

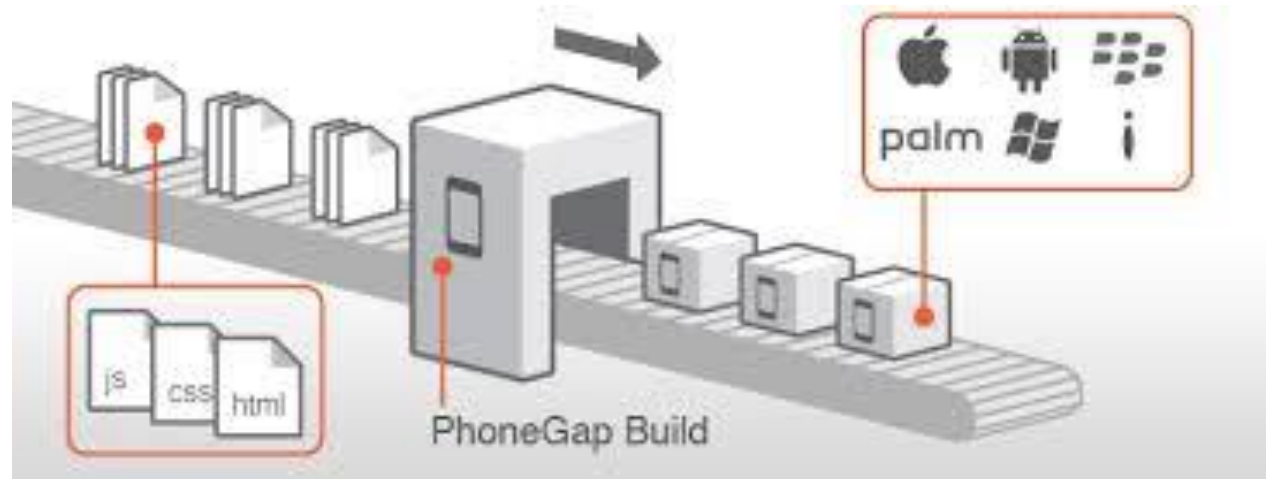
An X-Platform Solution: PhoneGap

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Agenda

- ▶ Background
- ▶ PhoneGap: What & How
- ▶ Pros & Cons
- ▶ Another Solutions
- ▶ Q&A



More and More Platforms



Mobile



Desktop



Web & Flash

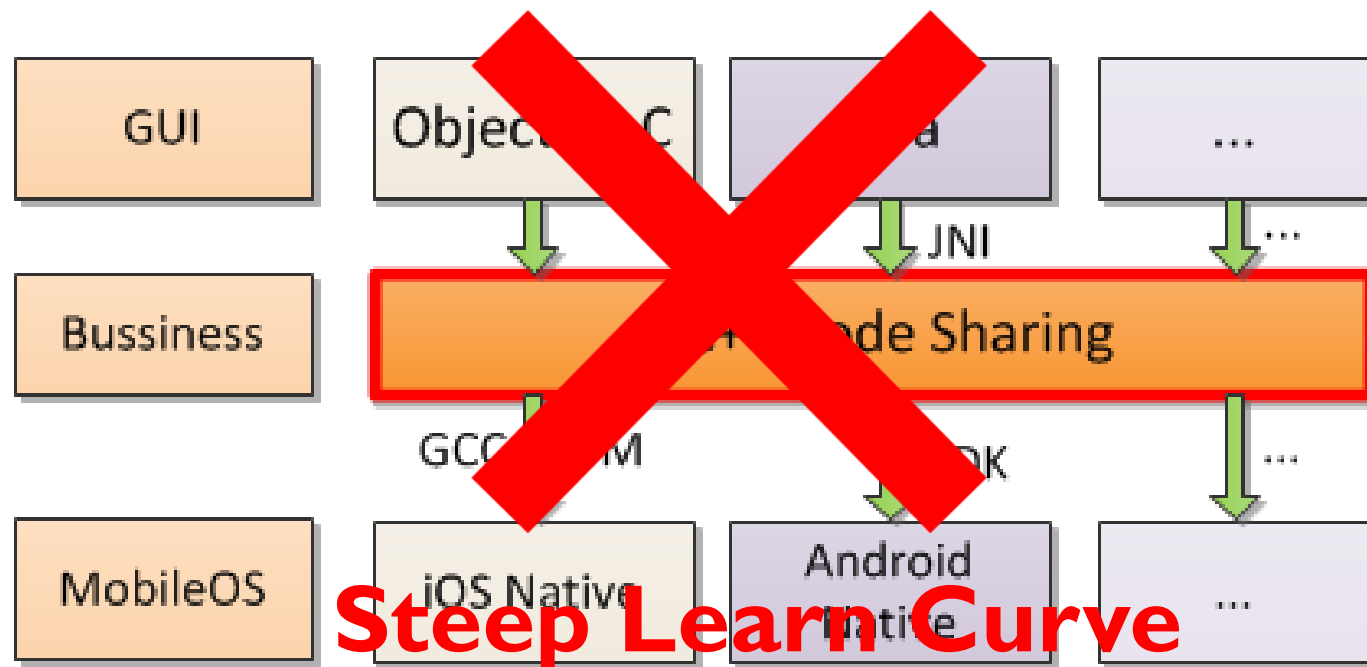
Challenge





Traditional Solution

► #1: Based on C/C++



**Steep Learn Curve
& Heavy Work**

Traditional Solution



► #2: Based on Web Page



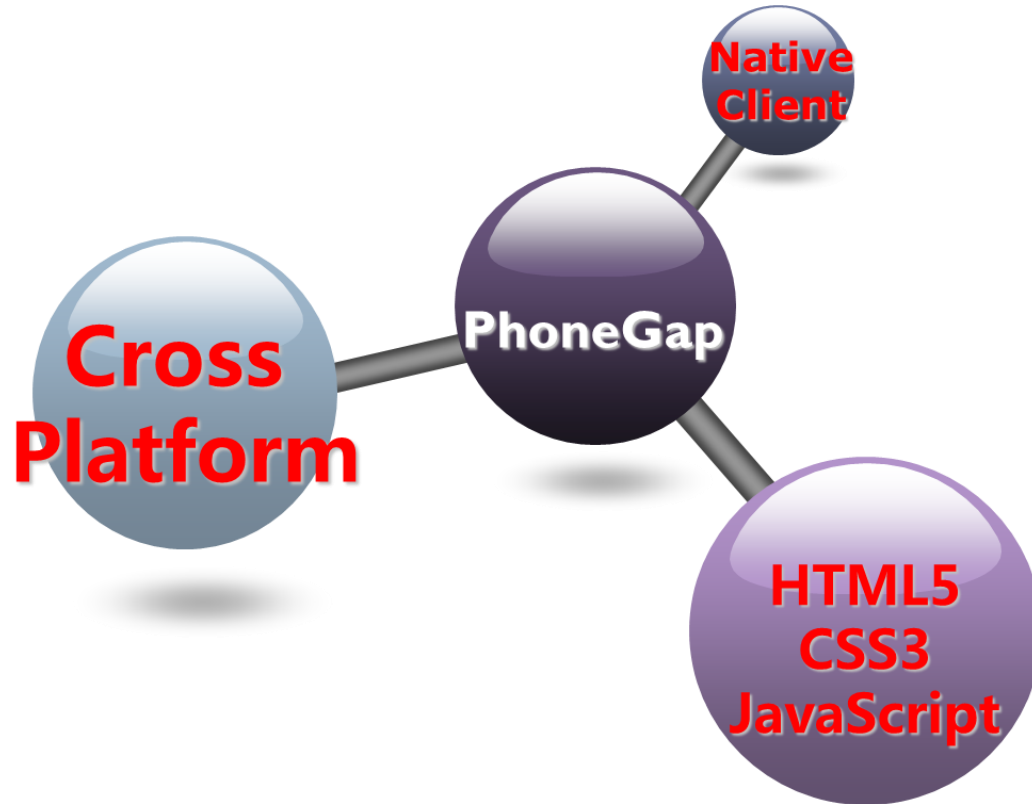
Not “mobile” style



An Great Idea



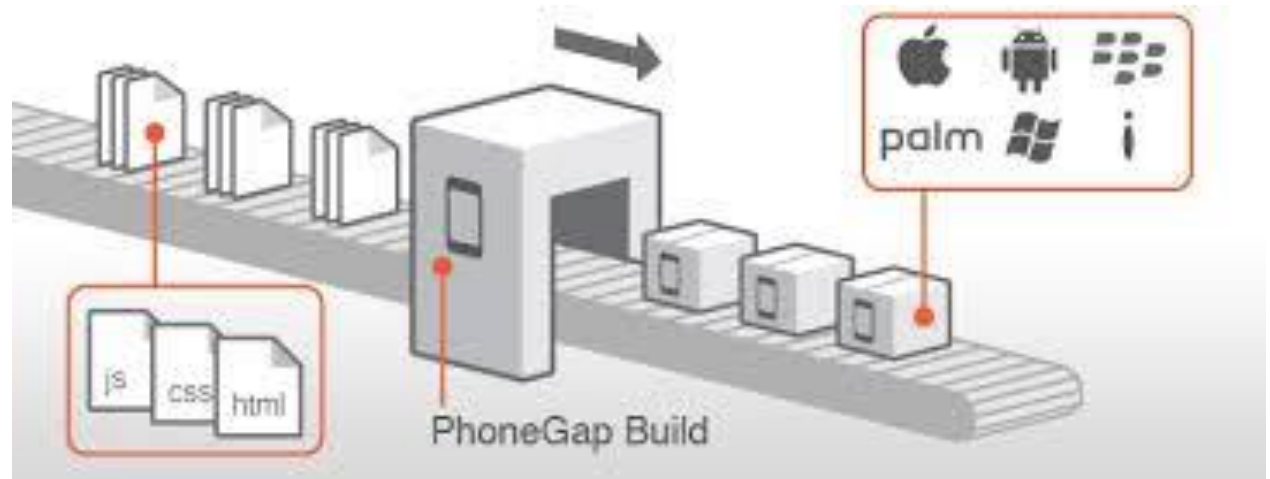
PhoneGap Can Help!!!





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PhoneGap History



2008 SF

- Keyword:

- Nitobi  nitobi
built for people

2011.7.29

- Keyword: 1.0

2011.10.4

- Keyword:

- Adobe  Adobe

2011.10.15

- Keyword:

Apache  Apache

2011.11.28

- Keyword:

Cordova 

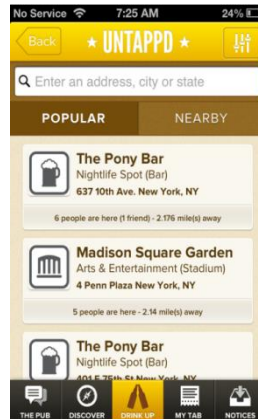
2012.10

- Keyword:

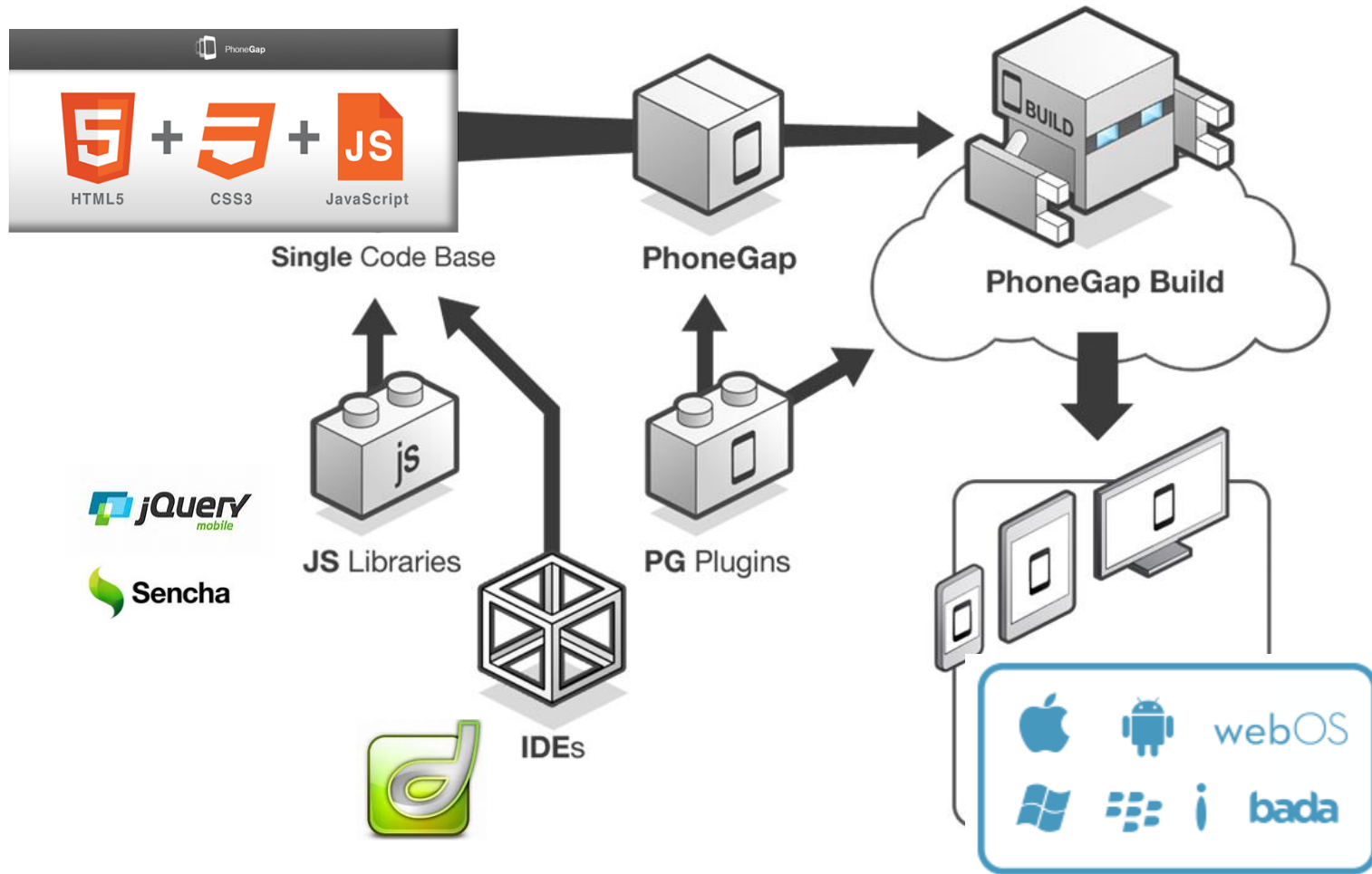
Graduate 

PhoneGap

Some Apps Using PhoneGap



Development



Development



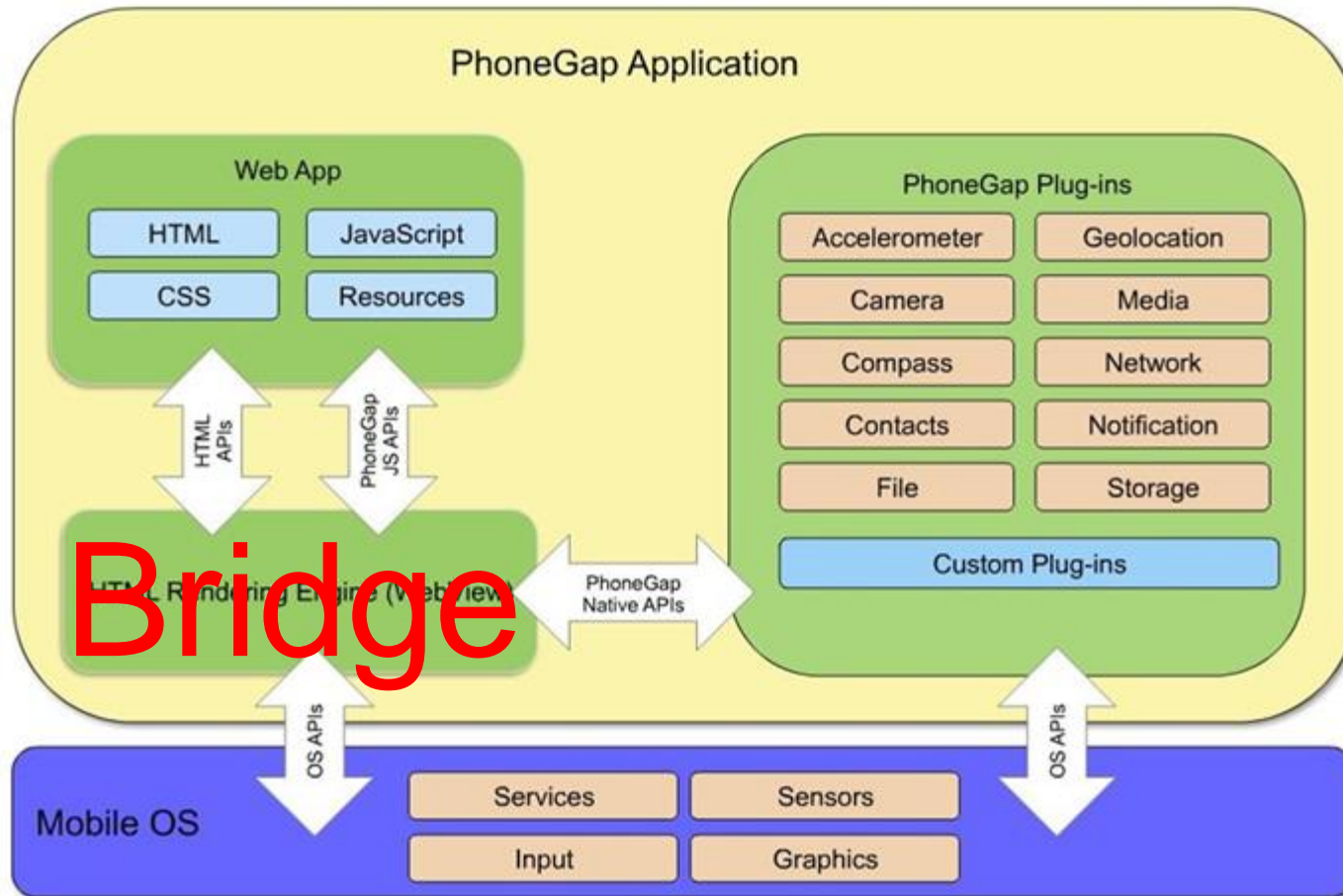
The screenshot displays the Eclipse IDE with a JavaScript file named `main.js` open. The code implements a PhoneGap application with the following functions:

- `updateAcceleration(a)`: Updates the innerHTML of elements with IDs 'x', 'y', and 'z' with rounded acceleration values.
- `toggleAccel()`: Toggles the accelerometer watch. If it's not null, it clears the watch and updates acceleration. If it's null, it sets up a new watch with a frequency of 1000 and an alert on failure.
- `preventBehavior(e)`: Prevents the default event behavior.
- `dump_pic(data)`: Logs data to the console and sets the style of a viewport element.
- `fail(msg)`: Displays an alert message.
- `show_pic()`: Uses the camera to get a picture and displays it.

On the right, a preview of the mobile application is shown. The app has a yellow header with the title "PhoneGap with JQuery Mobile". The main content area includes:

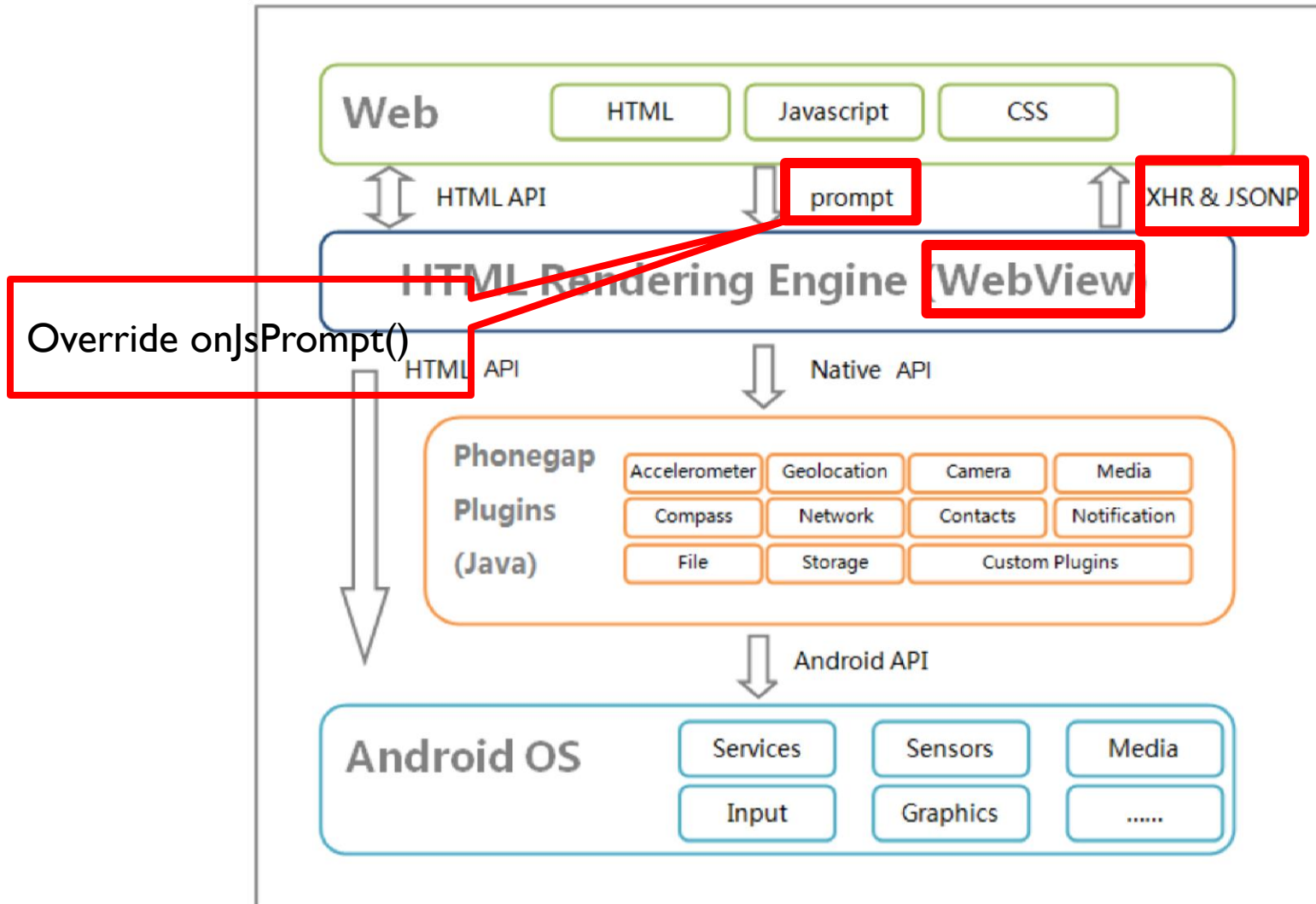
- A "System Info" section showing platform details: Android 2.3.3, UUID 200142d51b4dff38, Name: passion, Width: 320, Height: 508, Color Depth: 32.
- Buttons for "Toggle Accelerometer" and "Toggle Location".
- Buttons for "Call 411" and "Beep".

PhoneGap Architecture

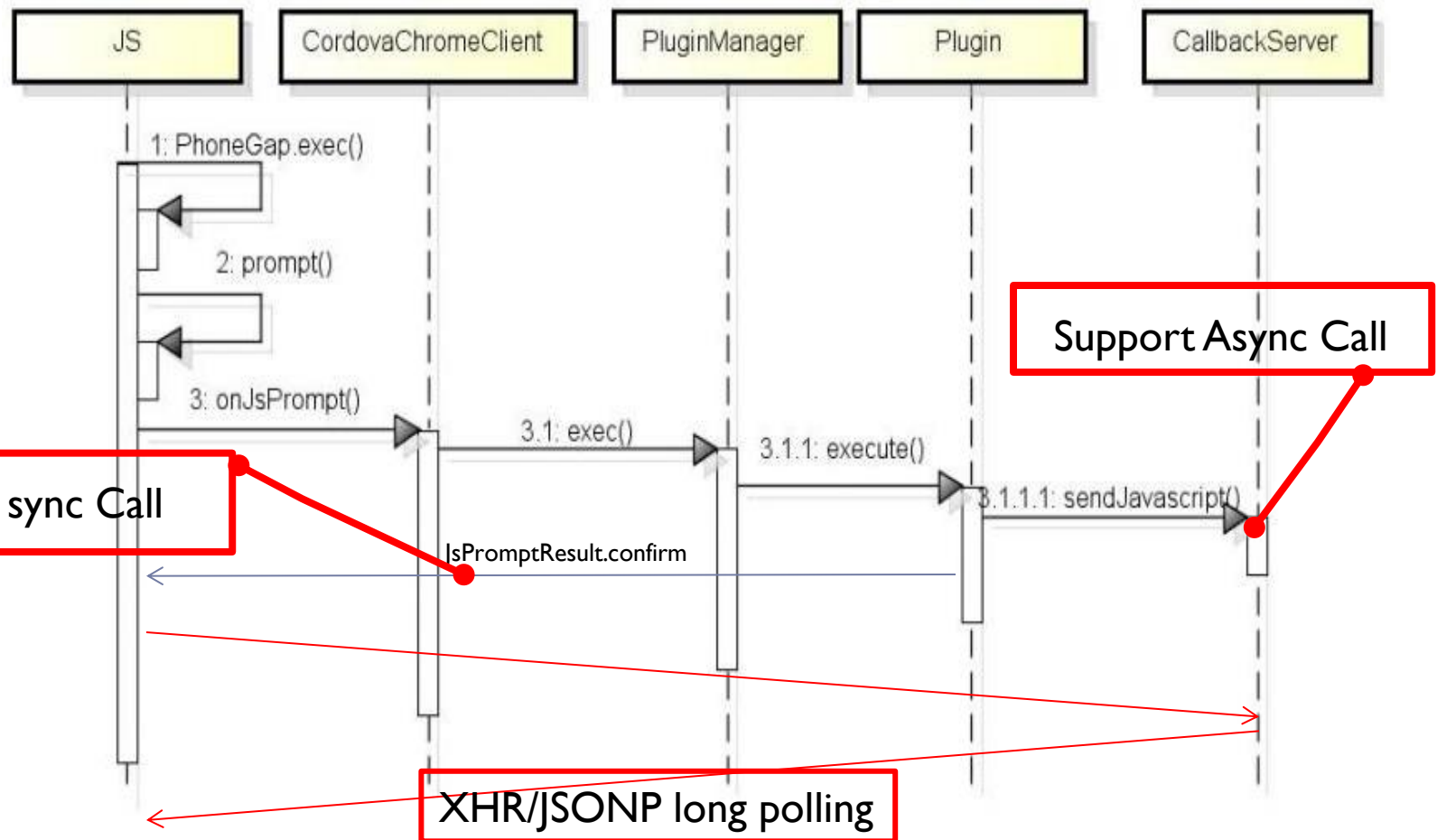




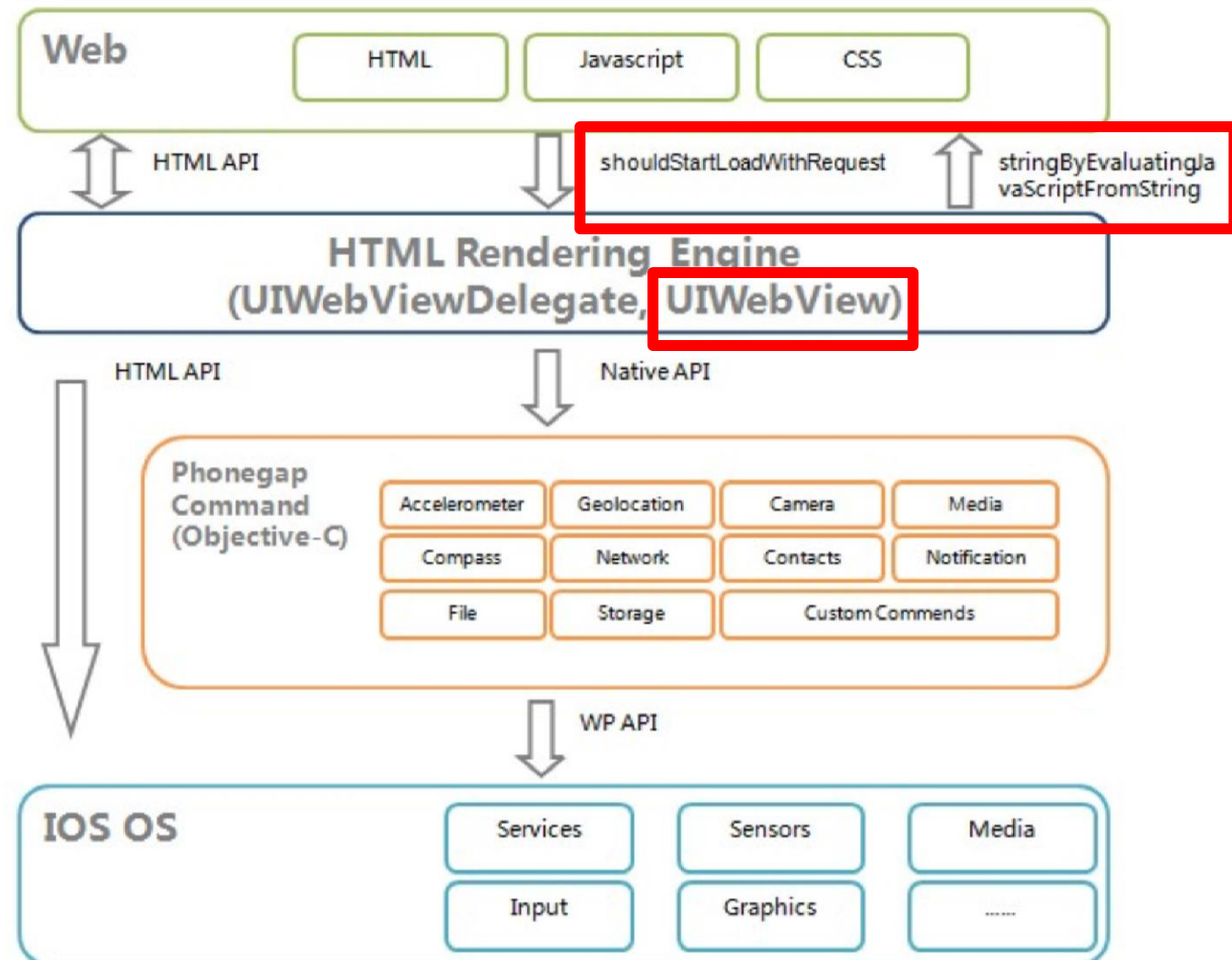
Under the Hood for Android



Invoke Native Plugin using Prompt()



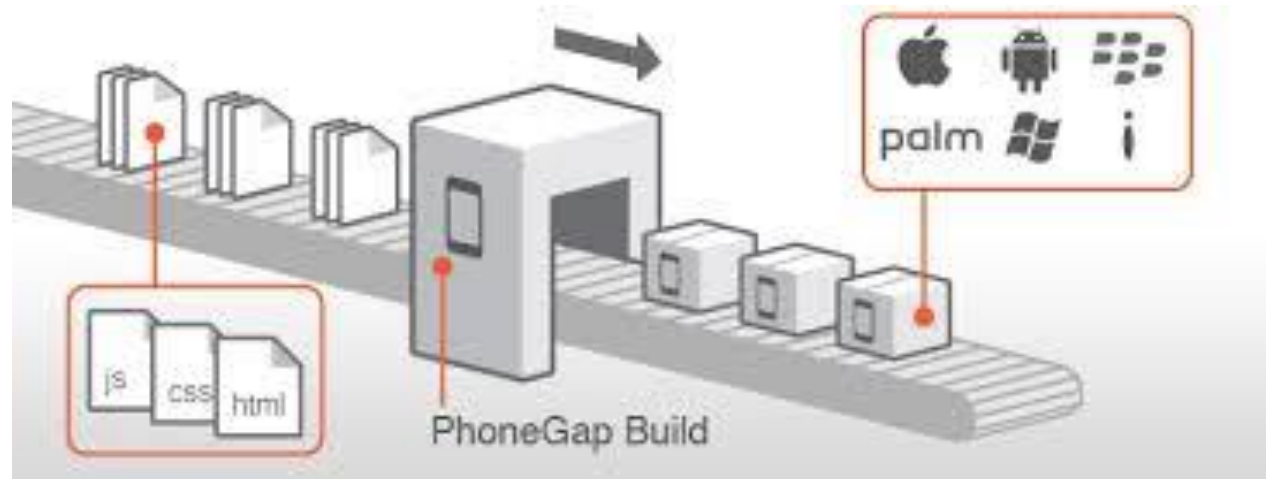
Under the Hood for iOS





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Pros and Cons



X-Platform

- Support x-platform with single codebase
- Use existing skills, improve efficiency
- Write once & run everywhere



Capability

- Cross domain access
- Access native platform API/hardware
- Free of charge



Extension

- Mobile style App: Run out of browser
- Easy to add extension
- Easy to deploy & update the App

Pros and Cons



3D Graphic

- Not support high end 3D graphic



Performance

- Occupy more size of memory
- Code might not run as fast



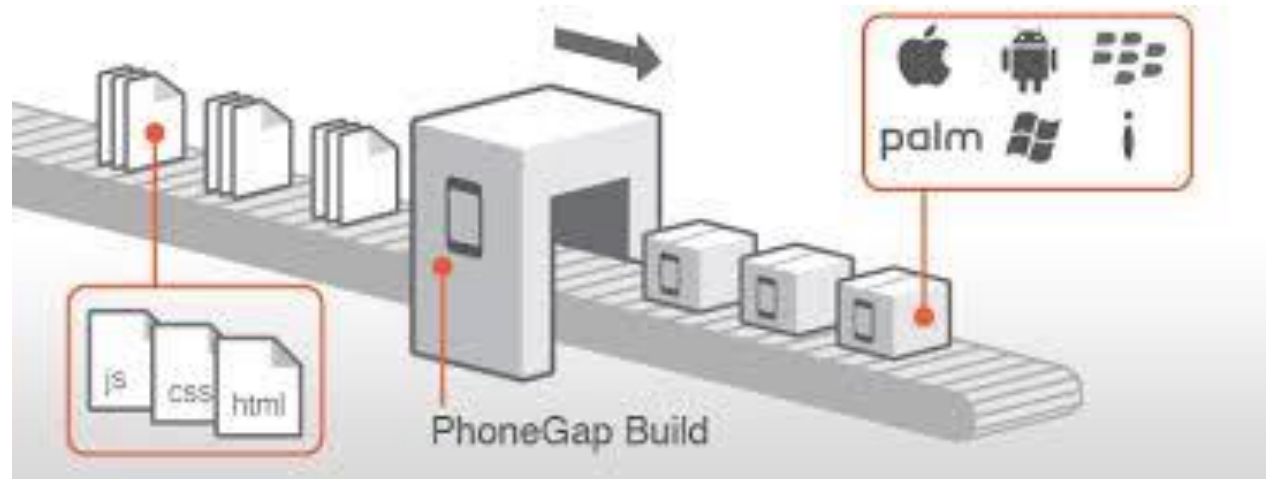
Notification

- Don't support notification

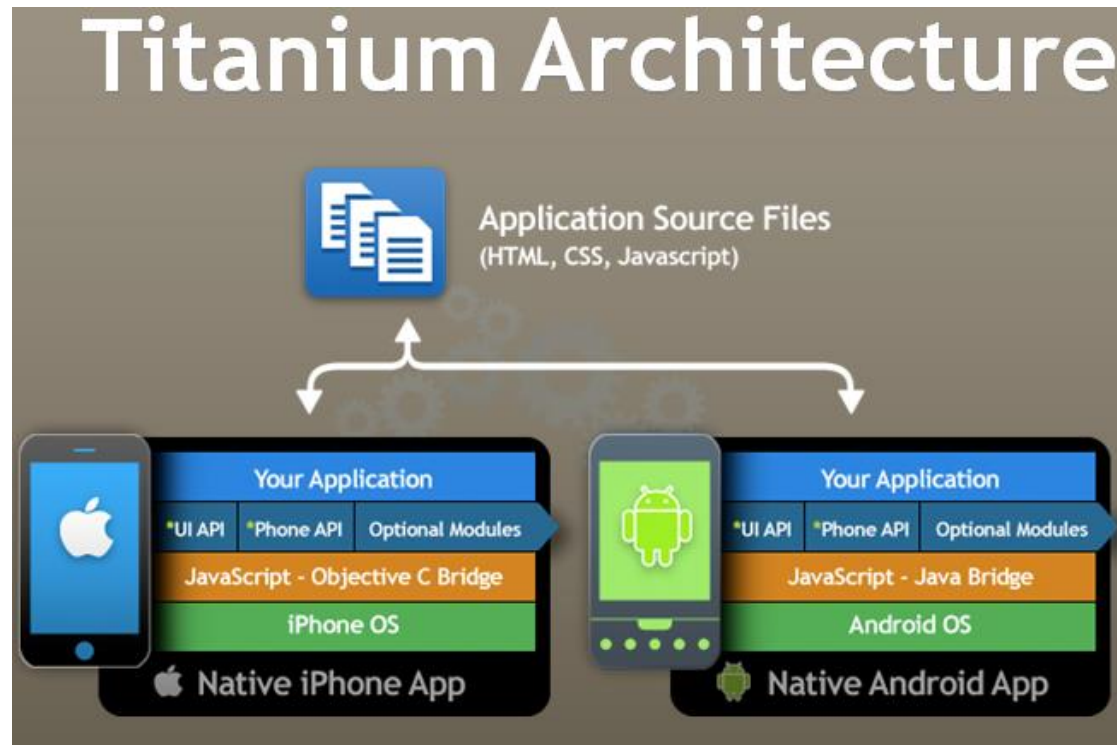


Agenda

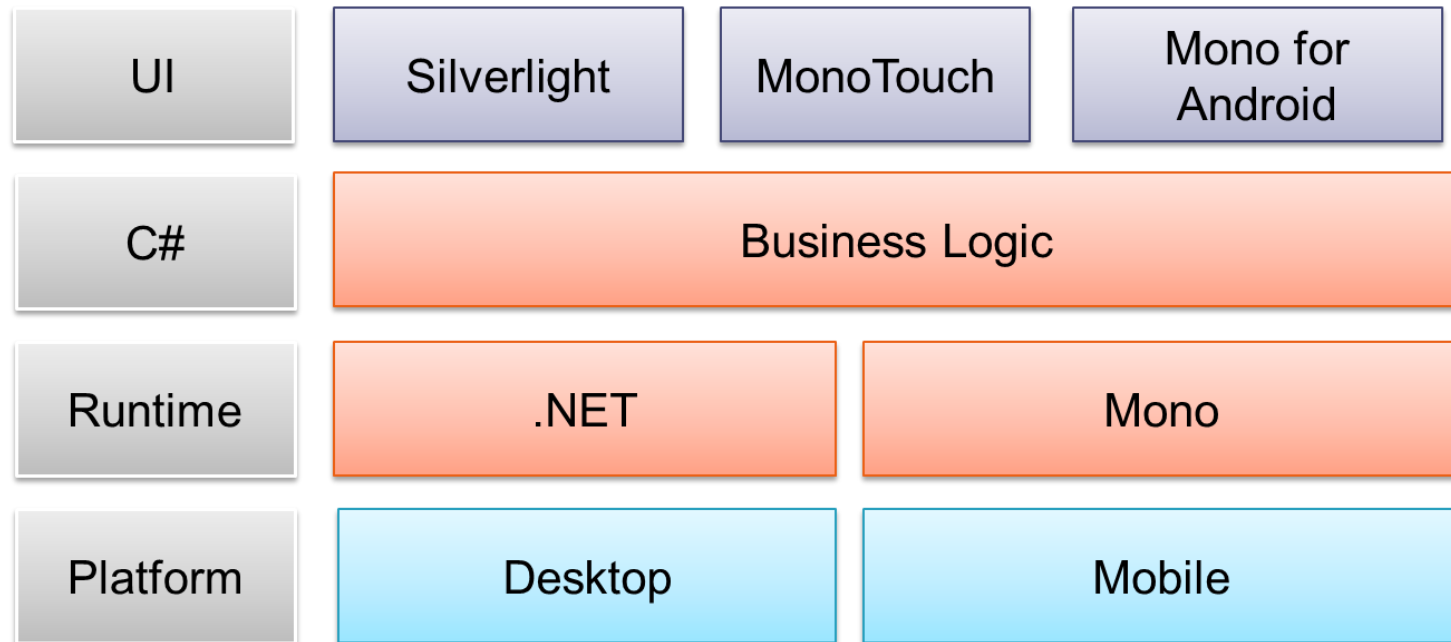
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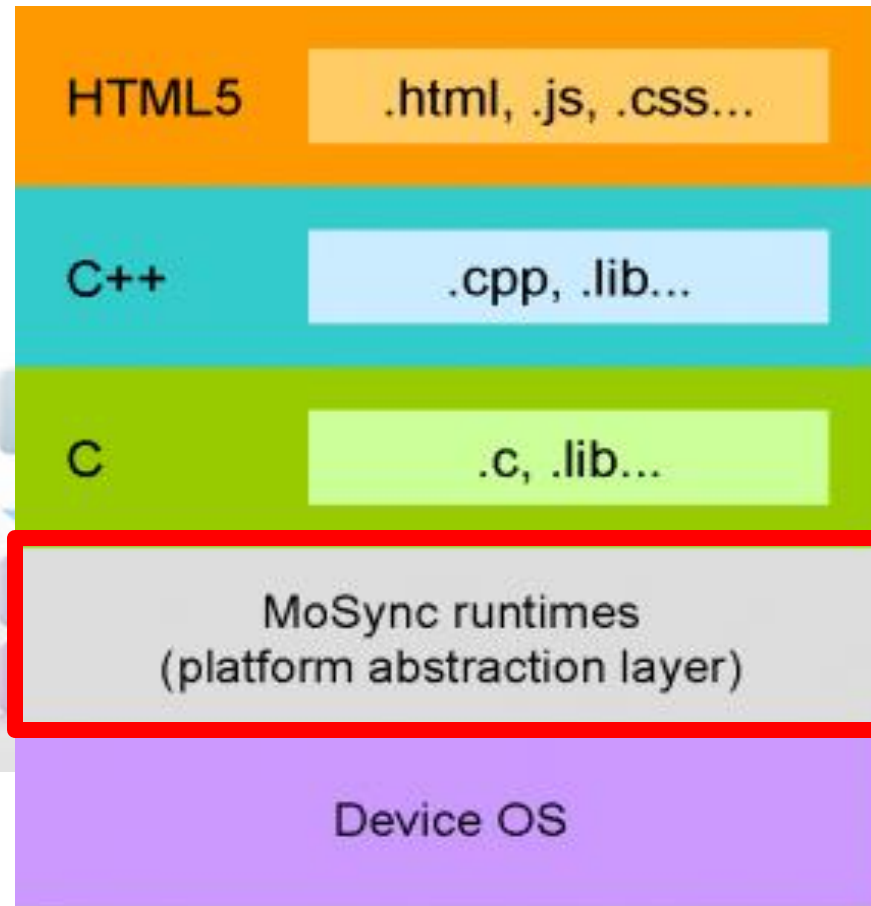
Titanium



Mono



Mosync



MoSync mobile App layers

Q&A



Thanks



**THANK
YOU**