

Application structure

Agenda

App types

Web

- Server-side
- HTML, CSS, JavaScript, PHP

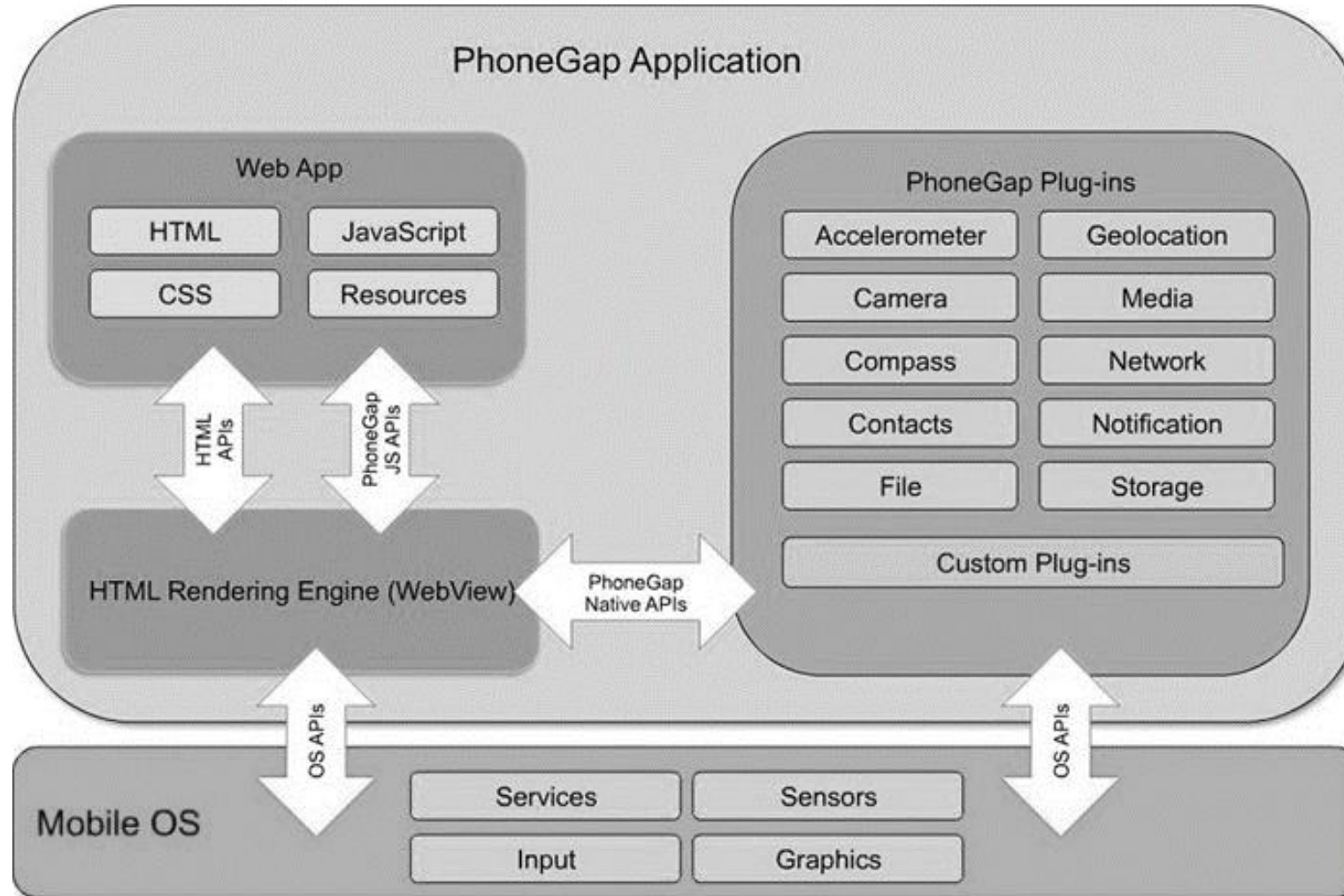
Hybrid

- Native container (Phonegap/Cordova)
- HTML, CSS, JavaScript

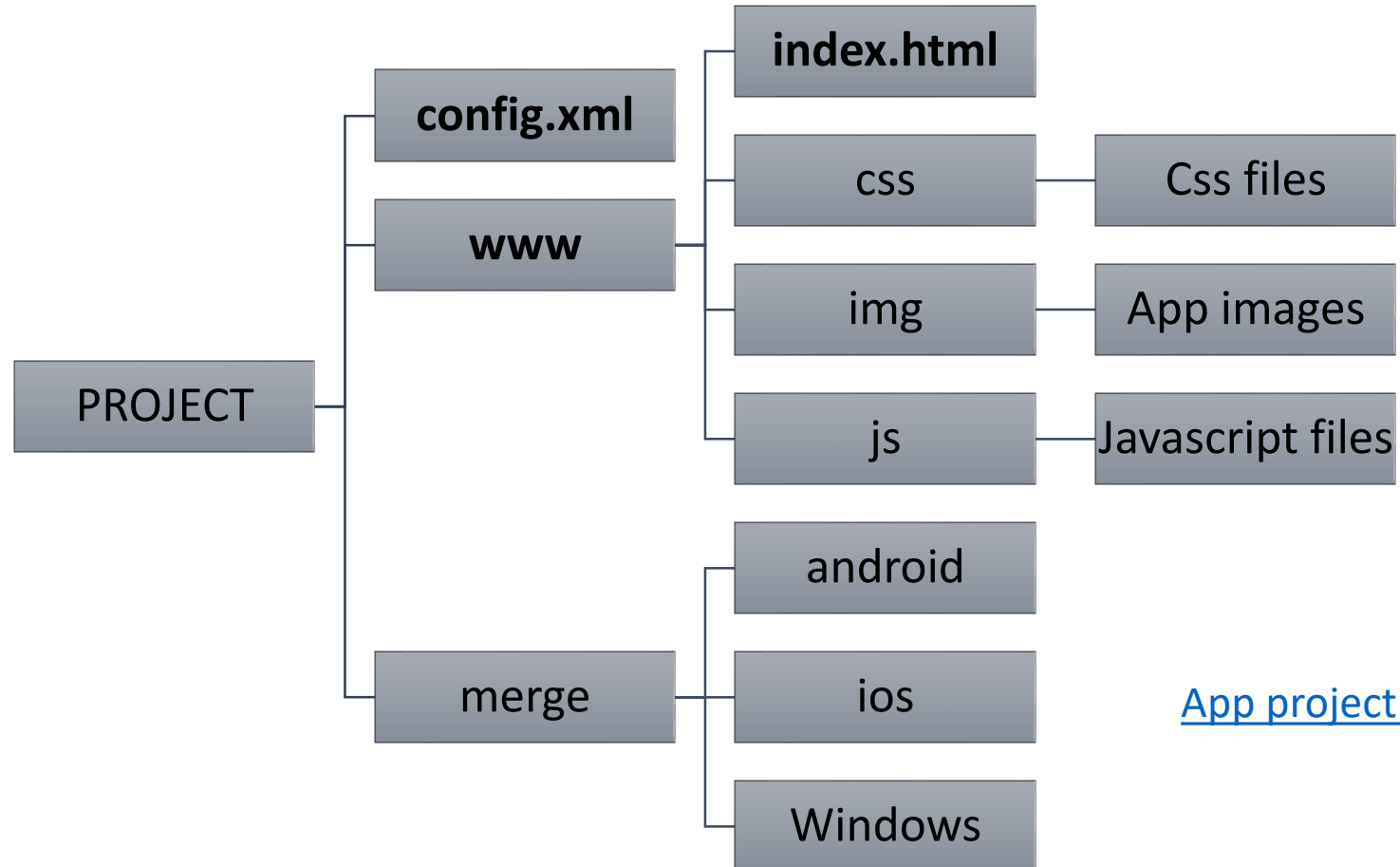
Native

- Specific platform
- Objective-C, Java, C#

PhoneGap/Cordova architecture



App project structure



[App project structure](#)

Index.html

```
<!DOCTYPE html>
<html>

  <head>
    <meta http-equiv="Content-type" content="text/html; charset=utf-8">
    <script src="js/pgb.js"></script>
    <script src="cordova.js"></script>
  </head>

  <body onload="init()">
    <h1>Hello World!</h1>
    <p id="dp"></p>
    <input type="button" onclick="deviceInfo()"
      value="Let me introduce myself!">
  </body>

</html>
```

Javascript file

```
function init() {
    document.addEventListener("deviceready",onDeviceReady, false);
}

function onDeviceReady() {
    navigator.notification.beep(1);
}

function deviceInfo() {
    info = 'Hi, I am your smartphone :-)' + '\n' +
          '=====' + '\n' +
          'Device Name      : ' + device.name + '\n' +
          'Device Cordova : ' + device.cordova + '\n' +
          'Device Platform: ' + device.platform + '\n' +
          'Device UUID      : ' + device.uuid + '\n' +
          'Device Model     : ' + device.model + '\n' +
          'Device Version  : ' + device.version + '\n';

    navigator.notification.alert(info);
}
```

Config.xml file

```
<?xml version="1.0" encoding="UTF-8" ?>
<widget xmlns
        xmlns:gap    = http://phonegap.com/ns/1.0
        id           = "myfirstapp"
        version      = "1.0.0" >

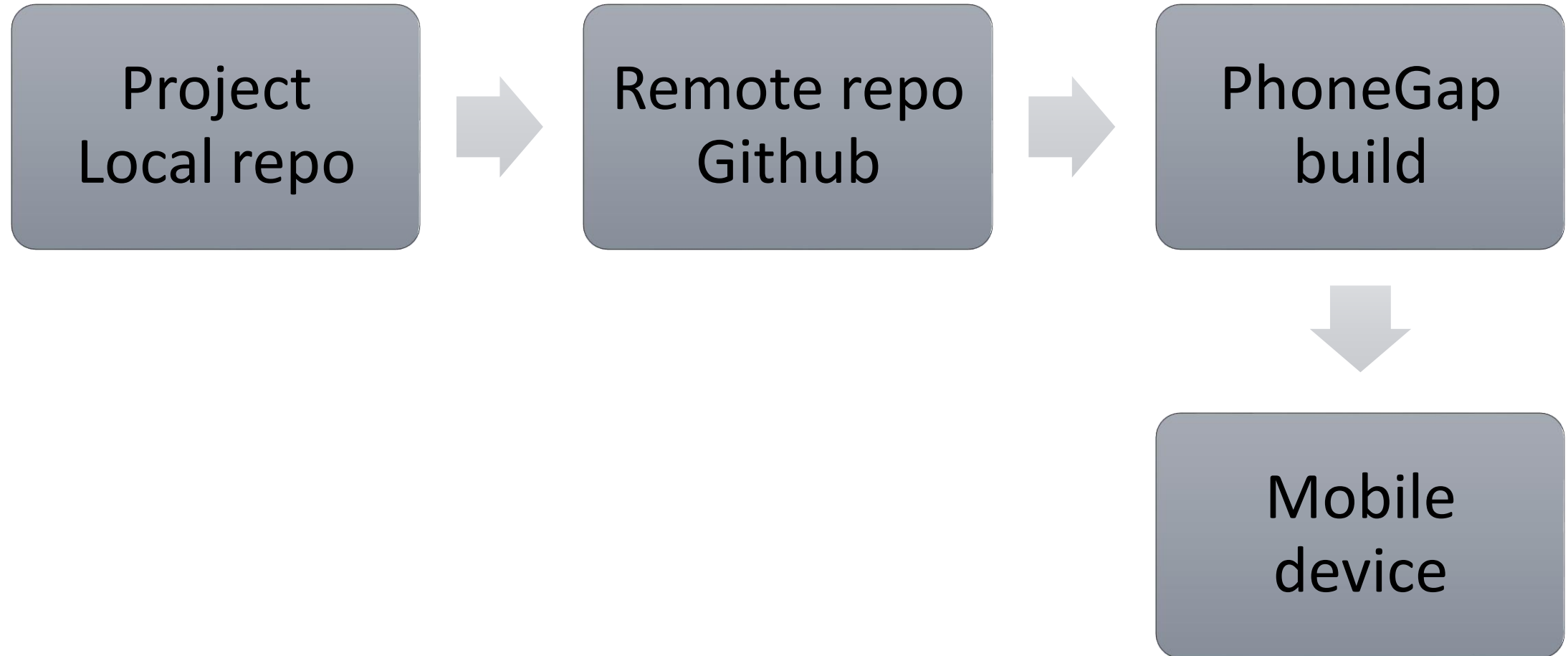
    <name>First app</name>
    <description>My first mobile app</description>
    <author href="http://mypersonalwebsite.com" email="johnbrown@gmail.com">
        John Brown
    </author>

    <platform name="android" />
    <plugin name="cordova-plugin-device" spec="~1.1.4" />
    <plugin name="cordova-plugin-dialogs" spec="~1.3.1" />


</widget>
```

[App configuring](#)

Project management






PhoneGap Build project





First app


My first mobile app





 Install 


 Update code

 Rebuild all



 Builds




 Plugins

 Collaborators

 Settings

App ID	Version	Owned by	PhoneGap (iOS / Android / Windows)	Source	Tag / Branch	Commit	Last built (34)
2506859	1.0.0	stalj@uek.krakow.pl	cli-6.5.0 (4.3.1 / 6.1.2 / 4.4.3)	https://github.com/stalj/pg-hello.git	master	6636a7c	1 minute

 No key selected 

 Rebuild  Log  apk

Hello World app

<https://github.com/stalj/pg-hello.git>

To do



Run sample app

Clone, prepare, and launch the Hello World sample app.

Modify sample app

1. **Add in your sample app a button.**
2. **After clicking on the button, your personal data are to be displayed.**
3. **Launch the app on a mobile device.**

Display your business card

1. **Create the app 'businesscard' to display your personal information**
 - Name and surname
 - Email
 - Website (if you have)
 - Dean's group number
 - Field of study
2. **Use CSS to improve quality of your business card.**
3. **Run the app on a mobile device.**

Make a network connection

1. Create the app 'network' to display the device's cellular and wifi connection, and whether the device has an internet connection.
2. Use the proper core plug-in.
3. Take a look at the example of the plug-in usage contained at the plug-in webpage.
4. Launch the app on a mobile device. Try your app out by switching on/off WiFi/3G/LTE connection.

Detect a device movement

1. Create the app 'motion' to detect a device movement.
2. Use the proper core plug-in.
3. Take a look at the example of the plug-in usage contained at the plug-in webpage.
4. Launch the app on a mobile device. Try to move the device and check displayed results.

Improve the business card app

1. **Improve the 'businesscard' app.**
2. **Add a splashscreen and replace a default app icon with your own one.**
3. **Use the proper core plug-in.**
4. **Launch the app on a mobile device.**

Display contact list

1. Create the app 'contactlist' to display the contact list (name and phone number) of your mobile device.
2. Use the proper core plug-in.
3. Launch the app on a mobile device.

Send a text message

1. Search for the plug-in for sending a text message (SMS) from your device.
2. Create the app 'sms'. Add two input fields (phone number, message) and a button 'Send'.
3. Send any text message to yourself and/or your friend/colleague.