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Passing a JavaScript object using addJavascriptInterface() on Android

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asked 7 years, 3 months ago

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20 ▲ Is it possible to pass a JavaScript object from JavaScript to Java using addJavascriptInterface()? Something along these lines:

```
var javascriptObject = {"field1":"string1", "field2":"string2"};
JavaScriptInterface.passObject(javascriptObject);
```

★ How would such a call be captured on the Java side? I have no problem setting up the interface to send a string, but when I send an object, I receive null on the Java end.

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asked Feb 12 '10 at 9:56



[pheelicks](#)

5,980 ● 1 ● 33 ● 46

5 Answers

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18 ▲ AFAIK, addJavascriptInterface() only works with primitive types and Strings, and so you cannot pass arbitrary Javascript objects.

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answered Feb 12 '10 at 12:16



[CommonsWare](#)

644k ● 102 ● 1557 ● 1605

4 @Robert Siemer: Use JSON, then. – [CommonsWare](#) Jul 23 '11 at 21:47

4 Does anybody know if there is actually any documentation on exactly what can be taken as parameters and what can be returned from a method which is part of the injected java object? – [Wayne Uroda](#) May 21 '13 at 4:07

4 What madness... – [Wayne Uroda](#) May 21 '13 at 5:12

3 From my tests, you can pass any primitive, string, or array of those. in case of polymorphism, though, it appears that the method that accepts float has priority (probably a matter of ordering the methods). I'll post something about that when I have investigated further – [njzk2](#) Sep 3 '13 at 10:16

1 serialize javascript object to json string and then pass that string to the android interface. now deserialize this json string in java to a java object. – [Gurpreet](#) Jul 7 '15 at 14:15

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7 ▲ I found a solution, using JSON. My Java method returns a JSONArray, on my javascript code I receive this and convert to a javascript vector using JSON.parse(). See the example:

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Java:

```
public class JavaScriptInterface {
    Context mContext;
    private static int ind=-1;
    private static int [] val = { 25, 25, 50, 30, 40, 30, 30, 5, 9 };

    public JavaScriptInterface(Context c) {
        mContext = c;
    }

    @JavascriptInterface
    public JSONArray getChartData() {
        String texto = " [ {name: 'valor1', 2007: "+val[(++ind)%9]+"}, "+
            " {name: 'valor2', 2007: "+val[(++ind)%9]+"}, "+
            " {name: 'valor3', 2007: "+val[(++ind)%9]+"} ]";

        JSONArray jsonar=null;
        try {
            jsonar = new JSONArray(texto);
        } catch (JSONException e) {
            e.printStackTrace();
        }

        return jsonar;
    }
}
```

Now the javascript code:

```
window.generateData = function() {
    /*var data = [ {name: 'valor1', 2007: 50},
        {name: 'valor2', 2007: 20},
        {name: 'valor3', 2007: 30} ]; */
    var data = JSON.parse( Android.getChartData() );
    return data;
};
```

The commented code above show how it was when static, and now the data came from the Java code.

It was testes on Android 2.1 and 3.2.

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edited Apr 30 '14 at 13:09



James Kidd
424 • 4 • 8

answered Jun 5 '12 at 4:47



Derzu
4,267 • 32 • 34

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This is how I am doing...

4 In Android...

```
@JavascriptInterface
public void getJSONData(String jsonData) {
    try {
        JSONObject data = new JSONObject(jsonData); //Convert from string to object, can
    } catch (Exception ex) {}
}
```

In JavaScript...

```
var obj = { Name : 'Tejasvi', Age: 100};
var str = JSON.stringify(obj);
Android.getJSONData(str);
```

As of now, I could not find any other proper way to pass the native JavaScript object directly to JavaScriptInterface.

Calling `Android.getJSONData({ Name : 'Tejasvi', Age: 100})` results in `null` (if parameter type is `object`) or `undefined` (if parameter type is defined as `String`) in `getJSONData`.

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answered Sep 21 '15 at 14:55



Tejasvi Hegde
822 • 8 • 13

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I think you can also pass `JSONObject` and `JSONArray`. So not only primitive types, but also primitive types stored in a javascript array `[0,1,2]` or dictionary `{one:1, two:2}`.

I have NOT verified this in code, just read the docs. Might be using it soon.

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How to pass non-primitive Object from Java to JS by Android `addJavascriptInterface`?

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answered Jul 21 '10 at 3:38



2 Where are the docs? There's only a tiny section devoted to it in WebView's documentation. – [Ian Kershaw](#) Jun 21 '11 at 11:56

Can someone confirm this? – [Robert Siemer](#) Jul 23 '11 at 21:41

I can confirm this, but in JS space, it is not a real Javascript array. You'll get an object with methods like length() and get(), I could only use the specific get(s) like getInt(). Basically I'm pretty sure you get everything here: json.org/javadoc/org/json/JSONArray.html – [Caleb Hearon](#) May 31 '12 at 20:23

@IanKershaw It works returning JSONArray. See my answer. – [Derzu](#) Jun 5 '12 at 4:49

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1



You can't pass JSONObject or JSONArray, but you can send strings with that form and parse them to those types.

Your option is to expose the method using strings and then you can use the JSONObject or JSONArray to parse the string and use it accordingly.

Here is what I did.

```
@JavaScriptInterface
public void passJSON(String array, String jsonObj) throws JSONException
{
    JSONArray myArray = new JSONArray(array);
    JSONObject myObj = new JSONObject(jsonObj);
    ...
}
```

where array is '["string1","string2"]' and jsonObj is '{attr:1, attr2:"myName"}'

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edited Aug 7 '15 at 10:46

answered Aug 19 '14 at 4:53



[Wernight](#)
16.1k ● 11 ● 80 ● 102



[SergioM](#)
431 ● 1 ● 7 ● 22

This could be good answer if example and was clear and complete – [Tejasvi Hegde](#) Sep 21 '15 at 13:43

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