

[app] C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide\app\src\main\java\edu\udayton\cityguide>MainActivity.java

activity_main.xml x MainActivity.java x

1:Project

Resource Manager

Gradle

Attributes

Ab travel

TextView

Common

Text

Buttons

Widgets

Layouts

Containers

Google

Legacy

Component Tree

LinearLayout(vertical)

Ab travel- "@string/travel"

In Part 1 of Lesson 5, we:

1. created the City Guide project with a custom icon
2. added the project resources, including a string array (attraction) for the list items (instead of a Java hard-coded array as shown in the textbook)
3. created the app layout, consisting of a TextView with a drawable for each item in the list (i.e., a TextView template)

In this 2nd part of the lesson, we code MainActivity.java so that it displays the list of 5 items, and so that each of the first 2 items uses an implicit Intent to open a web site in the device's web browser.

Design Text

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (24 minutes ago)



Switch to MainActivity.java

Activity Main

MainActivity

activity_main.xml

MainActivity

Default (en-us)

Attributes

Ab travel

autoSizeMaxTextSize

autoSizeMinTextSize

autoSizePresetSizes

autoSizeStepGranularity

autoSizeTextType

autoText

background

bufferType

capitalize

clickable

contentDescription

cursorVisible

digits

drawableBottom

drawableEnd

drawableLeft @drawable/ic_launcher_c

drawablePadding

drawableRight

drawableStart

drawableTop

drawingCacheQuality

duplicateParentState

editable

editorExtras

ellipsize

ems

enabled

fadeScrollbars

fadingEdge

fadingEdgeLength

filterTouchesWhenObscured

firstBaselineToTopHeight

Fixer Fixer

26%

AppTheme

Palette

Common Ab TextView

Text Button

Buttons ImageView

Widgets RecyclerView

Layouts <> <fragment>

Containers ScrollView

Google Switch

Legacy

Component Tree

LinearLayout(vertical) Ab travel- "@string/travel"

Design Text

Project

Resource Manager

Build Variants

Structure

Favorites

Layout Captures

TODO Terminal Build Logcat

Event Log

Source generation ended in 765 ms (24 minutes ago)

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2:Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     ...
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11    }
12 }
```

As mentioned (but not explained) in "Step 3" on page 182 of *Android Boot Camp*, we need to change `MainActivity`'s parent class from `AppCompatActivity` to `ListActivity`.

We do this so that we can override and code the `onListItemClick` (handler) method in `MainActivity`, that is inherited from `ListActivity`.

In this way, our app will respond to the user tapping the various list items (i.e., list item click events).

Select 'AppCompatActivity' here
Type 'ListA' ...

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (25 minutes ago) 17 chars 6:52 CRLF ï UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListA {
6     @Override
7     protected void onCreate(Bundle savedInstanceState) {
8         super.onCreate(savedInstanceState);
9         setContentView(R.layout.activity_main);
10    }
11
12 }
13
14 }
```

... and select android.app.ListActivity from the code completion menu

Resource Manager

- app
 - manifests
 - java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
 - generatedJava
 - res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml
- Gradle Scripts

Build Variants

Layout Captures

2: Favorites

Device File Explorer

MainActivity

TODO Terminal Build Logcat

Source generation ended in 765 ms (25 minutes ago)

6: Logcat

Event Log

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide>MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11    } // end onCreate method
12
13 } // end MainActivity class
```

As in prior lessons, we practice clean and organized coding by adding line comments to tag the close of the onCreate method and MainActivity class blocks

Layout Captures 2: Favorites 1: Structure Build Variants

Device File Explorer

TODO Terminal Build Logcat

Source generation ended in 765 ms (26 minutes ago)

14:28 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main); I
11    } // end onCreate method
12 } // end MainActivity class
13
14
15
```

As mentioned in "Step 3" on page 182 of Android Boot Camp, we delete this 2nd statement in the onCreate method that "inflates the GUI"; i.e., that displays the layout on the screen.

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 765 ms (26 minutes ago)

39 chars 12:48 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        // convert the 'attraction' string-array to a list []
11    } // end onCreate method
12 } // end MainActivity class
13
14
15
16
```

In code that we will add, we will include a statement that uses an ArrayAdapter to dynamically create the list layout.

You should therefore now read the description of ArrayAdapters inm the section "Using a setListAdapter and Array Adapter" at the bottom of page 185 of Android Boot Camp.

Do NOT, however, add any of the described code, as we will add slightly different code here (using the attraction string-array).

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (26 minutes ago) 13:59 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13     } // end onCreate()
14
15 } // end MainActivity
```

Before we can create the ArrayAdapter and display our list, we need to create the list from the attraction string-array we set up in our res/values/strings.xml file.

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (26 minutes ago) 15:9 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         } // end onCreate()
14     } // end MainActivi
15
16 } // end MainActivity
```

We declare the list as
a java.util.List generic
interface.
Type 'List' here ...

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (27 minutes ago) 15:9 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I: Structure

2: Favorites

Layout Captures

MainActivity.java

activity_main.xml

MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> attractionList = new ArrayList<String>(Arrays.asList(attraction));
14
15         List<String> attractionList = new ArrayList<String>(Arrays.asList(attraction));
16     }
17
18 }
```

... and select the java.util.List generic from the code completion menu

Device File Explorer

TODO Terminal Build Logcat Event Log

Cannot resolve symbol 'List'. ';' expected.

15:13 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6     ...
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10        setContentView(R.layout.activity_main);
11        // convert the 'attraction' string-array to a list
12        List<String> Attractions = ...
13        ...
14    } // end onCreate method
15 } // end MainActivity class
16
17
18
19
20
21
```

1. Since List is a generic interface, we specify that this one is a list of strings by adding its type argument 'String'

2. Complete the declaration of the list as shown here

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (28 minutes ago) 18:17 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

1:Gradle

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12         List<String> Attr
13
14     } // end onCreate met
15
16 } // end MainActivity cla
17
18
19
20
21
```

The java.util.List generic interface is implemented by the java.util.ArrayList generic class

Since we will be using an array adapter to display the list items, create the list by first typing 'Arr' here ...

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (28 minutes ago) 18:17 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants Layout Captures Favorites 2: Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions = ...
14             Arr
15         } // end Ma
16     } // end Ma
17
18     } // end Ma
19     } // end Ma
20
21 }
```

... and then selecting the java.util.Arrays class from this menu

TODO Terminal Build Logcat

Source generation ended in 765 ms (28 minutes ago)

18:20 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

1:Gradle

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml
- Gradle Scripts

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList( // <-- cursor here
15                 "Attraction 1", "Attraction 2", "Attraction 3"
16             );
17
18         setListAdapter(new ArrayAdapter<String>(this,
19                         android.R.layout.simple_list_item_1,
20                         Attractions));
21     }
22 }
```

We use the static `Arrays` method `asList` to convert the string-array to a list, so type a period ('.') here ...

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

□ expected 19:23 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I:Structure

Layout Captures

2: Favorites

MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.|
```

... and select the asList method from the code completion menu

asList(T... a) List<T>

- binarySearch(T[] a, int key) int
- binarySearch(byte[] a, byte key) int
- binarySearch(char[] a, char key) int
- binarySearch(double[] a, double key) int
- binarySearch(float[] a, float key) int
- binarySearch(short[] a, short key) int
- binarySearch(Object[] a, Object key) int
- binarySearch(T[] a, T key, Comparator<? super T> c) int
- binarySearch(int[] a, int fromIndex, int toIndex, int key) int

Device File Explorer

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

expected 19:24 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

1:Gradle

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(
15                 ...
16             );
17
18         ...
19     } // end onCreate method
20 } // end MainActivity class
21
22
```

The argument for the `asList` method is our string array; we access it by first calling the activity's `getResources` method.

Type 'getRes' here ...

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 765 ms (29 minutes ago)

19:31 CRLF UTF-8 4 spaces

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure Layout Captures 2:Favorites 2:Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources());
15
16     } // end onCreate method
17
18 } // end MainActivity class
```

... and select the getResources method from the code completion menu

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (29 minutes ago) 19:37 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

1:Gradle

Android

app manifests java edu.udayton.cityguide MainActivity edu.udayton.cityguide (androidTest) edu.udayton.cityguide (test) generatedJava res drawable layout mipmap values colors.xml dimens.xml strings.xml styles.xml Gradle Scripts

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources());
15
16     } // end onCreate method
17
18 } // end MainActivity class
19
20
21
22
```

Type '.getStr' here ...

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 765 ms (30 minutes ago)

19:45 CRLF UTF-8 4 spaces

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2: Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attractions));
15
16     } // end onCreate method
17
18 } // end MainActivity class
```

... and select this getStringArray method from the code completion menu

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (31 minutes ago) 19:52 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure Favorites 2:Layout Captures

```
activity_main.xml MainActivity.java
```

1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7 @Override
8 protected void onCreate(Bundle savedInstanceState) {
9 super.onCreate(savedInstanceState);
10
11 // convert the 'attraction' string-array to a list
12
13 List<String> Attractions =
14 Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16 } // end onCreate method
17
18 } // end MainActivity class
19
20
21
22

This method argument
is the resource id of the
attraction string-array

MainActivity > onCreate()

Todo Terminal Build Logcat Event Log

Source generation ended in 765 ms (31 minutes ago) 19:82 CRLF UTF-8 4 spaces



1:Project

Resource Manager

Build Variants

Favorites

Layout Captures

TODO Terminal Build Logcat

Source generation ended in 765 ms (32 minutes ago)

21:52 CRLF UTF-8 4 spaces

CityGuide > app > src > main > java > edu > udayton > cityguide > MainActivity

Android

1:Project

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Resource Manager

Gradle Scripts

```
activity_main.xml x MainActivity.java x
```

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17     } // end onCreate method
18 } // end MainActivity class
19
20
21
22
23
24
```

Now, we can use the Attractions List to make a new ArrayAdapter to which we set the activity's list adapter (similar to the code shown on page 185).

MainActivity > onCreate()

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure Favorites 2:Layout Captures Event Log

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         } // end onCreate method
19     } // end MainActivity class
20
21
22
23
24
25
26
```

Type 'setListAdapter(new ArrayAdapter<String>(this, R.layout.list_item, Attractions))'; here ...

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 765 ms (32 minutes ago)

23:9 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2: Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the ListAdapter adapter
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.list_item, Attractions));
19
20     } // end onCreate
21 } // end MainActivity
```

... and select this android.widget.ArrayAdapter generic class from the code completion menu

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

'setListAdapter(android.widget.ListAdapter)' cannot be applied to '0'

23:33 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure Favorites 2:Layout Captures

```
activity_main.xml MainActivity.java
```

1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7 @Override
8 protected void onCreate(Bundle savedInstanceState) {
9 super.onCreate(savedInstanceState);
10
11 // convert the attraction array into a list
12 List<String> attractions = new ArrayList<String>();
13 attractions.add("The U.S. Space & Rocket Center");
14 attractions.add("The National Civil Rights Museum");
15 attractions.add("The Country Music Hall of Fame and Museum");
16 attractions.add("The World's Largest Rock");
17 attractions.add("The Alabama Shakespeare Festival");
18 attractions.add("The Alabama Department of Archives and History");
19 attractions.add("The Birmingham Civil Rights Institute");
20 attractions.add("The Vulcan Park and Museum");
21 attractions.add("The Alabama Zoo");
22 attractions.add("The Birmingham Botanical Gardens");
23 attractions.add("The Birmingham Museum of Art");
24 setListAdapter(new ArrayAdapter<String>(this, R.layout.list_item, attractions));
25 } // end onCreate method
26 } // end MainActivity class

2. Add the ArrayAdapter constructor arguments as shown on the next page

1. Add the type argument 'String' for the generic

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Cannot resolve constructor 'ArrayAdapter()' 24:49 CRLF UTF-8 4 spaces

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Gradle

1. The Context (activity) to which this adapter is "listening"

2. The layout (resource) used by the adapter

3. The TextView for displaying each item in the list

4. The list of Strings (created from the attraction string-array)

Add the ArrayAdapter constructor arguments as shown here

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attractions' string array to a list
12         List<String> Attractions = Arrays.asList(g
13             "Attraction 1", "Attraction 2", "Attraction 3");
14
15         // inflate the UI with the Attractions list
16         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
17             Attractions));
18
19     } // end onCreate method
20
21     // end MainActivity class
22 }
```

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants Layout Captures 2: Favorites 2: Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20
21     } // end onCreate method
22
23
24     // handle user taps on the list items
25 }
26 // end MainActivity class
27
28
29
30 }
```

We can now add the onListItemClick method definition

Review "Using the onListItemClick" method on pages 193-194 of Android Boot Camp

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (34 minutes ago) 28:42 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2:Favorites Layout Captures

```
activity_main.xml MainActivity.java
```

1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7 @Override
8 protected void onCreate(Bundle savedInstanceState) {
9 super.onCreate(savedInstanceState);
10
11 // convert the 'attraction' string-array to a list
12
13 List<String> Attractions =
14 Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16 // inflate the UI with the Attractions list
17
18 setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19 R.id.travel, Attractions));
20 } // end onCreate method
21
22 // handle user taps on the list items
23
24 } // end MainActivity class

Type 'protected void onListItemClick(ListV' on this line ...

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (34 minutes ago) 30:5 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I:Structure

I:Favorites

Layout Captures

2:Favorites

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20     } // end onCreate method
21
22
23     // handle user taps on the list items
24
25     protected void onListItemClick(ListView listView)
26     } // end MainActivity class
27
28
29
30
31
32 }
```

... and select the android.widget.ListView class from the code completion menu

MainActivity > onListItemClick()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (35 minutes ago) 30:41 CRLF UTF-8 4 spaces

The screenshot shows the Android Studio interface with the project 'CityGuide' open. The 'MainActivity.java' file is selected in the editor. A code completion dropdown is displayed at the cursor position, listing several ListView-related classes. The class 'ListView (android.widget)' is highlighted with a yellow arrow pointing to it. A yellow callout box contains the instruction: "... and select the android.widget.ListView class from the code completion menu". The bottom status bar indicates that source generation ended 35 minutes ago.

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

Android

Project

Resource Manager

Gradle

1:Project

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I: Structure

2: Favorites

Layout Captures

2: Favorites

Identifier expected

MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12         List<String> Attractions =
13             Arrays.asList(getResources().getStringArray(R.array.attraction));
14
15         // inflate the UI with the Attractions list
16         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
17             R.id.travel, Attractions));
18     } // end onCreate method
19
20     // handle user taps on the list items
21
22     protected void onListItemClick(ListView l, View v, int position, long id) {
23         // do something with the attraction at position
24     }
25
26 } // end MainActivity class
```

Type 'I, View' here ...

MainActivity > onListItemClick()

TODO Terminal Build Logcat Event Log

Identifier expected 31:44 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2:Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12         List<String> Attractions =
13             Arrays.asList(getResources().getStringArray(R.array.attraction));
14
15         // inflate the UI with the Attractions list
16
17         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
18             R.id.travel, Attractions));
19
20     } // end onCreate method
21
22
23     // handle user taps on the list items
24
25     protected void onListItemClick(ListView l, View v)
26     } // end MainActivity class
27
28
29
30
31
32
33 }
```

... and select the android.view.View class from the code completion menu

MainActivity > onListItemClick()

Todo Terminal Build Logcat Event Log

Source generation ended in 765 ms (35 minutes ago) 31:52 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide>MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants Layout Captures 2: Favorites 2: Layout Captures

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20
21     } // end onCreate method
22
23
24     // handle user taps on the list items
25
26     protected void onListItemClick(ListView l, View v, int position, long id) {
27
28 } // end MainActivity class
```

Add the rest of the parameter list, ...

MainActivity

TODO Terminal Build Logcat Event Log

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants 2:Favorites Layout Captures

```
activity_main.xml MainActivity.java
```

1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7 @Override
8 protected void onCreate(Bundle savedInstanceState) {
9 super.onCreate(savedInstanceState);
10
11 // convert the 'attraction' string-array to a list
12 List<String> Attractions =
13 Arrays.asList(getResources().getStringArray(R.array.attraction));
14
15 // inflate the UI with the Attractions list
16 setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
17 R.id.travel, Attractions));
18 } // end onCreate method
19
20 // handle user taps on the list items
21
22 protected void onListItemClick(ListView l, View v, int position, long id)
23 {
24 // end onListItemClick handler []
25 } // end onListItemClick handler []
26 } // end MainActivity class

Add a line comment to tag the end of the onListItemClick method

... followed by the method's statement block

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (36 minutes ago) 35:37 CRLF UTF-8 4 spaces



1:Project

Resource Manager

Build Variants

Favorites

Layout Captures

CityGuide > app > src > main > java > edu > udayton > cityguide > MainActivity

Android

1:Project

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Resource Manager

Gradle Scripts

```
activity_main.xml x MainActivity.java x
```

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20
21     } // end onCreate method
22
23
24     // handle user taps on the list items
25
26     protected void onListItemClick(ListView l, View v, int position, long id)
27     {
28         Intent i;
29
30         i = new Intent("android.intent.action.VIEW");
31
32         i.setData(Uri.parse("http://www.udayton.edu"));
33
34         l.setAdapter(null);
35
36     } // end onL
37 } // end MainAct
```

In the onListItemClick method, we'll declare a single Intent variable at the start of the method code, since we will be creating an Intent no matter what:

for each of the first 2 list items, we create an implicit intent that requests a web site be opened by the system in the device web browser:

for each of the last 3 list items, we create an explicit intent (as we did for the Healthy Recipes app) to display another activity on the screen.

You should now review "Android Intents" on pages 197-198 of Android Boot Camp.

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2:Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20
21     } // end onCreate method
22
23
24     // handle user taps on the list items
25
26     protected void onListItemClick(ListView l, View v, int position, long id)
27     {
28         Intent i = new Intent("android.intent.action.VIEW",
29             Uri.parse("http://www.udayton.edu"));
30
31         i.putExtra("Attraction", Attractions.get(position));
32
33         startActivity(i);
34     } // end onListItemClick
35
36 } // end MainActivity class
37
```

MainActivity > onListItemClick()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (36 minutes ago) 34:9 CRLF UTF-8 4 spaces

To start the Intent variable declaration, type 'Int' here ...

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure Favorites Layout Captures 2:Favorites Device File Explorer

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20
21     } // end onCreate method
22
23
24     // handle user taps on the list items
25
26     protected void onListItemClick(ListView l, View v, int position, long id)
27     {
28
29         Intent i = new Intent(android.content.Intent.ACTION_SEND);
30         i.setType("text/plain");
31         i.putExtra(Intent.EXTRA_TEXT, Attractions.get(position));
32
33         startActivity(i);
34     }
35 }
```

... and select the android.context.Intent class from the code completion menu

MainActivity > onListItemClick()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (36 minutes ago) 34:12 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager Build Variants I:Structure 2:Favorites Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20     } // end onCreate method
21
22     // handle user taps on the list items
23
24     protected void onListItemClick(ListView l, View v, int position, long id)
25     {
26         Intent itemIntent; [ ] // end onListItemClick handler
27     } // end MainActivity class
28 }
```

MainActivity > onListItemClick()

TODO Terminal Build Logcat Event Log

Source generation ended in 765 ms (37 minutes ago) 35:27 CRLF UTF-8 4 spaces

A yellow callout box with the text "Complete this Intent variable declaration" points to the opening brace of the "onListItemClick" method at line 24.

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project Resource Manager

Android

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
- edu.udayton.cityguide (androidTest)
- edu.udayton.cityguide (test)

generatedJava

res

- drawable
- layout
- mipmap
- values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I: Structure

2: Favorites

Layout Captures

MainActivity.java

```
1 package edu.udayton.cityguide;
2
3 import ...
4
5 public class MainActivity extends ListActivity {
6
7     @Override
8     protected void onCreate(Bundle savedInstanceState) {
9         super.onCreate(savedInstanceState);
10
11         // convert the 'attraction' string-array to a list
12
13         List<String> Attractions =
14             Arrays.asList(getResources().getStringArray(R.array.attraction));
15
16         // inflate the UI with the Attractions list
17
18         setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
19             R.id.travel, Attractions));
20     } // end onCreate method
21
22     // handle user taps on the list items
23
24     protected void onListItemClick(ListView l, View v, int position, long id)
25     {
26         Intent itemIntent;
27
28         itemIntent = new Intent("android.intent.action.VIEW",
29             Uri.parse("http://www.udayton.edu/" + Attractions.get(position)));
30
31         startActivity(itemIntent);
32     } // end onListItemClick()
33 } // end MainActivity
```

We can use a switch statement (reviewed on pages 195-196 of Android Boot Camp) to determine what action to take based on the list item's position (i.e., index), the 3rd method parameter

I

"Index? Like an index in an array?"

Exactly! The position passed to onListItemClick as the 3rd parameter works just like an array index:

- 0 is the position of the first list item
- 1 is the position of the second list item
- ...
(n-1) is the position of the nth list item

MainActivity > onListItemClick()

TODO Terminal Build Logcat

Source generation ended in 765 ms (37 minutes ago)

37:9 CRLF ÷ UTF-8 ÷ 4 spaces ÷

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project

Android

Resource Manager

1:Project

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Gradle Scripts

Build Variants

I:Structure

I:Favorites

Layout Captures

activity_main.xml

MainActivity.java

```
import ...  
public class MainActivity extends ListActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, int position, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                break;  
            case 1:      // Magnificent Mile (web page)  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick  
} // end MainActivity class
```

>MainActivity > onListItemClick()

"Why the default? There are five list items."
As programmers, in general, it's always best to "err on the side of caution", so if something strange happens, our code can deal with it (e.g., display a message in the form of a Toast).

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

```
import ...
public class MainActivity extends ListActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        // convert the 'attraction' string-array to a list
        List<String> Attractions =
            Arrays.asList(getResources().getStringArray(R.array.attraction));

        // inflate the UI with the Attractions list
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
            R.id.travel, Attractions));
    } // end onCreate method

    // handle user taps on the list items
    protected void onListItemClick(ListView l, View v, int position, long id)
    {
        Intent itemIntent;

        switch (position)
        {
            case 0: // Art Insti
                break;
            case 1: // Magnifice
                break;
            case 2: // Willis Tower (image)
                break;
            case 3: // Navy Pier (image)
                break;
            case 4: // Water Tower (image)
                break;
            default:
                break;
        } // end switch
    } // end onListItemClick handler
} // end MainActivity class
```

MainActivity > onListItemClick()

For the first list item, we create the intent as an implicit intent with the web address of the Art Institute of Chicago ...

Device File Explorer



1:Project

Resource Manager

Build Variants

Structure

Favorites

Layout Captures

TODO

Terminal

Build

Logcat

Source generation ended in 765 ms (41 minutes ago)

40:64 CRLF ÷ UTF-8 ÷ 4 spaces ÷

CityGuide > app > src > main > java > edu > udayton > cityguide > MainActivity

Android

1:Project

app

- manifests
- java
 - edu.udayton.cityguide
 - MainActivity
 - edu.udayton.cityguide (androidTest)
 - edu.udayton.cityguide (test)
- generatedJava
- res
 - drawable
 - layout
 - mipmap
 - values
 - colors.xml
 - dimens.xml
 - strings.xml
 - styles.xml

Resource Manager

Gradle

activity_main.xml > MainActivity.java

```
import ...

public class MainActivity extends ListActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        // convert the 'attraction' string-array to a list

        List<String> Attractions =
            Arrays.asList(getResources().getStringArray(R.array.attraction));

        // inflate the UI with the Attractions list

        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
            R.id.travel, Attractions));
    } // end onCreate method

    // handle user taps on the list items

    protected void onListItemClick(ListView l, View v, int position, long id)
    {
        Intent itemIntent;

        switch (position)
        {
            case 0:      // Art Institute of Chicago (web page)
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri);
                break;
            case 1:      // Magnificent Mile (web page)
                break;
            case 2:      // Willis Tower (image)
                break;
            case 3:      // Navy Pier (image)
                break;
            case 4:      // Water Tower (image)
                break;
            default:
                break;
        } // end switch
    } // end onListItemClick handler
} // end MainActivity class
```

1. Type this code

2. Select the android.net.Uri class from the code completion menu

Uri (android.net)

- URI (java.net)
- Uri.EMPTY (android.net)
- Uri.fromFile(File file) (android.net)
- Uri.fromParts(String scheme, String ssp, String fragment) .. Uri
- Uri.parse(String uriString) (android.net)
- Uri.withAppendedPath(Uri baseUri, String pathSegment) (and.. Uri)
- UriMatcher (android.content)
- UriPermission (android.content)
- URISyntaxException (java.net)
- URIResolver (javax.xml.transform)

MainActivity > onListItemClick()

Event Log

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project

Resource Manager

Gradle Scripts

Build Variants

I:Structure

Layout Captures

2:Favorites

Device File Explorer

activity_main.xml MainActivity.java

```
import ...  
public class MainActivity extends ListActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));  
                break;  
            case 1:      // Magnificent Mile (web page)  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick handler  
} // end MainActivity class
```

Add this call to the Uri's static parse method

The argument to Uri.parse is a string with the location of the Art Institute's web site

MainActivity > onListItemClick()

TODO Terminal Build Logcat

Source generation ended in 765 ms (42 minutes ago)

41:92 CRLF ÷ UTF-8 ÷ 4 spaces ÷

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

```
import ...  
public class MainActivity extends ListActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, int position, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));  
                break;  
            case 1:      // Magnificent Mile (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick handler  
} // end MainActivity class
```

MainActivity > onListItemClick()

We use similar syntax to create the implicit intent to display the Magnificent Mile's web site in the device's web browser

Device File Explorer

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Build the project

Make Project (Ctrl+F9)

Let's preview our app and make sure the list is displayed correctly.

```
activity_main.xml MainActivity.java
```

import ...

```
public class MainActivity extends ListActivity {
```

```
    @Override
```

```
    protected void onCreate(Bundle savedInstanceState) {
```

```
        super.onCreate(savedInstanceState);
```

```
        // convert the 'attraction' string-array to a list
```

```
        List<String> Attractions =
```

```
            Arrays.asList(getResources().getStringArray(R.array.attraction));
```

```
        // inflate the UI with the Attractions list
```

```
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,
```

```
                    R.id.travel, Attractions));
```

```
    } // end onCreate method
```

```
    // handle user taps on the list items
```

```
    protected void onListItemClick(ListView l, View v, int position, long id)
```

```
    {
```

```
        Intent itemIntent;
```

```
        switch (position)
```

```
        {
```

```
            case 0:      // Art Institute of Chicago (web page)
```

```
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));
```

```
                break;
```

```
            case 1:      // Magnificent Mile (web page)
```

```
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));
```

```
                break;
```

```
            case 2:      // Willis Tower (image)
```

```
                break;
```

```
            case 3:      // Navy Pier (image)
```

```
                break;
```

```
            case 4:      // Water Tower (image)
```

```
                break;
```

```
            default:
```

```
                break;
```

```
        } // end switch
```

```
    } // end onListItemClick handler
```

```
} // end MainActivity class
```

MainActivity > onListItemClick()

TODO Terminal Build Logcat

Source generation ended in 765 ms (45 minutes ago)

44:105 CRLF ï UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

AVD Manager

Open the AVD Manager

activity_main.xml MainActivity.java

```
import ...  
public class MainActivity extends ListActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, int position, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));  
                break;  
            case 1:      // Magnificent Mile (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick handler  
} // end MainActivity class
```

MainActivity > onListItemClick()

TODO Terminal Build Logcat

Gradle build finished in 13 s 290 ms (moments ago)

44:105 CRLF ÷ UTF-8 ÷ 4 spaces ÷



CityGuide

Android Virtual Device Manager

Your Virtual Devices

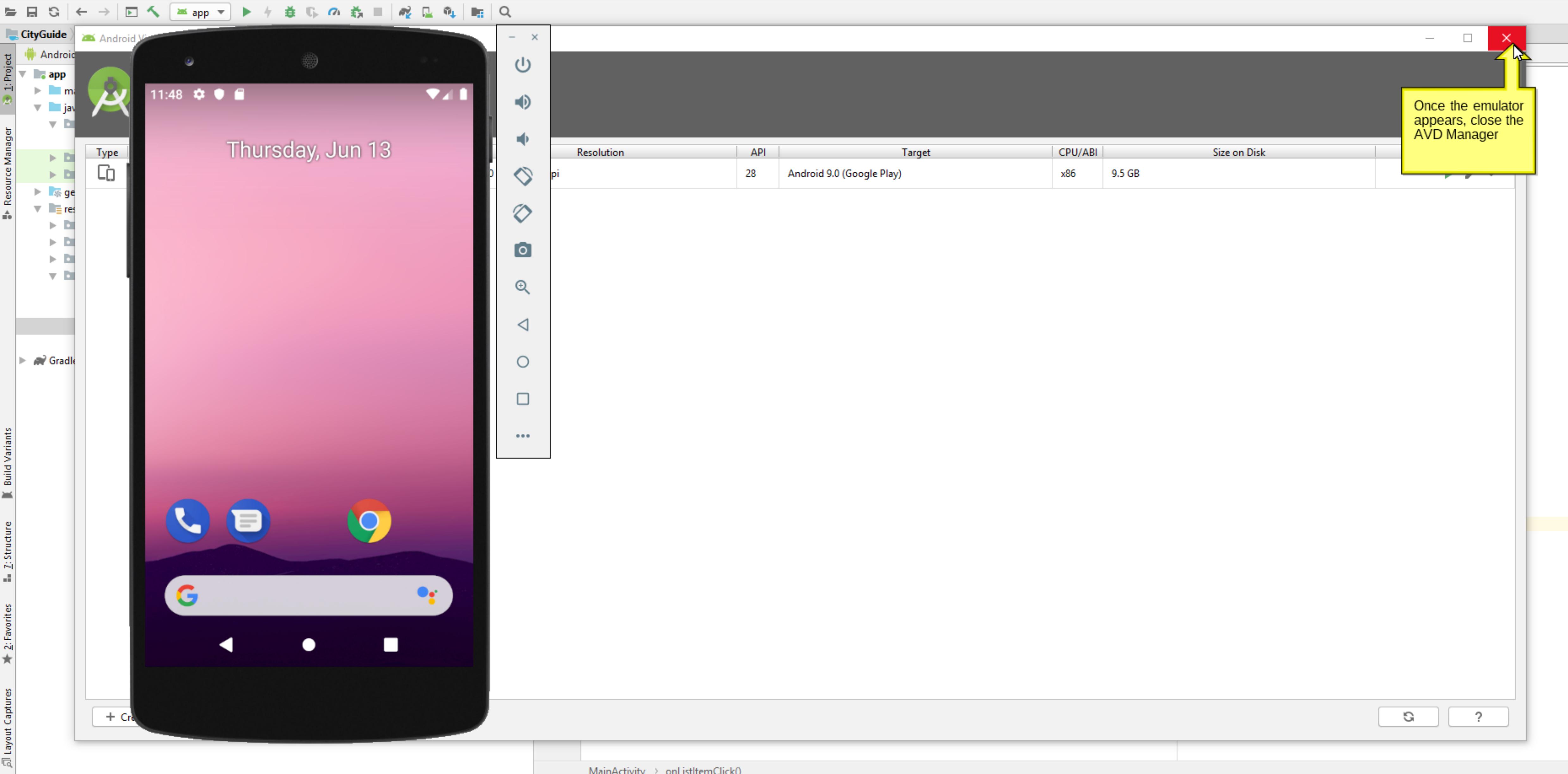
Android Studio

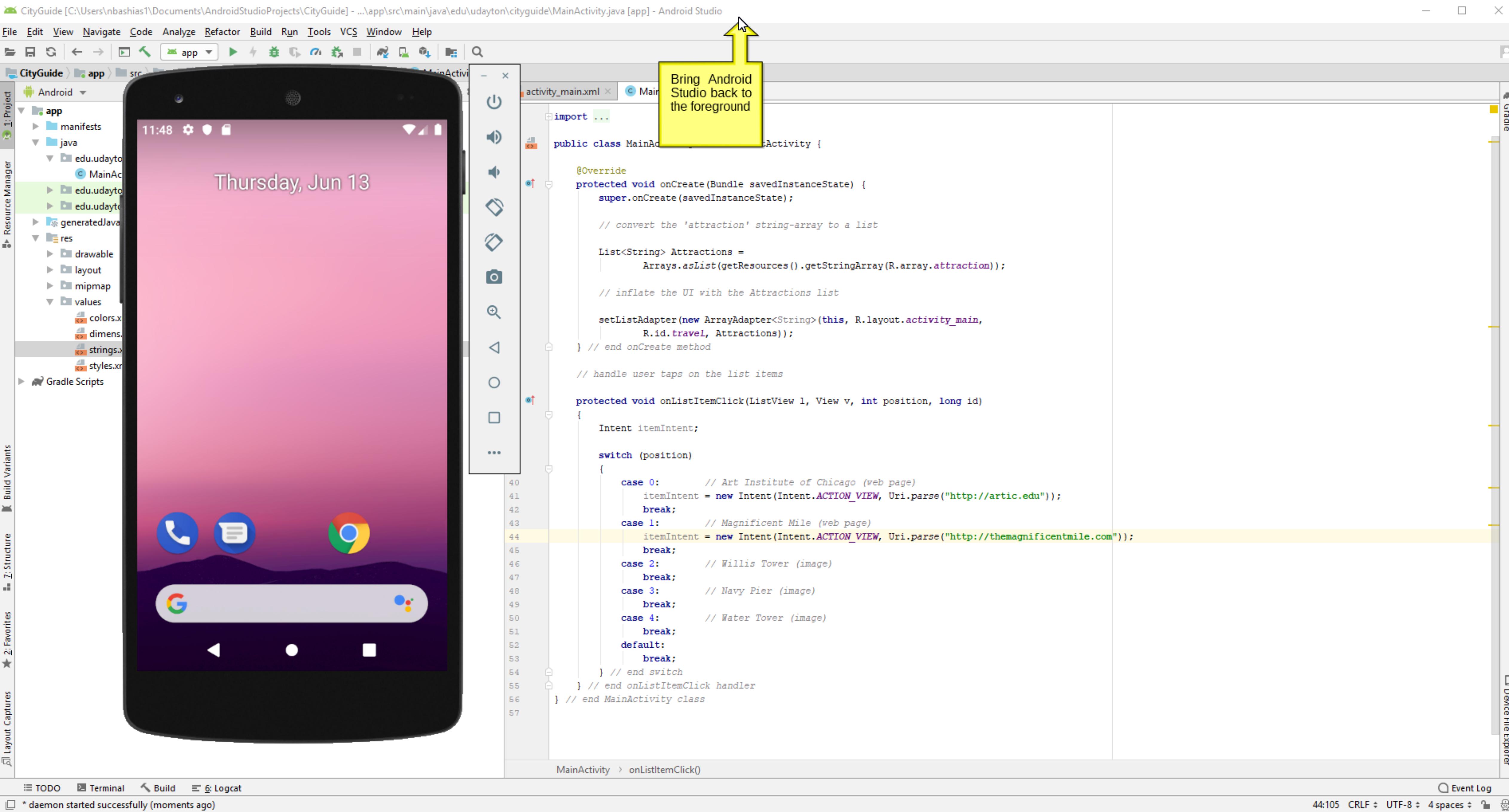
Type	Name	Play Store	Resolution	API	Target	CPU/ABI	Size on Disk	Actions
Emulator	Nexus 5 Pie	▶	1080 × 1920: xxhdpi	28	Android 9.0 (Google Play)	x86	9.5 GB	

+ Create Virtual Device...

Open the emulator with the virtual Nexus 5

MainActivity > onListItemClick()





CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

Run the app

CityGuide app src main java edu cityguide MainActivity

1:Project

Resource Manager

Gradle Scripts

Build Variants

I:Structure

2:Favorites

Layout Captures

Device File Explorer

activity_main.xml MainActivity.java

```
import ...  
public class MainActivity extends ListActivity {  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, int position, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));  
                break;  
            case 1:      // Magnificent Mile (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick handler  
} // end MainActivity class
```

MainActivity > onListItemClick()

TODO Terminal Build Logcat

Run selected configuration

44:105 CRLF UTF-8 4 spaces

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src main java edu udayton cityguide MainActivity

1:Project

Resource Manager

Gradle

Activity_main.xml MainActivity.java

3 import ...
14
15 public class MainActivity extends ListActivity {
16
17 @Override
18 protected void onCreate(Bundle savedInstanceState) {
19 super.onCreate(savedInstanceState);

Select Deployment Target

Connected Devices

Nexus 5 Pie (Android 9, API 28)

Create New Virtual Device

Use same selection for future launches

OK Cancel Help

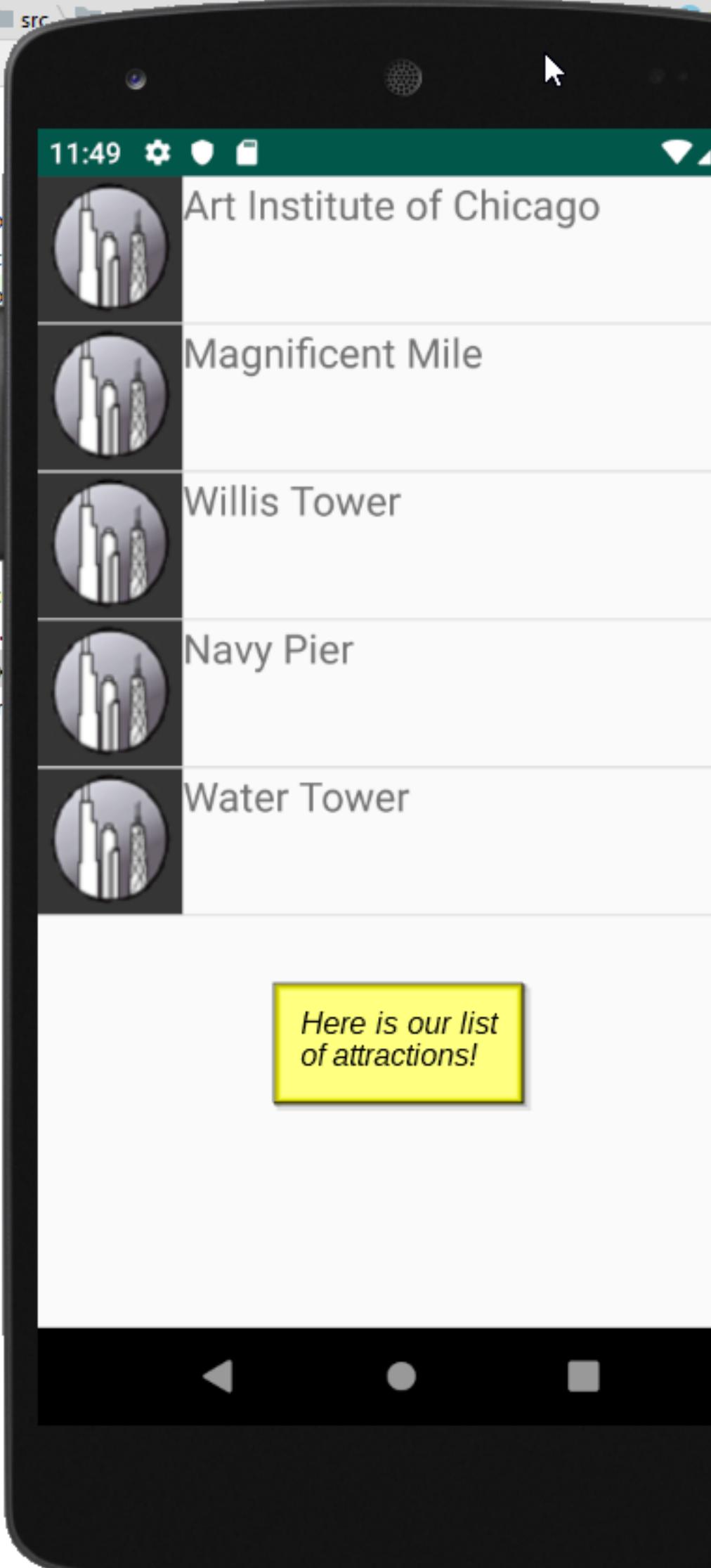
Confirm we're using the running virtual Nexus 5

49 break;
50 case 4: // Water Tower (image)
51 break;
52 default:
53 break;
54 } // end switch
55 } // end onListItemClick handler
56 } // end MainActivity class

MainActivity > onListItemClick()

Todo Terminal Build Logcat Event Log

* daemon started successfully (a minute ago) 44:105 CRLF UTF-8 4 spaces



The screenshot shows an Android application running on a virtual device. The device screen displays a list of five attractions: Art Institute of Chicago, Magnificent Mile, Willis Tower, Navy Pier, and Water Tower. Each item in the list has a small thumbnail image to its left. A yellow callout box at the bottom left of the screen contains the text "Here is our list of attractions!". The application's interface is simple, using a white background and black text.

activity_main.xml x MainActivity.java x

```
import ...  
  
public class MainActivity extends ListActivity {  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
  
        // convert the 'attraction' string-array to a list  
  
        List<String> Attractions =  
            Arrays.asList(getResources().getStringArray(R.array.attraction));  
  
        // inflate the UI with the Attractions list  
  
        setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,  
            R.id.travel, Attractions));  
    } // end onCreate method  
  
    // handle user taps on the list items  
  
    protected void onListItemClick(ListView l, View v, int position, long id)  
    {  
        Intent itemIntent;  
  
        switch (position)  
        {  
            case 0:      // Art Institute of Chicago (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));  
                break;  
            case 1:      // Magnificent Mile (web page)  
                itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));  
                break;  
            case 2:      // Willis Tower (image)  
                break;  
            case 3:      // Navy Pier (image)  
                break;  
            case 4:      // Water Tower (image)  
                break;  
            default:  
                break;  
        } // end switch  
    } // end onListItemClick handler  
} // end MainActivity class
```

MainActivity > onListItemClick()

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app src MainActivity.java

1: Project

Resource Manager

Gradle Scripts

Build Variants

I: Structure

2: Favorites

Layout Captures

Device File Explorer

Import

Activity Main

activity_main.xml

MainActivity

public class MainActivity extends ListActivity {

 @Override

 protected void onCreate(Bundle savedInstanceState) {

 super.onCreate(savedInstanceState);

 // convert the 'attraction' string-array to a list

 List<String> Attractions =

 Arrays.asList(getResources().getStringArray(R.array.attraction));

 // inflate the UI with the Attractions list

 setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,

 R.id.travel, Attractions));

 } // end onCreate method

 // handle user taps on the list items

 protected void onListItemClick(ListView l, View v, int position, long id)

 {

 Intent itemIntent;

 switch (position)

 {

 case 0: // Art Institute of Chicago (web page)

 itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://artic.edu"));

 break;

 case 1: // Magnificent Mile (web page)

 itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));

 break;

 case 2: // Willis Tower (image)

 break;

 case 3: // Navy Pier (image)

 break;

 case 4: // Water Tower (image)

 break;

 default:

 break;

 } // end switch

 } // end onListItemClick handler

} // end MainActivity class

MainActivity > onListItemClick()

Bring Android Studio back to the foreground

44:105 CRLF ï UTF-8 ï 4 spaces

Since we'll be using it again later, we'll leave the emulator running

The screenshot shows the Android Studio interface with the CityGuide project open. On the left, the emulator displays a list of five attractions: Art Institute of Chicago, Magnificent Mile, Willis Tower, Navy Pier, and Water Tower. Each item in the list includes a small thumbnail image. A yellow callout box with the text "Bring Android Studio back to the foreground" has an arrow pointing towards the top center of the screen. Another yellow callout box with the text "Since we'll be using it again later, we'll leave the emulator running" has an arrow pointing towards the bottom left of the screen. The code editor on the right shows the MainActivity.java file with the onListItemClick() method highlighted. The code implements a switch statement to handle user taps on the list items, opening web pages or displaying images based on the position.

CityGuide [C:\Users\nbashias1\Documents\AndroidStudioProjects\CityGuide] - ...app\src\main\java\edu\udayton\cityguide\MainActivity.java [app] - Android Studio

File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help

CityGuide app

1:Project

Resource Manager

Gradle

Activity_main.xml MainActivity.java

import ...

public class MainActivity extends ListActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

// convert the 'attraction' string-array to a list

List<String> Attractions =

Arrays.asList(getResources().getStringArray(R.array.attraction));

// inflate the UI with the Attractions list

setListAdapter(new ArrayAdapter<String>(this, R.layout.activity_main,

R.id.travel, Attractions));

} // end onCreate method

// handle user taps on the list items

protected void onListItemClick(ListView listView, View view, int position, long id) {

Intent itemIntent;

switch (position) {

case 0: // Art Institute

itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://theartinstitution.com"));

break;

case 1: // Magnificent Mile (web page)

itemIntent = new Intent(Intent.ACTION_VIEW, Uri.parse("http://themagnificentmile.com"));

break;

case 2: // Willis Tower (image)

break;

case 3: // Navy Pier (image)

break;

case 4: // Water Tower (image)

break;

default:

break;

} // end switch

} // end onListItemClick handler

} // end MainActivity class

This concludes Part 2 of Lesson 5.

In Part 3 of this lesson, we create a single additional Activity, and then use Intents with extras to display the respective image for each of the last three list items. We also test our app using the emulator with the Nexus 5 system image.

MainActivity > onListItemClick()

TODO Terminal Build Logcat Profiler Run Event Log

Gradle build finished in 12 s 13 ms (moments ago) 44:105 CRLF UTF-8 4 spaces