

RETHINKING CROSS PLATFORM DEVELOPMENT

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IDEAS

History lesson

Current landscape

Capacitor

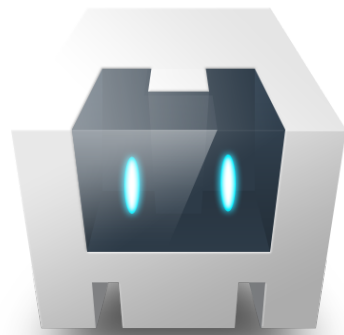
NATIVE SDKS

Original iPhone SDK released 2008

Android SDK released 2009

Roughly 10 years of Native tooling

Day One of Native tools...
there have been hackers



APACHE

CORDOVA™

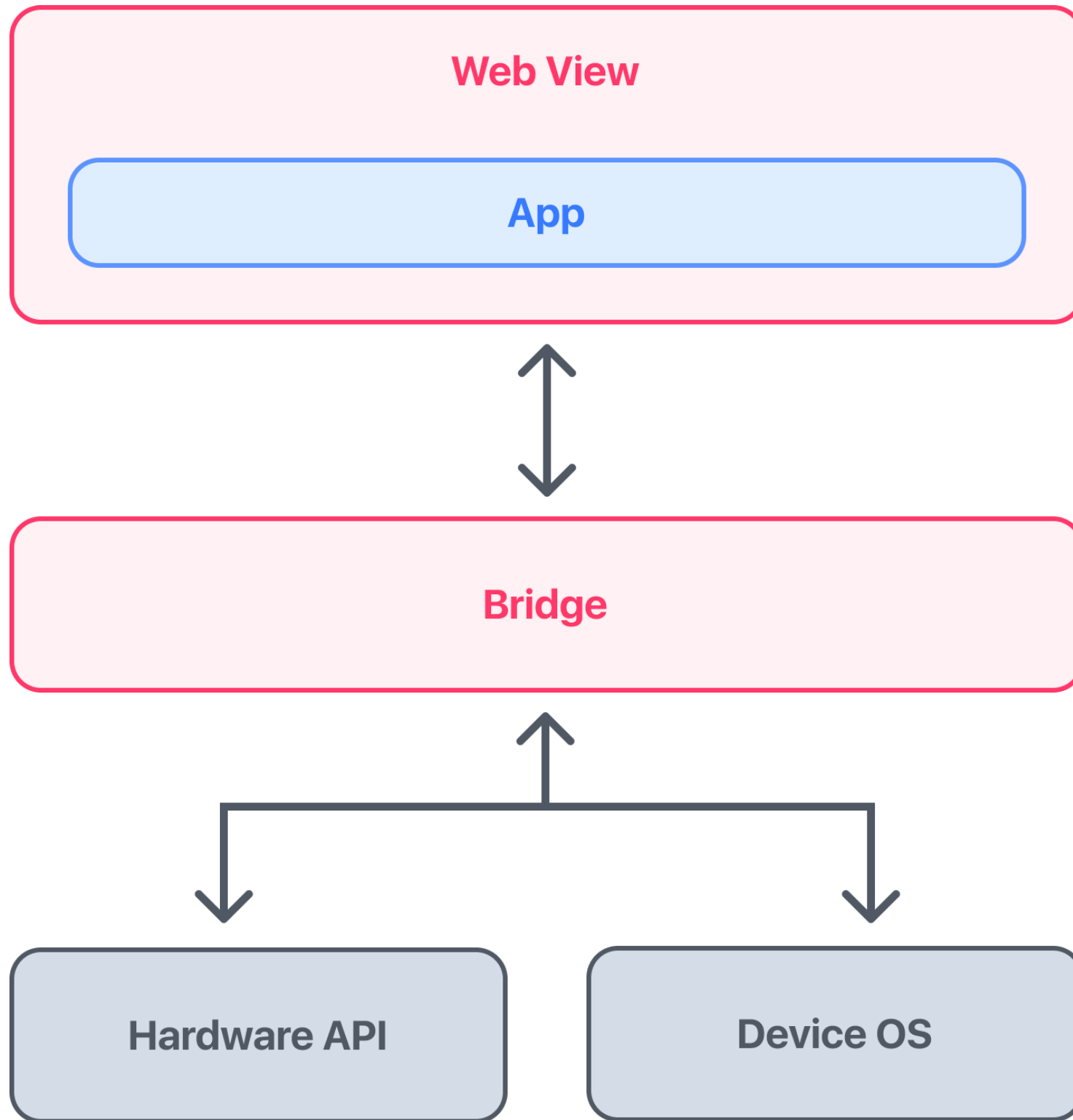
Write once, run anywhere

Probably the first?

Bridge between native and a browser

Polyfill for browser/webviews

Goal: Ceases to exist!



```
document.addEventListener('deviceready',function(){  
    // Call your native code for startup  
  
})
```


TIMES WERE GOOD!

iOS, Android, Windows, Electron, MacOS

Huge Community of Plugins

Some edge cases 🙄

SOME DOWNSIDES...

Custom tooling for everything

Volatile Native Projects

Overall Project health

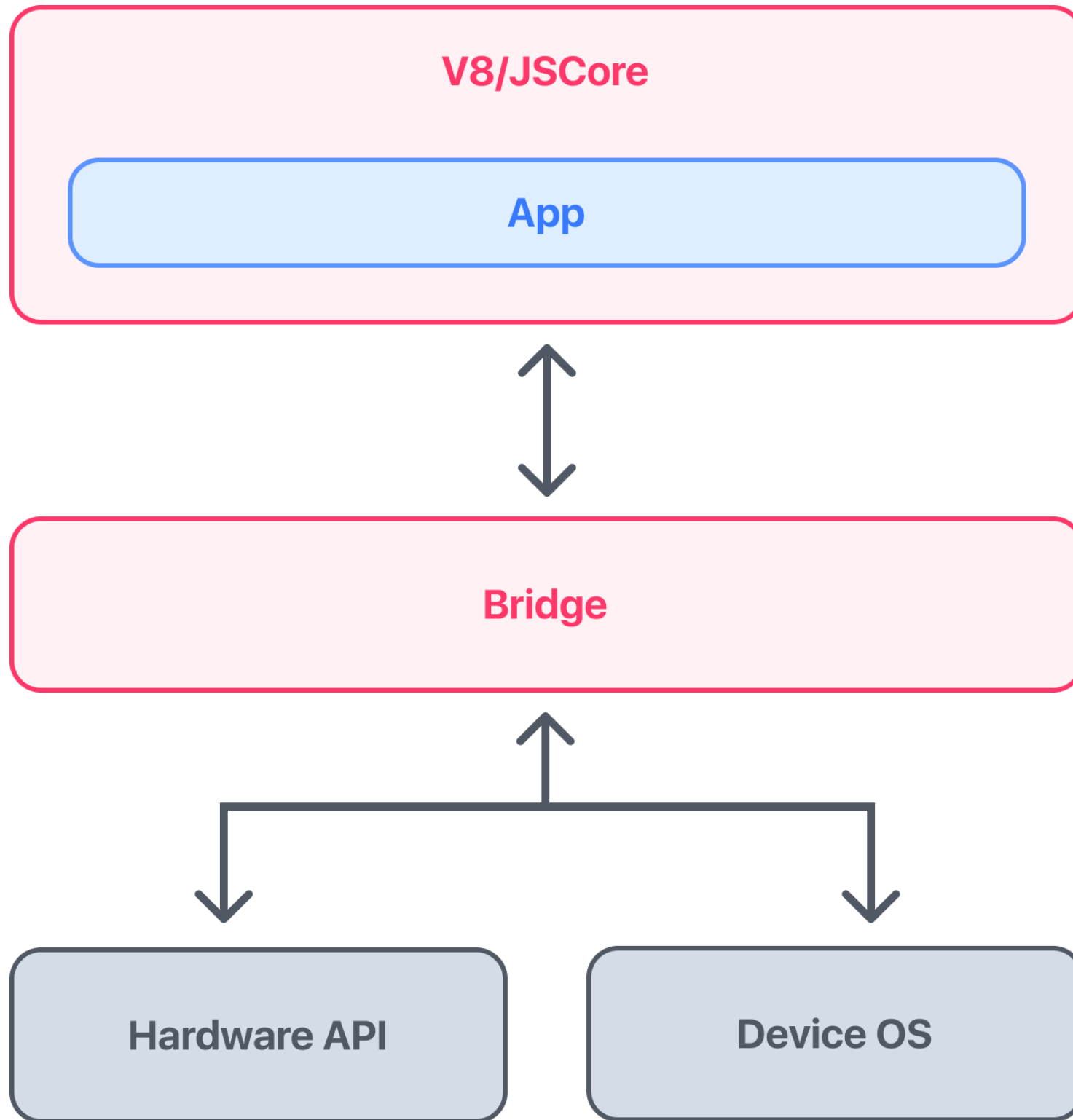
REACT NATIVE AND SIMILAR

Learn once, write anywhere

Promise of "truly native" App

Abstractions for native controls

All UI is generated at run time



```
import React, { Component } from 'react';
import { Text, View } from 'react-native';

// https://docs.expo.io/versions/latest/sdk/camera/
import { Camera } from 'expo-camera';

class HelloWorld extends Component {
  render() {
    return (
      <View style={{ flex: 1 }}>
        <Camera
          style={{ flex: 1 }}
          type={Camera.Constants.Type.back}>
        </Camera>
      </View>
    );
  }
}
```

DOWNSIDERS

Corporate driven development

Smaller Community

Varying quality of plugins

A lot of native knowledge is needed

Not as cross platform as advertised



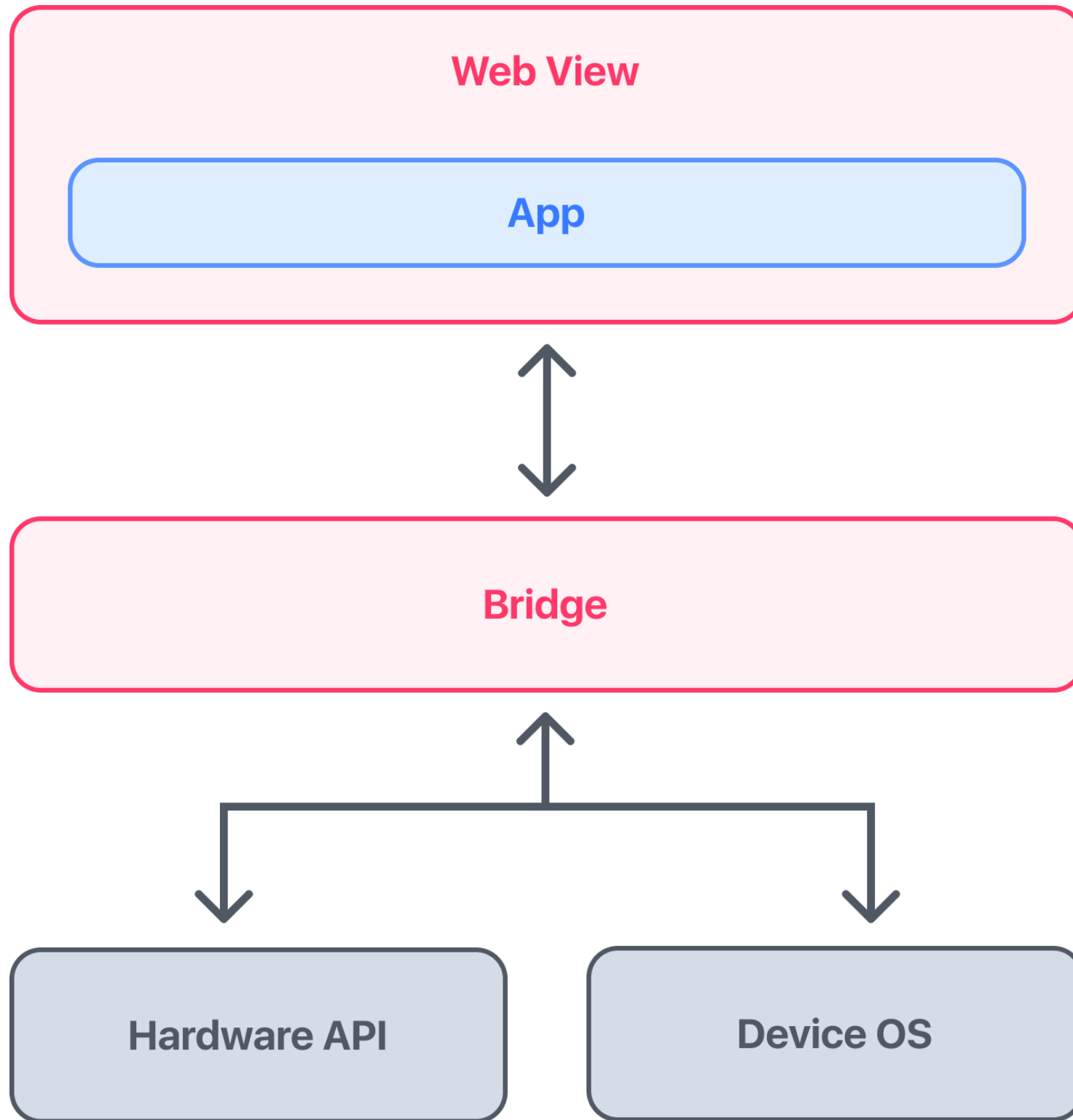
capacitor

WHAT IS CAP?

Best of both worlds

Web centric on one end

Native tooling on the other



KEEP IN MIND

BYOC: Bring your own Components

API is not 1:1 to standard Web APIs

Runtime/bridge is loads instantly

"AGGRESSIVE VERSION SUPPORT"

Android: API 21(5.0) and up

iOS: Last two versions (12 and 13)

USAGE

AKA: Demo Time

PWA SUPPORT

Supplied via Web Components

Custom UI/Controls for Web

Same API, web UI stays on the web

Optional, so install as needed

PLATFORMS

iOS, Android, Web, Electron

EXISTING ANGULAR PROJECT?

```
ng add @capacitor/angular
```

PARTING THOUGHTS

Cross Platform is the code you don't have to
write

Capacitor has solved a lot of problems for
people so far

Evaluate as with your team and build some
POC

THANKS

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