Android Quick Start demonstration

Overview

The purpose of this demonstration is to experience an end-to-end flow where the MobileFirst Platform Foundation SDK for Android is integrated into an Android project and used to retrieve data using a MobileFirst adapter.

To learn more about creating projects and applications, using adapters and lots more, visit the Native Android Development (../../android-tutorials/) landing page.

Required installed:

- MobileFirst Platform commandline tool (download (file:///home/travis/build/MFPSamples/DevCenter/_site/downloads/))
- Android Studio

1. Create a MobileFirst project and adapter

o Create a new project and Android framework/server-side application entity

```
mfp create MyProject
cd MyProject
mfp add api MyAndroidFramework -e android
```

• Add a HTTP adapter to the project

```
mfp add adapter MyAdapter -t http
```

2. Deploy artifacts to the MobileFirst Server

o Start the MobileFirst Server and deploy the server-side application entity and adapter

```
mfp start
# Wait until a browser window is opened, displaying the MobileFirst
Console
mfp deploy
```

3. Create an Android project

4. Add the MobileFirst Android SDK to the Android Studio project

 From project-folder-location > MyProject > apps > MyAndroidFramework, copy the following files: worklight-android.jar, uicandroid.jar, bcprov.jar and androidasync-http.jar

- Open the Project view and navigate to the app\libs folder. Paste the copied files
- Right-click on any of the added . jar files and select **Add as library** to add all libraries
- Create an **assets** folder under **src\main** and paste into it the wlclient.properties file
- Add the following permissions to the AndroidManifest.xml file:

```
<uses-permission android:name="android.permission.INTERNET"/>
<uses-permission android:name="android.permission.ACCESS_WIFI_STATE"/>
<uses-permission android:name="android.permission.GET_TASKS" />
```

• Add the MobileFirst UI activity in the AndroidManifest.xml file:

```
<activity android:name="com.worklight.wlclient.ui.UIActivity" />
```

5. Implement MobileFirst adapter invocation

o Main Activity class Add imports:

```
import com.worklight.wlclient.api.*;
import android.util.Log;
```

Add the following to onCreate:

```
super.onCreate(savedInstanceState);
setContentView(R.layout.activity main);
final WLClient client = WLClient.createInstance(this);
client.connect(new WLResponseListener() {
   @Override
   public void onSuccess(WLResponse wlResponse) {
        URI adapterPath = new URI("/adapters/MyAdapter/getFeed");
        WLResourceRequest request = new WLResourceRequest(adapterPath, W
LResourceRequest.GET);
        request.send(new MyInvokeListener());
   }
   @Override
   public void onFailure(WLFailResponse wlFailResponse) {
        Log.i("MFPMyProject", "Failed connecting to the MobileFirst Serv
er: " + wlFailResponse.getErrorMsg());
});
```

MyInvokeListener class Add a new MyInvokeListener class Add imports:

```
import com.worklight.wlclient.api.*;
import android.util.Log;
```

Paste the following:

```
public class MyInvokeListener implements WLResponseListener {
    @Override
    public void onSuccess(WLResponse wlResponse) {
        Log.i("MFPMyProject", "Adapter invocation response: " + wlResponse.getResponseJSON());
    }
    @Override
    public void onFailure(WLFailResponse wlFailResponse) {
        Log.i("MFPMyProject", "Adapter invocation response: " + wlFailResponse.getErrorMsg());
    }
}
```

6. Final configurations

- Supply the machine's IP address for the host property in wlclient.properties
- Create an AVD

7. Click Run

Review the LogCat view for the data retrieved by the adapter request.

