Create Your Own Android App Tools Using ArcGIS Runtime SDK for Android

Dan O’Neill & Xueming Wu

Demo Theater

Introductions

- What we do
  - Redlands – Xueming Wu - https://github.com/XuemingRock
  - Alaska – Dan O’Neill - @jdoneill - https://github.com/doneill
- What you do
- Session Surveys

Agenda

- Application Toolkit
  - What can you do now
    - MapViewHelper
      - Show Callout, Popups, Geometries
    - GeocodeHelper
      - Find Place & Address
  - What's coming
    - Measure Tool
    - Geocode Tool

Application Toolkit

Dan O’Neill

What Can You Do Now

- **MapViewHelper**
  - **Simplification developer pattern for showing Geometries**

Instantiate a MapViewHelper class

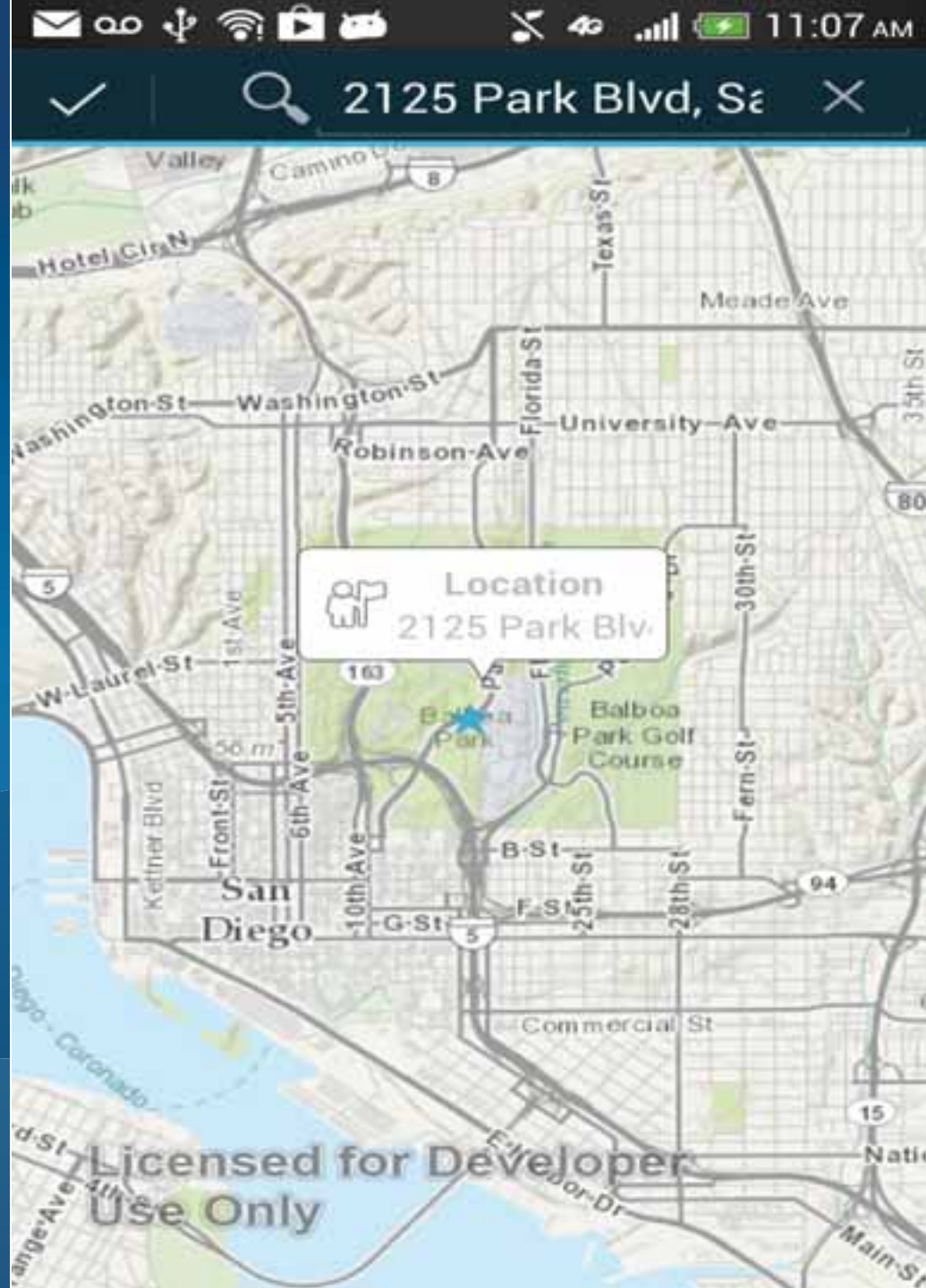
```
96      // Create a MapView Helper for use in MapView listeners set below.
97      mMapViewHelper = new MapViewHelper(mMapView);
```

Add a Geometry with Graphic

```
130             mMapViewHelper.addMarkerGraphic(34.056695, -117.195693, "ESRI",
131                 "World Headquarters", null, mIcon, false, 0);
```

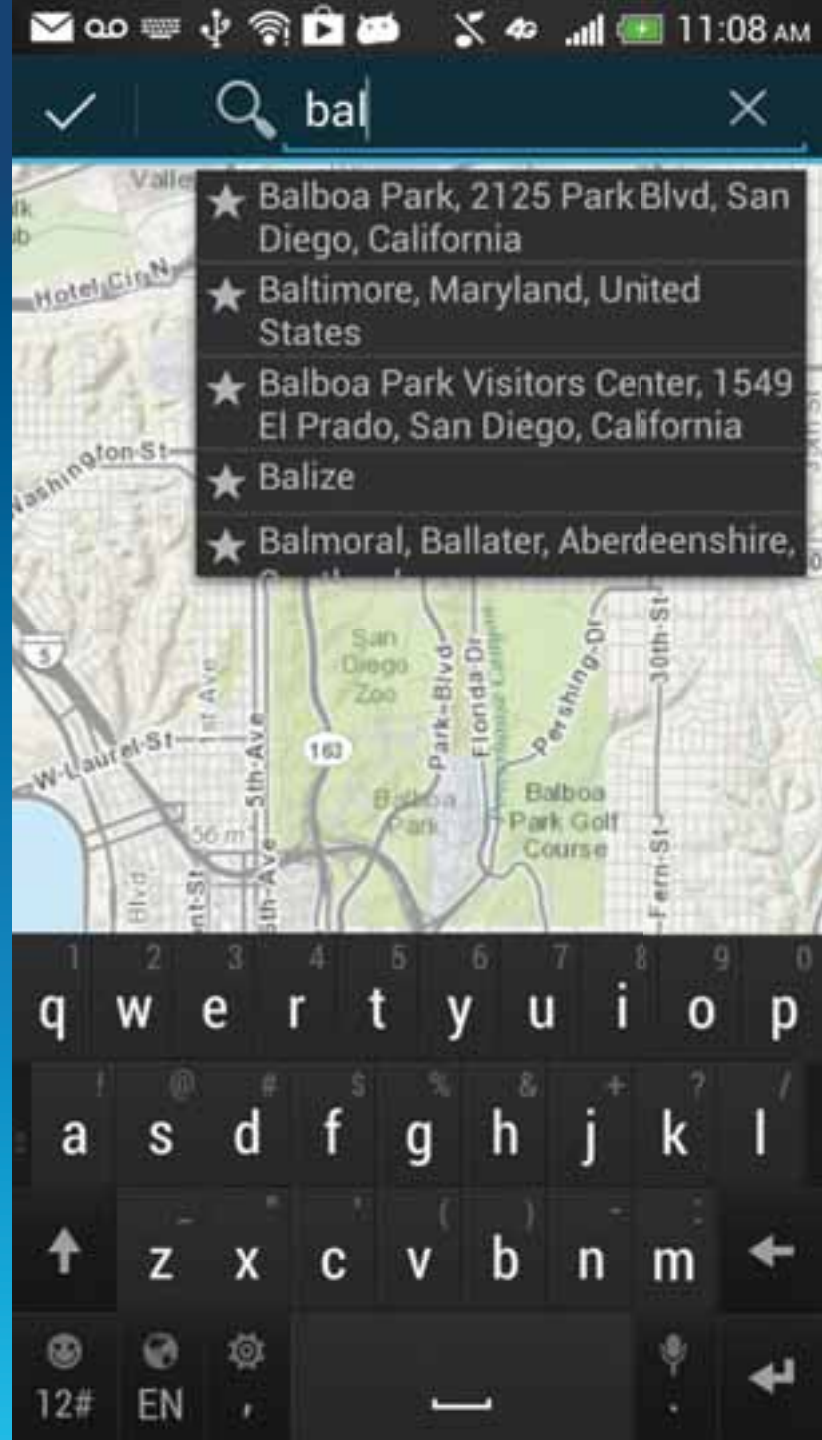
Geocode Tool

Xueming Wu



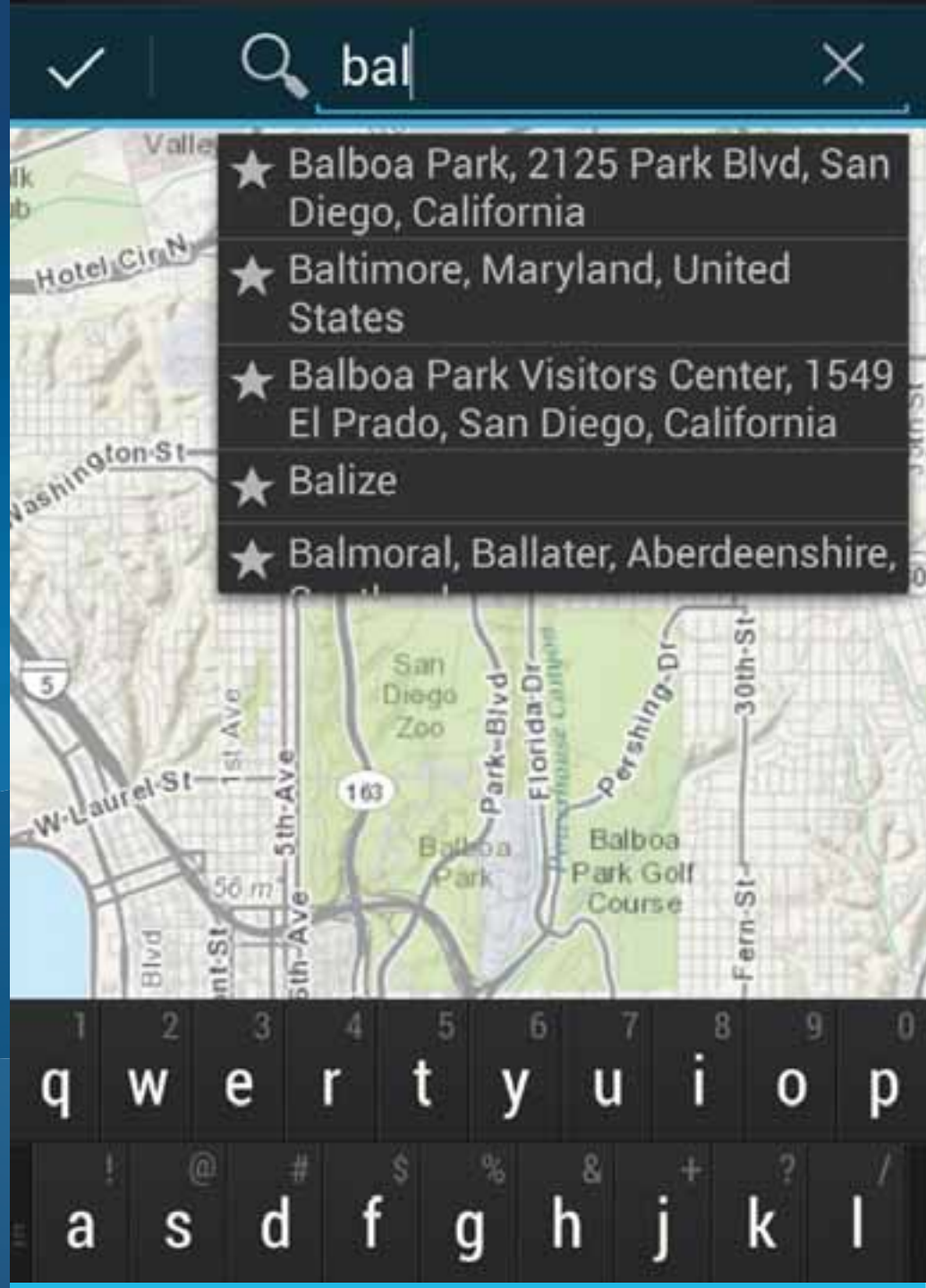
Geocode Tool

- **Self-contained**
- **Easy to integrate into your own apps**
- **Easy to customize**



GeoCode Tool Demo

Xueming Xu



Geocode Tool - integration

```
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    <item
        android:id="@+id/action_geocoding"
        android:orderInCategory="100"
        android:showAsAction="ifRoom"
        android:icon="@android:drawable/ic_menu_search"
        android:title="@string/action_geocoding"/>
</menu>
```

```
public boolean onOptionsItemSelected(MenuItem item) {
    switch (item.getItemId()) {
      case R.id.action_geocoding:
          Locator locator = Locator.createOnlineLocator();
          GeocodeTool geocodeTool = new GeocodeTool(mMap, locator);
          startActionMode(geocodeTool);
          break;

      default:
          break;
    }
    return super.onOptionsItemSelected(item);
  }
```

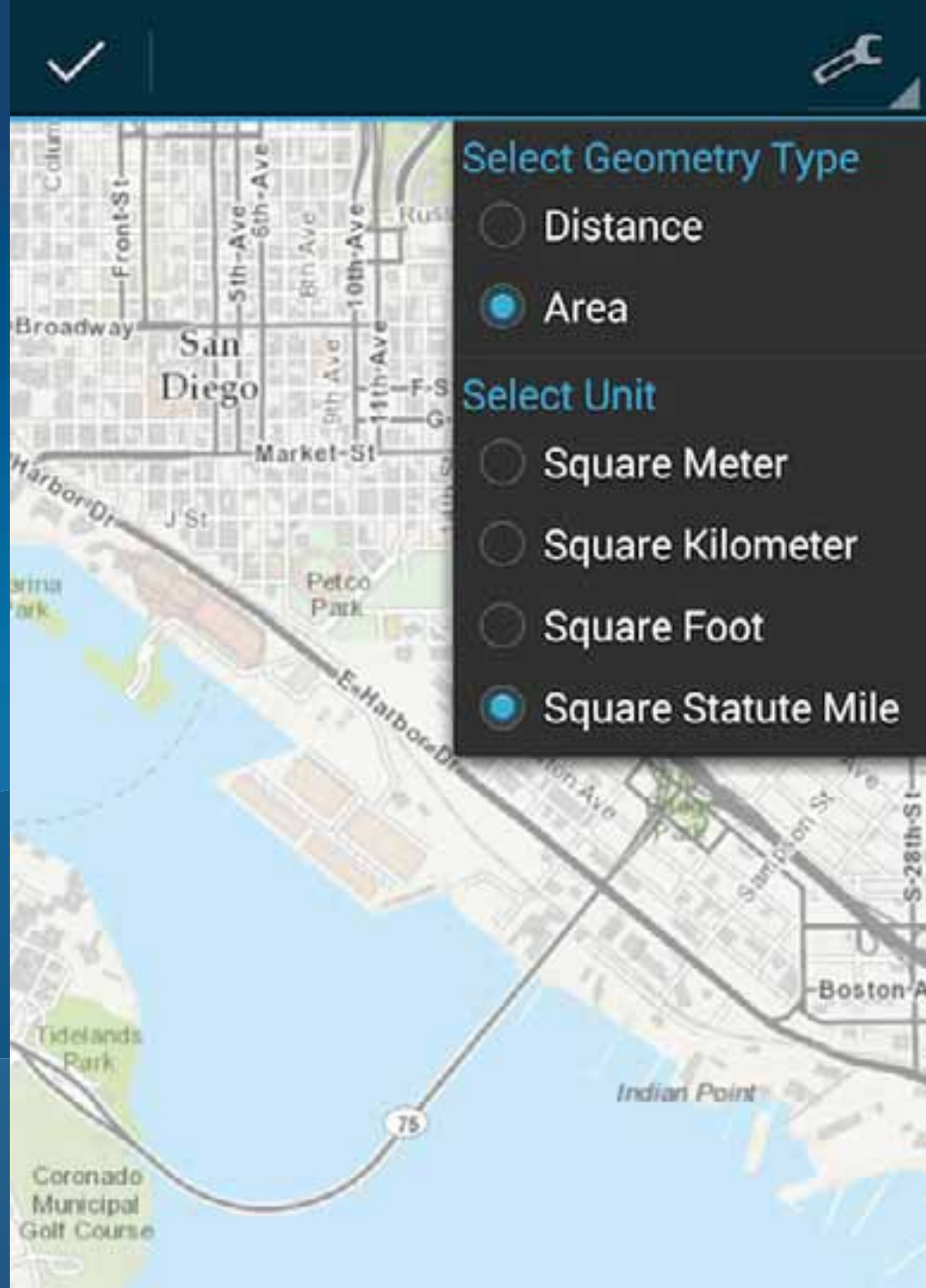
Geocode Tool - customization

```
<string name="query_hint">Find a place</string>
<string name="search_title">Search</string>
<string name="suggestion_text">Suggestion</string>
```

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal">

            <ImageView
               android:id="@+id/suggestion_item_icon"
               android:layout_width="wrap_content"
                        android:layout_height="wrap_content"
                        android:src="@android:drawable/star_off" />

            <TextView
               android:id="@+id/suggestion_item_address"
               android:layout_width="wrap_content"
                        android:layout_height="wrap_content"
                        android:text="@string/suggestion_text" />

</LinearLayout>
```

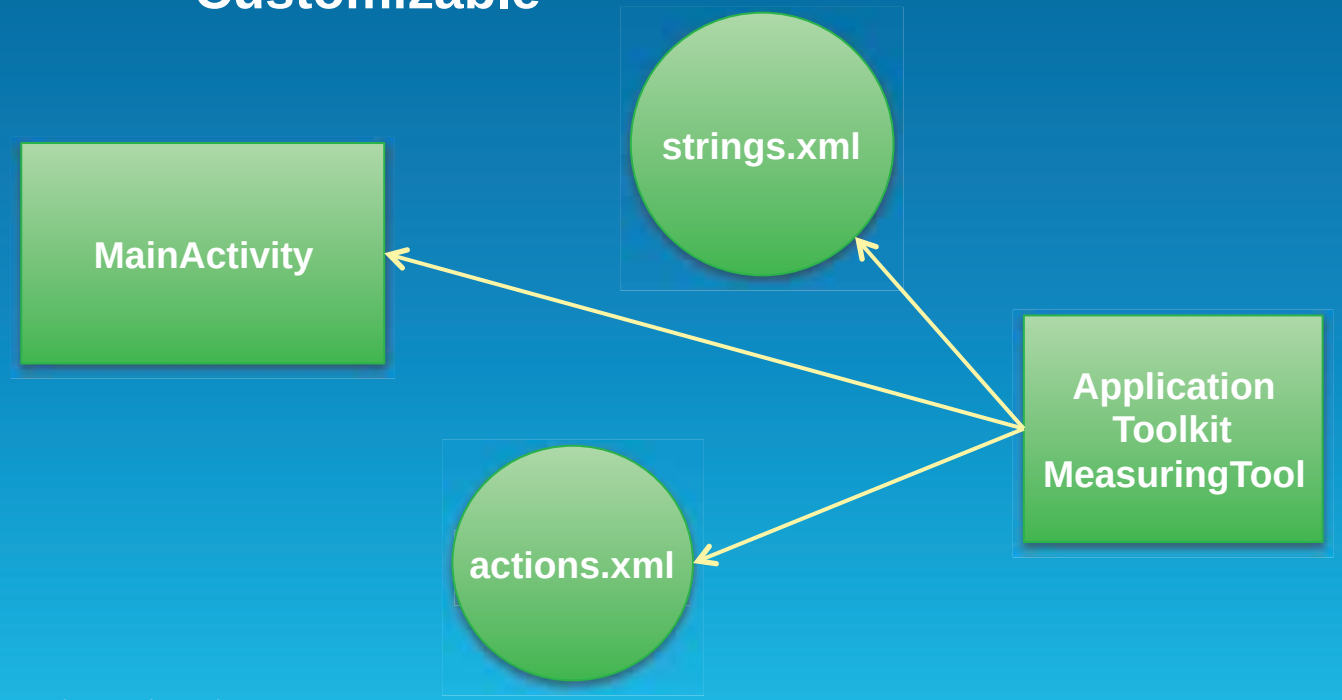
Measure Tool

Dan O'Neill



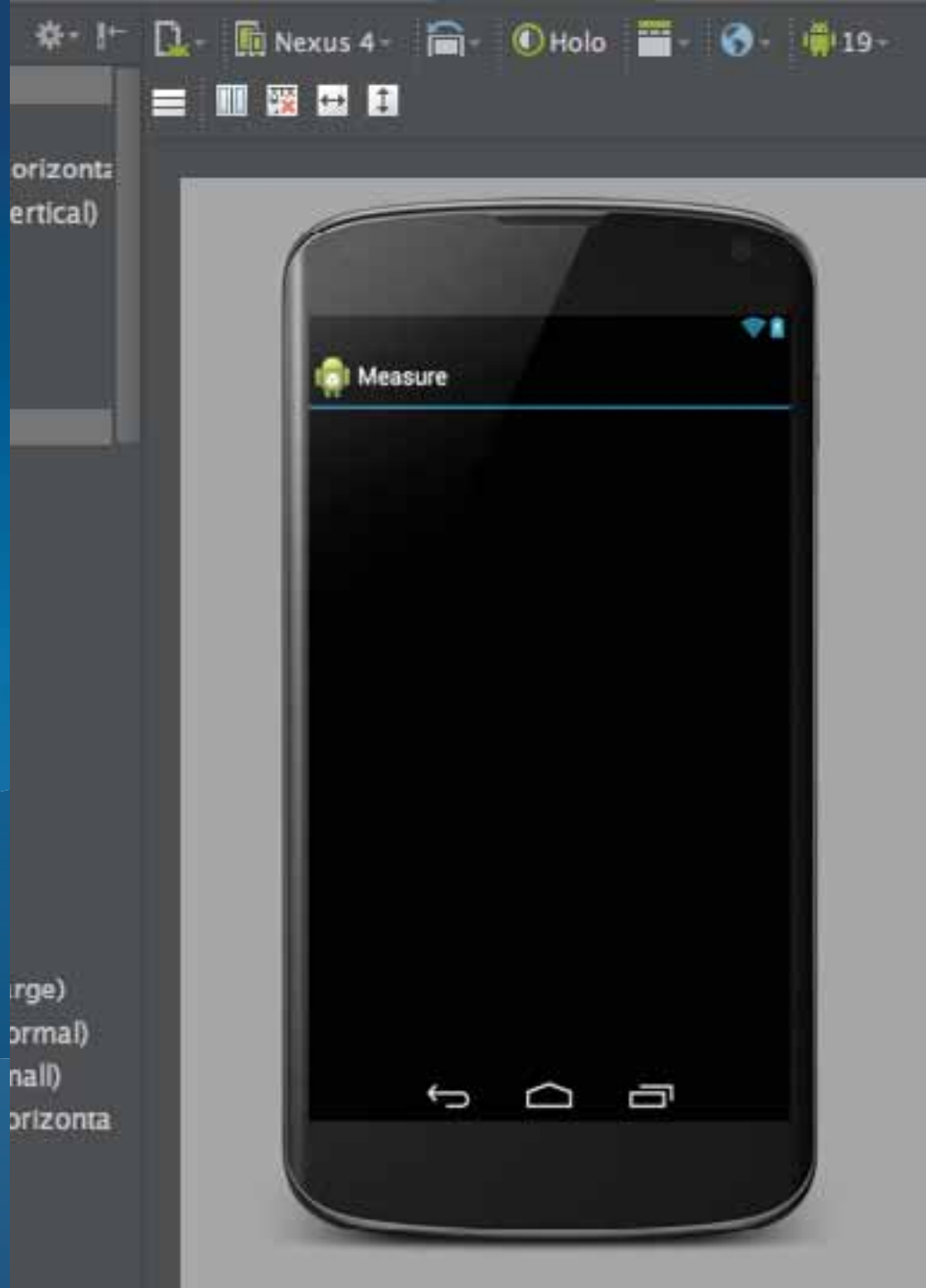
Analysis – Measure Tool

- Measure Tool is self contained
- Easy to integrate into your own app
- Class in Application Toolkit
- Customizable



Measure Tool Demo

Dan O’Neill



ArcGIS Runtime SDK sessions Thursday

Session Name	Time	Location
Create your own Android App Tools Using ArcGIS Runtime SDKs	9:30am – 10:00am	Developer Island (demo theatre)
Dive Deep into the Performance of the ArcGIS Runtime SDKs Core Display Architecture	10:30am – 11:00am	Developer Island (demo theatre)
10 Things you Didn't Know You Can Do with ArcGIS Runtime SDK for iOS	11:30am – 12:00pm	Developer Island (demo theatre)
Animating Thousands of Graphics and Features with ArcGIS Runtime SDK for Java SE	12:30pm – 1:00pm	Developer Island (demo theatre)
Developing Mobile Apps with ArcGIS Runtime SDK for .NET	10:15am – 11:30am	Room 05 A
ArcGIS Runtime SDKs: The Road Ahead	1:30pm – 2:45pm	Room 07 A/B

Thank You

- **Please fill out the session survey:**

Offering ID: 1868

Online – www.esri.com/ucsessionsurveys

Understanding our world.