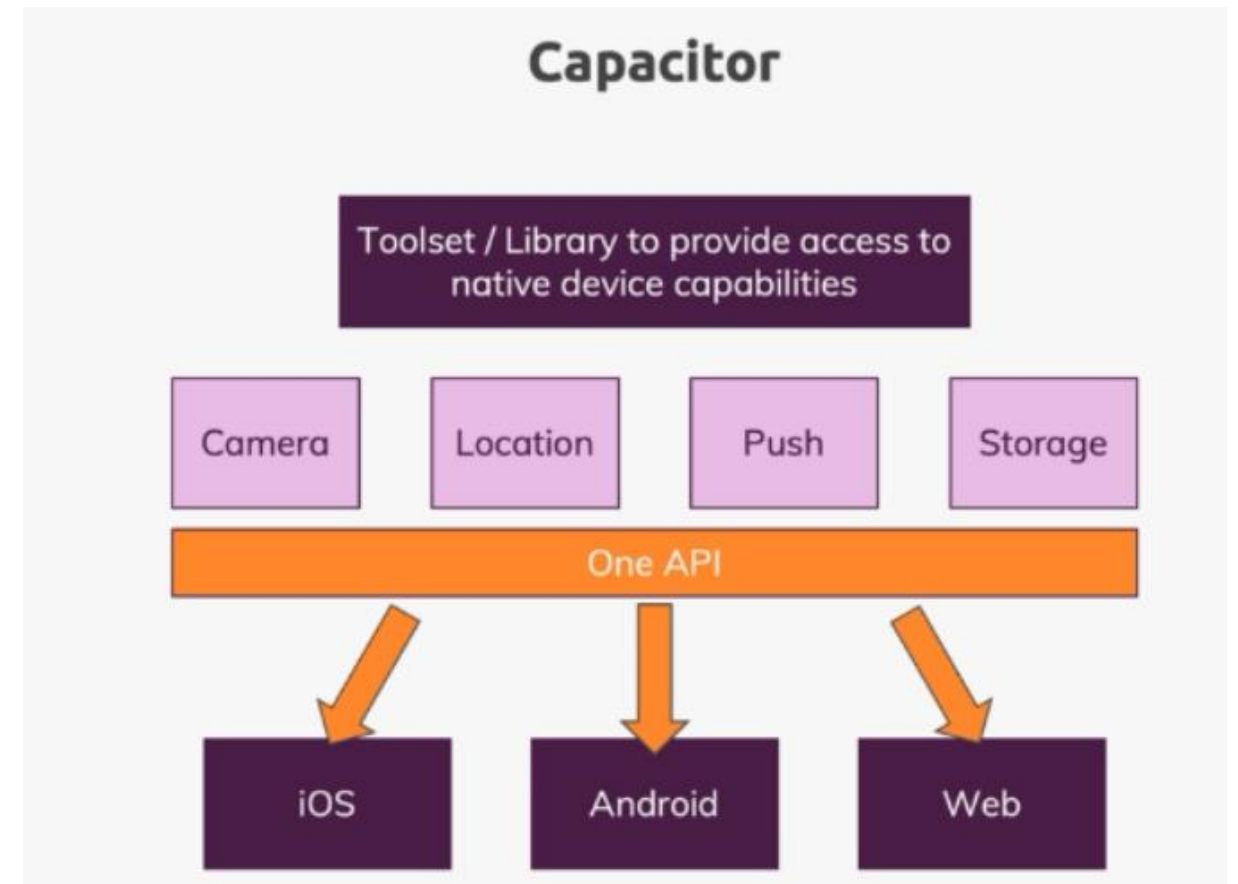
- Cordova was the only option when Ionic was introduced. You will see Ionic 2,3 projects using Apache Cordova but most Ionic 4 projects use Capacitor.
- Capacitor has been built by the Ionic team and they strongly encourage using Capacitor over Cordova.
- However, you can use cordova plugins alongside Capacitor so you have this flexibility.

Capacitor and Cordova

- There is much more to Capacitor / Cordova than just creating a native app.
- So far, we have developed our ionic app in the browser. What if we wanted to add camera functionalities or access some other mobile device specific feature?
- Again, that's where Capacitor / Cordova come in.
- Capacitor / Cordova provide us access to Native Platform APIs. (e.g Camera, Location, Storage).

Capacitor and Cordova

- We will focus mostly on Capacitor.
- It provides us an API (JavaScript functions) which we can call to do specific tasks. For e.g Take a picture etc.
- Capacitor then converts these based on the platform its building for.



*You dont have to know everything. You just have to find
the right questions*

Adding Capacitor to Ionic App

Pre-requisites

- Android Studio (<https://developer.android.com/studio>)
- Android Phone or use an Android Emulator

Adding Capacitor to Ionic App

- Follow these commands to add capacitor to an existing Ionic application

1. *ionic integrations enable capacitor*

2. *npx cap init*

3. *ionic build*

4. *npx cap add android*

5. *npx cap open android*