# Intro to hybrid apps with lonic

Denis Sellu

@CookiesHQ

@Denis\_Sellu

#### DBM

https://www.meetup.com/Design-Build-Market/

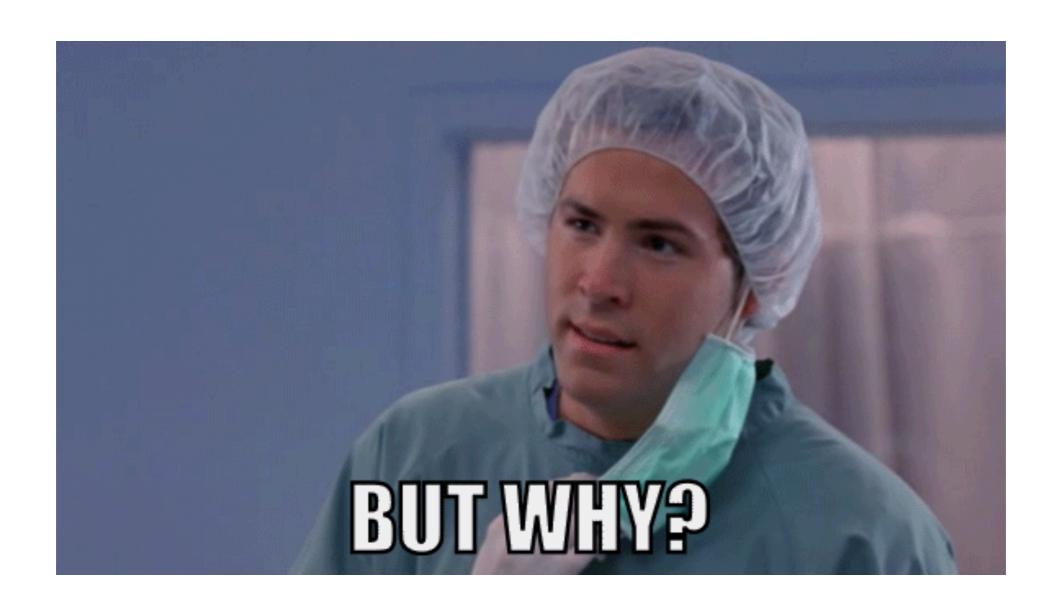


## What is a hybrid app?

Apps built with web technologies and wrapped in a native container that proved access to the native API on the platform.

#### Whats the catch?

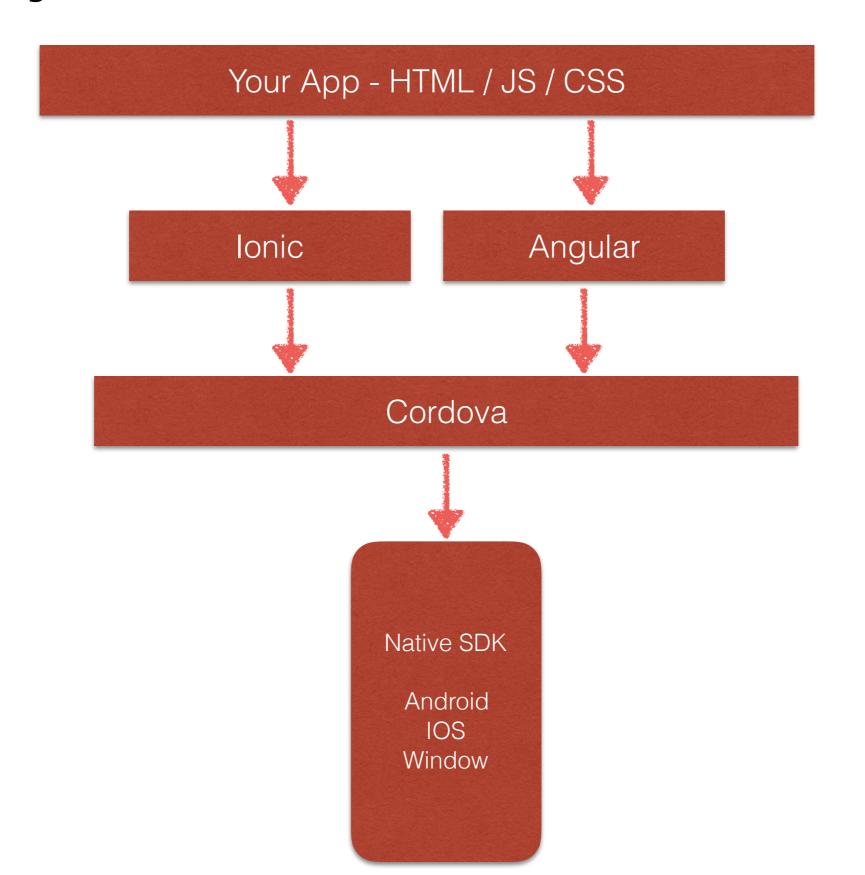
- Slower that Native apps
- Can be a lot less secure
- Graphics are processed slower and not smoothly
- Can tend to use more resources e.g. battery, storage



## Why Hybrid?

- Use familiar web technologies such as HTML, CSS, and JavaScript
- Simpler and rapid development process
- Target multiple platforms with a single code base
- Easier to maintain the code base

## Hybrid Architecture







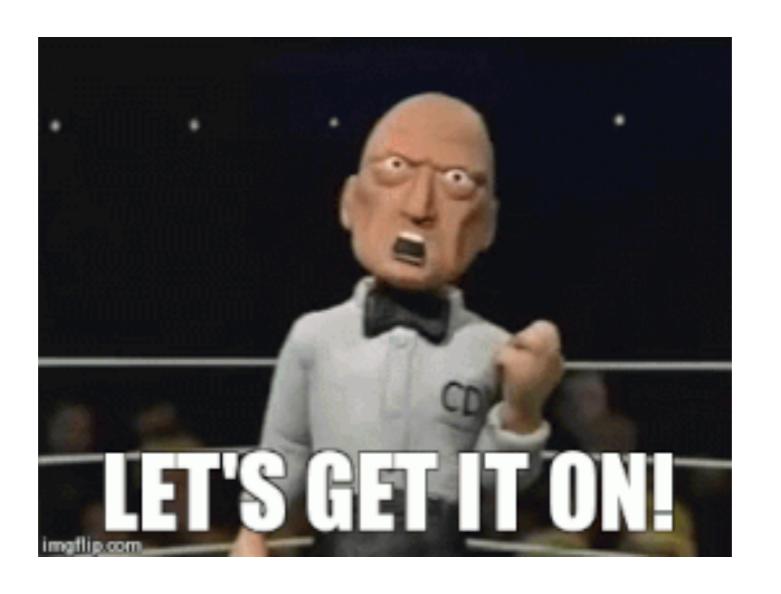
## Why Ionic?





## Why Ionic?

- Wide range of tools and services that eases development
- Concise but comprehensive documentation
- Great online community with friendly and helpful people
- Growing marketplace with paid and free themes, plug-ins and starter apps
- FREE AND OPEN SOURCE!!



## Storage Options

#### WebSQL

- Provides a way to store data in a structured database
- Data can be queried using SQL
- Available on both Android and IOS
- Data can be indexed which provides good performance
- WebSQL is however deprecated

#### SQLLite

- You can store an unlimited amount of data and use SQL syntax to query the data
- Each app will have it own database
- This only work on mobile apps and not on websites

## Native Storage

- This is a persistent storage like and SQL each app will have it's own database
- It's simple and fast storage which is available on all the platforms lonic supports
- Unlike SQLLite it isn't unlimited, it has a max size

#### Local Storage / Web Storage

- A simple non-relational database
- This is unreliable, as you could lose the data at anytime
- Has a 5 MB data limit which can be extended to 25 MB
- Can only contain strings, all other types of data has to be serialised - this can impact performance.
- Available for web sites

#### IndexedDB

- It's uses no-SQL as a collections of objects-stores
- It's a lot more flexible
- Versioning of data
- Doesn't fully work on windows.
- Ability to index data makes it better performant that other options

#### Resources

https://www.cookieshq.co.uk/posts/native-apps-vs-mobile-apps-how-to-choose

https://market.ionic.io/

https://forum.ionicframework.com/

http://ionicframework.com/getting-started

https://github.com/candelibas/awesome-ionic

### Questions?