# Introduction to Cordova

BY CHRISTOFFER BJERREGAARD

### Who am 1?

- Christoffer Bjerregaard
- 27 years old
- Web developer @ Webitall Ap\$
- Graduated in Multimedia Design and Computer Science
- Currently studying PBA Software Development
- Used Cordova for around 1 year

# What is Cordova?

- ▶ Free and Open Source!
- ▶ Easy to use and get started
- ▶ Provides API's for your device.
- You can create your own plugins

# What is it used for?

- Making cross platform mobile applications
- Some browser / desktop applications

# Why use Cordova?

- Don't need to know native code
- ▶ Fast prototyping.
- ► Extendable with plugins

### What do I need to know or learn?

- Web technologies
  - ► HTML / 5
  - ► CSS / LESS / SASS
  - JavaScript
- Web frameworks (Javascript MV frameworks)
  - ► <a href="http://todomvc.com/">http://todomvc.com/</a>

### What do I need to use?

#### For a local build environment

- Node JS / NPM <a href="https://nodejs.org/en/">https://nodejs.org/en/</a>
- Cordova cli <a href="https://cordova.apache.org/">https://cordova.apache.org/</a>
- ► Any IDE capable of opening HTML,CSS and JS files
  - ▶ Webstorm, Visual Studio, Atom, Notepad ++
- For Android
  - Any PC
  - Java development kit, Apache Ant, Android SDK
- ▶ For IOS
  - A mac
  - Xcode + developer images

# Building

- ▶ Locally
  - ▶ Pro's
  - ▶ Cons
- ► Remotely
  - ▶ Pro's
  - ▶ Cons

# What do I need to use?

- ▶ Locally
  - Cordova CLI
- Remotely
  - ▶ Phonegap build
  - ▶ Ionic build

# Console commands for a local environment.

- cordova create [AppName]
- cordova platform add [Platform]
- cordova plugin add [Url, Packagename or Git uri]
- cordova prepare
- ► cordova build
- cordova run [Platform]

# Debugging

- Gapdebug
- ► Logcat

# My app is boring! How do I make it fun?

- Explore open API's
  - Mashape
- ▶ Build something you think is fun
  - ▶ Build your own API and use it

# My app is ugly! How do I make it look awesome?

- ▶ Use a UI framework!
  - ▶ Ionic
  - OnsenUI
  - ▶ KendoUI
- ▶ But I want to style it myself?
  - ► You can, but it's tough

# Demo!

App and Gapdebug

- ► Tools
  - http://cordova.apache.org/
  - ▶ <a href="https://build.phonegap.com">https://build.phonegap.com</a>
- Open API's
  - ► <a href="https://market.mashape.com">https://market.mashape.com</a>
  - ▶ <a href="http://labs.rejseplanen.dk/api">http://labs.rejseplanen.dk/api</a>
  - ► <a href="https://restcountries.eu/">https://restcountries.eu/</a>

- Frameworks
  - ▶ <a href="https://angularjs.org/">https://angularjs.org/</a>
  - ▶ <a href="http://ionicframework.com">http://ionicframework.com</a>
  - http://onsen.io/
  - http://ngcordova.com/
- Plugins demoed (documentation):
  - ► <a href="https://www.npmjs.com/package/cordova-plugin-camera">https://www.npmjs.com/package/cordova-plugin-camera</a>
  - ► <a href="https://www.npmjs.com/package/cordova-plugin-device-orientation">https://www.npmjs.com/package/cordova-plugin-device-orientation</a>

- Android
  - ▶ Java SDK
    - ► <a href="http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html">http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html</a>
  - ► SDK
    - ► <a href="https://developer.android.com/sdk/index.html#Other">https://developer.android.com/sdk/index.html#Other</a>
  - Ant
    - http://ant.apache.org/bindownload.cgi
- ▶ Install and add them to your PATH variables.

- Prototyping
  - https://creator.ionic.io/