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

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

- o 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, WLResourceRequest.GET);
    request.send(new MyInvokeListener());
  }
  @Override
  public void onFailure(WLFailResponse wlFailResponse) {
    Log.i("MFPMyProject", "Failed connecting to the MobileFirst Server: " + wlFailRespo
nse.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.getResponse
JSON());
    }
    @Override
    public void onFailure(WLFailResponse wlFailResponse) {
        Log.i("MFPMyProject", "Adapter invocation response: " + wlFailResponse.getError
Msg());
    }
}
```

6. Final configurations

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

7. Click Run

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

