

SailingAdventures [C:\Users\Nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...app\src\main\res\layout\activity_main.xml [app] - Android Studio

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

SailingAdventures app src main res layout ac [app] C:\Users\Nbashias1\Documents\AndroidStudioProjects\SailingAdventures\app\src\main\java\edu\udayton\sailingadventures\MainActivity.java

1:Project

Resource Manager

Palette

Common Text Buttons Widgets Layouts Containers Google Legacy

Switch to the main activity's Java code

Nexus_5_Pie 28 AppTheme Default (en-us) 28% Attributes

Ab TextView

onClick overScrollMode

padding padding @dimen/stdResPadding

paddingLeft paddingTop paddingRight paddingBottom

password phoneNumber privateimeOptions requiresFadingEdge

rotation rotationX rotationY

saveEnabled scaleX scaleY scrollHorizontally

scrollIX scrollY scrollbarAlwaysDraw scrollbarDefaultDelt scrollbarFadeDuration scrollbarSize scrollbarStyle

scrollbarThumbHoriz scrollbarThumbVerti scrollbarTrackHorizo scrollbarTrackVertica scrollbars

Gradle

Activity Main

MainActivity.java

activity_main.xml

Sailing Adventures - Kona, Hawaii

Sailing Adventures located at Kona Harbor on the Big Island in Hawaii, has a simple sailing philosophy - We Create Adventure! Our experience, expertise and knowledge of the high seas provide our customers with the best chance of having an enjoyable and productive sailing adventure. Select a date for your sailing day trip.

Select the Date for a Full-Day Sailing Trip

SailboatImageview

tblLayout

tblRow1

View

titleTextView- "@string/

tblRow2

View

descTextView- "@str... A

tblRow3

View

btnDate- "@string/btn...

tblRow4

View

resTextView

Component Tree

LinearLayout(horizontal)

Sailing Adventures - Kona, Hawaii

Sailing Adventures

SELECT THE DATE FOR A FULL-DAY SAILING TRIP

Design Text

TODO Terminal Build Logcat

Event Log

Source generation ended in 718 ms (today 12:52 PM)

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

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

Add line comments as the closing tags for both the onCreate method and the MainActivity class

2: Favorites

Build Variants

Layout Captures

Device File Explorer

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

13:28 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

Android 1:Project

app manifests AndroidManifest.xml java edu.udayton.sailingadventures MainActivity androidTest 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.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     ...
7
8     @Override
9     protected void onCreate(Bundle savedInstanceState) {
10         super.onCreate(savedInstanceState);
11         setContentView(R.layout.activity_main);
12     } // end onCreate method
13 } // end MainActivity class
```

Place the cursor at the start of the MainActivity class block to add the reference variable (data field) for the output TextView

Note that, unlike Chapter 8 of the textbook, we give each of our variables the same name as the UI component that it is referencing.

This is a common technique among Android programmers for remembering which UI component is referenced by each variable or named constant.

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 6:54 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project Resource Manager

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5
6 public class MainActivity extends AppCompatActivity {
7
8     Add a blank line, then type 'private TextView'
9     on the following line ...
10
11     @Override
12     protected void onCreate(Bundle savedInstanceState) {
13         super.onCreate(savedInstanceState);
14         setContentView(R.layout.activity_main);
15     } // end onCreate method
16 } // end MainActivity class
```

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM) 8:5 CRLF UTF-8 4 spaces

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity.java

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

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

Device File Explorer

Todo Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM) 8:18 CRLF UTF-8 4 spaces

The screenshot shows the Android Studio interface with the project 'SailingAdventures' open. In the code editor, a 'TextView' declaration is being typed in the 'MainActivity.java' file. A code completion dropdown menu is displayed, listing various TextView classes from the Android framework. The 'TextView (android.widget)' option is highlighted with a blue selection bar. A yellow callout box with the text "... and select the android.widget.TextView class from the code completion menu" points to this highlighted option. The background of the callout box is yellow, and it has a black border.

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

2: Structure

MainActivity

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6     private TextView resTextView; // output TextView
7     ...
8
9     @Override
10    protected void onCreate(Bundle savedInstanceState) {
11        super.onCreate(savedInstanceState);
12        setContentView(R.layout.activity_main);
13    } // end onCreate method
14 } // end MainActivity class
15
16
17
```

Complete this declaration
for the resTextView data
field

Device File Explorer

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM) 9:53 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project Resource Manager

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (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.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9
10    @Override
11    protected void onCreate(Bundle savedInstanceState) {
12        super.onCreate(savedInstanceState);
13        setContentView(R.layout.activity_main);
14    } // end onCreate method
15
16 } // end MainActivity class
```

Type 'private static final Calendar' here ...

Now we can add named constant fields in MainActivity for both the Calendar and the DateFormat objects

These classes are described on pages 322-323 of Android Boot Camp

MainActivity

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

11:5 CRLF UTF-8 4 spaces

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (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.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9
10    private static final Calen...
11    @Override
12    protected void onCreate(Bundle savedInstanceState) {
13        super.onCreate(savedInstanceState);
14        setContentView(R.layout.activity_main);
15    }
16
17 } // end onCreate()
18 } // end MainActivity
```

... and select the java.util.Calendar class from the code completion menu

Calendar (java.util)

Calendar (android.icu.util)

CalendarView (android.widget)

CalendarAlerts (android.provider)

CalendarCache (android.provider)

CalendarContract (android.provider)

CalendarEntity (android.provider.CalendarContract)

Calendars (android.provider.CalendarContract)

ConfirmationAlreadyPresentingException (android.security)

GregorianCalendar (java.util)

XMLGregorianCalendar (javax.xml.datatype)

DayInMonth (com.android.internal.util)

Layout Captures

2: Favorites

Build Variants

MainActivity

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

11:30 CRLF UTF-8 4 spaces

Device File Explorer

Event Log

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

Gradle

Android

app

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance(); I
10
11     @Override
12     protected void onCreate(Bundle savedInstanceState) {
13         super.onCreate(savedInstanceState);
14         setContentView(R.layout.activity_main);
15     } // end onCreate method
16 } // end MainActivity class
```

Complete this statement to declare and create the Calendar object referred to by the cal data field

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

13:64 CRLF UTF-8 4 spaces

Event Log

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity

activity_main.xml

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11
12
13
14
15     On the next line, type 'private static final DateFormat ...
16
17
18     @Override
19     protected void onCreate(Bundle savedInstanceState) {
20         super.onCreate(savedInstanceState);
21         setContentView(R.layout.activity_main);
22     } // end onCreate method
23 } // end MainActivity class
```

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

15:5 CRLF UTF-8 4 spaces

Event Log

Device File Explorer

The screenshot shows the Android Studio interface with the project 'SailingAdventures' open. The 'MainActivity.java' file is the active editor. The code editor displays the following Java code:

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11
12
13
14
15     On the next line, type 'private static final DateFormat ...
16
17
18     @Override
19     protected void onCreate(Bundle savedInstanceState) {
20         super.onCreate(savedInstanceState);
21         setContentView(R.layout.activity_main);
22     } // end onCreate method
23 } // end MainActivity class
```

A yellow callout box with the text "On the next line, type 'private static final DateFormat ..." is positioned over the line 15 of the code. The code editor has line numbers from 1 to 23. The Java code uses standard conventions like package declarations, imports, and an AppCompatActivity subclass. It includes a private TextView field and a static final Calendar field. The onCreate method is overridden to set the content view to R.layout.activity_main.

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat
12         @Override
13         protected void onCreate(Bundle savedInstanceState) {
14             super.onCreate(savedInstanceState);
15             setContentView(R.layout.activity_main);
16         }
17     } // end onCreate()
18 } // end MainActivity
```

... and select the java.text.DateFormat class from the code completion menu

2: Favorites

Build Variants

Layout Captures

MainActivity

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

15:31 CRLF UTF-8 4 spaces

Device File Explorer

The screenshot shows the Android Studio interface with the project 'SailingAdventures' open. The 'MainActivity.java' file is being edited. In the code editor, at line 15, there is a placeholder for a variable declaration: 'private static final DateFormat'. A code completion dropdown menu is displayed, listing several options under the 'java.text' package. The 'java.text.DateFormat' option is highlighted with a blue selection bar. A yellow callout box with the text '... and select the java.text.DateFormat class from the code completion menu' is positioned over the dropdown menu. The 'Resource Manager' tool window is visible on the left, showing the project structure with 'MainActivity' selected. The bottom navigation bar includes tabs for 'TODO', 'Terminal', 'Build', 'Logcat', and 'Event Log'. The status bar at the bottom shows 'Source generation ended in 718 ms (today 12:52 PM)'.

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

Gradle

Android

app

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance(); I
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17     } // end onCreate method
18 } // end MainActivity class
```

Complete this statement to declare and create the DateFormat object referred to by the fmtDate data field

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

16:76 CRLF UTF-8 4 spaces

Event Log

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

generatedJava

res

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

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20     } // end onCreate method
21 } // end MainActivity class
22
23
24
25
26
27
28
```

In the onCreate method block ...

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

25:9 CRLF ▾ UTF-8 ▾ 4 spaces ▾

Device File Explorer

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml x MainActivity.java x

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView)findViewById(R.id.resTextView);[]]
21     } // end onCreate method
22 } // end MainActivity class
23
24
25
26
27
28
```

... add this statement to create the reference to the output TextView

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 25:64 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

I: Structure

2: Favorites

Build Variants

Layout Captures

TODO Terminal Build Logcat

Event Log

activity_main.xml x MainActivity.java x

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21     } // end onCreate method
22
23     } // end MainActivity class
24
25
26
27
28
29
```

On the following line, type 'But' ...

MainActivity > onCreate()

Source generation ended in 718 ms (today 12:52 PM) 26:9 CRLF UTF-8 4 spaces

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

Gradle

Android

app

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

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21         But
22     }
23
24
25 }
```

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

Device File Explorer

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21         Button btnDate = (Button) findViewById(R.id.btnDate);
22     } // end onCreate method
23 } // end MainActivity class
```

Complete this statement to declare and create the reference variable to the btnDate UI component

MainActivity > onCreate()

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 27:61 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21         Button btnDate = (Button) findViewById(R.id.btnDate);
22     } // end onCreate method
23
24 }
25
26 } // end MainActivity class
```

Now, we'll add the event listeners for the DatePicker and btnDate Button as MainActivity data fields

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

I:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity

activity_main.xml

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21         Button btnDate = (Button) findViewById(R.id.btnDate);
22     } // end onCreate method
23
24
25
26     // set up listener for user choosing a date
27 } // end MainActivity class
```

First, we'll add the OnDateSetListener for the DatePickerDialog

This event listener will execute ('fire') whenever the user selects a date using the DatePickerDialog (which will be created in the btnDate's OnClickListener).

Device File Explorer

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

30:48 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

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

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11     private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13     @Override
14     protected void onCreate(Bundle savedInstanceState) {
15         super.onCreate(savedInstanceState);
16         setContentView(R.layout.activity_main);
17
18         // get UI component references
19
20         resTextView = (TextView) findViewById(R.id.resTextView);
21         Button btnDate = (Button) findViewById(R.id.btnDate);
22     } // end onCreate method
23
24
25     // set up listener for user choosing a date
26
27 } // end MainActivity class
```

Type 'DatePicker' here ...

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 31:5 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

1 package edu.udayton.sailingadventures;

2

3 import ...

4

5 public class MainActivity extends AppCompatActivity {

6

7 private TextView resTextView; // output TextView

8

9 private static final Calendar cal = Calendar.getInstance();

10

11 private static final DateFormat fmtDate = DateFormat.getDateInstance();

12

13 @Override

14 protected void onCreate(Bundle savedInstanceState) {

15 super.onCreate(savedInstanceState);

16 setContentView(R.layout.activity_main);

17

18 // get UI component references

19

20 resTextView = (TextView) findViewById(R.id.resTextView);

21 Button btnDate = (Button) findViewById(R.id.btnDate);

22 } // end onCreate method

23

24

25 // set up listener for user choosing a date

26 DatePickerDialog datePickerDialog;

27 datePickerDialog.show();

28 } // end onCreate method

29

30

31 DatePick

32 C DatePickerDialog (android.app)

33 C DatePicker (android.widget)

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

MainActivity

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

31:13 CRLF UTF-8 4 spaces

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog[] Then, type a period (.)
27
28    } // end MainActivity class
29
30
31
32
33
34
```

TODO Terminal Build Logcat Event Log

Identifier expected 32:21 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml
- java
- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2:Structure

3:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener datePicker...
27} // end MainActivity
```

... and select this OnDateSetListener interface for the DatePickerDialog from the code completion menu

Identifier expected

32:22 CRLF UTF-8 4 spaces

Event Log

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

I:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27        @Override
28        public void onDateSet(DatePicker view, int year, int month, int day) {
29            String dateText = fmtDate.format(cal.getTime());
30            resTextView.setText(dateText);
31        }
32    }; // end MainActivty class
33
34 }
```

After typing a space, type 'dateListener = new Date' here ...

TODO Terminal Build Logcat

Identifier expected

32:39 CRLF UTF-8 4 spaces

Event Log

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project Resource Manager

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

Resource Manager

activity_main.xml

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextview);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new Date
27} // end MainActivity class
```

... and select this DatePickerDialog.OnDateSetListene class from the code completion menu

DatePickerDialog.OnDateSetListener(...)(android.app.DatePickerD

DateFormat (java.text)

DatePickerDialog (android.app)

DateFormat.Field (java.text.DateFormat)

Press Ctrl+Shift+Space to show only variants that are suitable by type

MainActivity

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

32:63 CRLF UTF-8 4 spaces

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project Resource Manager 2:Structure Favorites Build Variants Layout Captures 3:Logcat

Android

app manifests AndroidManifest.xml java edu.udayton.sailingadventures MainActivity (selected) edu.udayton.sailingadventures (androidTest) edu.udayton.sailingadventures (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.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {
30
31            ...
32        }
33    };
34
35    /**
36     * Add the semi-colon at the end of this
37     * declaration/initialization statement
38    }
39 } // end MainActivity class
```

MainActivity

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 38:7 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

3:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {
30
31            // end onDateSet handler I
32            }
33        };
34
35    } // end MainActivity class
36
37
38
39
40 }
```

Add this line comment as a closing tag for the onDateSet event handler

MainActivity > dateListener > new OnDateSetListener

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

37:35 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
30
31            // end onDateSet handler
32        };
33    }; // end MainActivity class
34
35 }
```

Rename the 3rd onDateSet parameter to a more meaningful name, also shown on page 326 of Android Boot Camp

MainActivity > dateListener > new OnDateSetListener > onDateSet()

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 35:73 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

Android

app manifests AndroidManifest.xml

java edu.udayton.sailingadventures MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res drawable layout mipmap values

colors.xml dimens.xml strings.xml styles.xml

Gradle Scripts

I:Structure

2:Favorites

Build Variants

Layout Captures

Layout Explorer

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
30
31            // set the selected date and time in the Calendar
32
33            cal.set(Calendar.YEAR, year);
34            cal.set(Calendar.MONTH, monthOfYear);
35            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth); I
36
37        } // end onDateSet handler
38    };
39
40    } // end MainActivity class
41
42
43
44
45
46
```

Add this code to onDateSet
This sets the date selected in the Calendar based on the parameter values

MainActivity > dateListener > new OnDateSetListener > onDateSet()

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

41:56 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

3:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24    // set up listener for user choosing a date
25    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
26
27        @Override
28        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
29
30            // set the selected date and time in the Calendar
31
32            cal.set(Calendar.YEAR, year);
33            cal.set(Calendar.MONTH, monthOfYear);
34            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
35
36            // get the selected date from the calendar, and show it to the user
37
38            String dateStr = fmtDate.format(cal.getTime());
39            resTextView.setText(dateStr);
40
41        } // end onDateSet handler
42    };
43 } // end MainActivity class
```

To get the date selected in the
Calendar, type 'Date' here ...

MainActivity > dateListener > new OnDateSetListener > onDateSet()

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

45:13 CRLF ï UTF-8 ï 4 spaces

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project

Resource Manager

Gradle

Android

app

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

Gradle Scripts

2:Structure

Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
30
31            // set the selected date and time in the Calendar
32
33            cal.set(Calendar.YEAR, year);
34            cal.set(Calendar.MONTH, monthOfYear);
35            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
36
37            // get the selected date from the calendar, and show it to the user
38
39            Date
40            Date (java.util)
41            Date (java.sql)
42            DatePickerDialog (android.app)
43            DatePicker (android.widget)
44            DateFormat (java.text)
45            DateFormat (android.icu.text)
46            DateFormat (android.text.format)
47            DateFormatSymbols (java.text)
48            DateFormatSymbols (android.icu.text)
49            DateFormatBuilder (android.text.style.TtsSpan)
50            DateFormatSymbols (android.icu.util)
```

... and select the java.util.Date class from the code completion menu

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

3:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
30
31            // set the selected date and time in the Calendar
32
33            cal.set(Calendar.YEAR, year);
34            cal.set(Calendar.MONTH, monthOfYear);
35            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
36
37            // get the selected date from the calendar, and show it to the user
38
39            Date reservedDate = cal.getTime(); I ← Complete this statement
40            // assign the Date variable the date selected
41            // in the Calendar object
42
43        } // end onDateSet handler
44    }; // end MainActivity class
45
46
47
48
49
50
51
```

MainActivity > dateListener > new OnDateSetListener > onDateSet()

The getTime method is described on pages 327-328 of Android Boot Camp

Complete this statement to assign the Date variable the date selected in the Calendar object

46:47 CRLF ÷ UTF-8 ÷ 4 spaces ÷

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

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

SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project Resource Manager 2:Structure Favorites Build Variants Layout Captures 3:Logcat

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22    } // end onCreate method
23
24
25    // set up listener for user choosing a date
26    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
27
28        @Override
29        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
30
31            // set the selected date and time in the Calendar
32
33            cal.set(Calendar.YEAR, year);
34            cal.set(Calendar.MONTH, monthOfYear);
35            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
36
37            // get the selected date from the calendar, and show it to the user
38
39            Date reservedDate = cal.getTime();
40            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
41        } // end onDateSet handler
42    };
43
44 } // end MainActivity class
```

MainActivity > dateListener > new OnDateSetListener > onDateSet()

Add this last statement to onDateSet
This outputs the selected date to the txtReservation TextView

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
import ...

public class MainActivity extends AppCompatActivity {

    private TextView resTextView; // output TextView

    private static final Calendar cal = Calendar.getInstance();

    private static final DateFormat fmtDate = DateFormat.getDateInstance();

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // get UI component references

        resTextView = (TextView)findViewById(R.id.resTextView);
        Button btnDate = (Button)findViewById(R.id.btnDate);
    } // end onCreate method

    // set up listener for user choosing a date
    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
        @Override
        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {

            // set the selected date and time in the Calendar

            cal.set(Calendar.YEAR, year);
            cal.set(Calendar.MONTH, monthOfYear);
            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);

            // get the selected date from the calendar, and show it to the user

            Date reservedDate = cal.getTime();
            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
        } // end onDateSet handler
    };
    // set up listener for the btnDate Button
} // end MainActivity class
```

Now, we'll add the OnClickListener for the btnDate Button

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

```
13
14     public class MainActivity extends AppCompatActivity {
15
16         private TextView resTextView; // output TextView
17
18         private static final Calendar cal = Calendar.getInstance();
19
20         private static final DateFormat fmtDate = DateFormat.getDateInstance();
21
22         @Override
23         protected void onCreate(Bundle savedInstanceState) {
24             super.onCreate(savedInstanceState);
25             setContentView(R.layout.activity_main);
26
27             // get UI component references
28
29             resTextView = (TextView) findViewById(R.id.resTextView);
30             Button btnDate = (Button) findViewById(R.id.btnDate);
31         } // end onCreate method
32
33
34         // set up listener for user choosing a date
35         DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
36             @Override
37             public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
38
39                 // set the selected date and time in the Calendar
40
41                 cal.set(Calendar.YEAR, year);
42                 cal.set(Calendar.MONTH, monthOfYear);
43                 cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
44
45
46                 Date reservedDate = cal.getTime();
47                 resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
48
49             } // end onDateSet handler
50         };
51
52
53         // set up listener for the btnDate Button
54     } // end MainActivity
```

MainActivity

TODO Terminal Build Logcat

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

13
14 public class MainActivity extends AppCompatActivity {
15
16 private TextView resTextView; // output TextView
17
18 private static final Calendar cal = Calendar.getInstance();
19
20 private static final DateFormat fmtDate = DateFormat.getDateInstance();
21
22 @Override
23 protected void onCreate(Bundle savedInstanceState) {
24 super.onCreate(savedInstanceState);
25 setContentView(R.layout.activity_main);
26
27 // get UI component references
28
29 resTextView = (TextView) findViewById(R.id.resTextView);
30 Button btnDate = (Button) findViewById(R.id.btnDate);
31 } // end onCreate method
32
33 // set up listener for user choosing a date
34 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
35 @Override
36 public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
37
38 // set the selected date and time in the Calendar
39
40 cal.set(Calendar.YEAR, year);
41 cal.set(Calendar.MONTH, monthOfYear);
42 cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
43
44 // get the selected date from the calendar, and show it to the user
45
46 Date reservedDate = cal.getTime();
47 resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
48
49 } // end onDateSet handler
50 C Button (android.widget)
51 C ButtonBarLayout (android.support.v7.Widget)
52 E BufferType (android.widget.TextView)
53 But
54 } // end MainActivity class

MainActivity

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

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

53:8 CRLF ÷ UTF-8 ÷ 4 spaces ÷

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

Android

Project

Resource Manager

1: Project

Gradle

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2: Favorites

Build Variants

Layout Captures

MainActivity.java

```
public class MainActivity extends AppCompatActivity {  
    private TextView resTextView; // output TextView  
    private static final Calendar cal = Calendar.getInstance();  
    private static final DateFormat fmtDate = DateFormat.getDateInstance();  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        // get UI component references  
  
        resTextView = (TextView) findViewById(R.id.resTextView);  
        Button btnDate = (Button) findViewById(R.id.btnDate);  
    } // end onCreate method  
  
    // set up listener for user choosing a date  
    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {  
        @Override  
        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {  
  
            // set the selected date and time in the Calendar  
  
            cal.set(Calendar.YEAR, year);  
            cal.set(Calendar.MONTH, monthOfYear);  
            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);  
  
            // get the selected date from the calendar, and show it to the user  
  
            Date reservedDate = cal.getTime();  
            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));  
        } // end onDateSet handler  
    };  
  
    // set up listener for the btnDate Button  
    Button [ Then type a period (. ) ... ]  
} // end MainActivity class
```

MainActivity

TODO Terminal Build Logcat

Identifier expected

53:11 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

13
14 public class MainActivity extends AppCompatActivity {
15
16 private TextView resTextView; // output TextView
17
18 private static final Calendar cal = Calendar.getInstance();
19
20 private static final DateFormat fmtDate = DateFormat.getDateInstance();
21
22 @Override
23 protected void onCreate(Bundle savedInstanceState) {
24 super.onCreate(savedInstanceState);
25 setContentView(R.layout.activity_main);
26
27 // get UI component references
28
29 resTextView = (TextView) findViewById(R.id.resTextView);
30 Button btnDate = (Button) findViewById(R.id.btnDate);
31 } // end onCreate method
32
33 // set up listener for user choosing a date
34 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
35 @Override
36 public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
37
38 // set the selected date and time in the Calendar
39
40 OnClickListener (android.view.View) ←
41 BufferType (android.widget.TextView)
42 OnEditorActionListener (android.widget.TextView)
43 SavedState (android.widget.TextView)
44 OnCreateContextMenuListener (android.view.View)
45 AccessibilityDelegate (android.view.View)
46 BaseSavedState (android.view.View)
47 DragShadowBuilder (android.view.View)
48 MeasureSpec (android.view.View)
49 OnApplyWindowInsetsListener (android.view.View)
50 OnAttachStateChangeListener (android.view.View)
51 /...
52 Button.
53 } // end MainActivity class
54 } // end MainActivity class
55 }

And select this OnClickListener interface from the code completion menu

Identifier expected

53:12 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

```
13
14 public class MainActivity extends AppCompatActivity {
15
16     private TextView resTextView; // output TextView
17
18     private static final Calendar cal = Calendar.getInstance();
19
20     private static final DateFormat fmtDate = DateFormat.getDateInstance();
21
22     @Override
23     protected void onCreate(Bundle savedInstanceState) {
24         super.onCreate(savedInstanceState);
25         setContentView(R.layout.activity_main);
26
27         // get UI component references
28
29         resTextView = (TextView) findViewById(R.id.resTextView);
30         Button btnDate = (Button) findViewById(R.id.btnDate);
31     } // end onCreate method
32
33
34     // set up listener for user choosing a date
35     DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
36         @Override
37         public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
38
39             // set the selected date and time in the Calendar
40
41             cal.set(Calendar.YEAR, year);
42             cal.set(Calendar.MONTH, monthOfYear);
43             cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
44
45             // get the selected date from the calendar, and show it to the user
46
47             Date reservedDate = cal.getTime();
48             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
49         } // end onDateSet handler
50     };
51
52
53     // set up listener for the btnDate Button
54     Button.OnClickListener [ ] // end MainActivity class
55 }
```

Type a space, then 'btnListener = new Button.' here ...

MainActivity

TODO Terminal Build Logcat Event Log

Identifier expected 53:27 CRLF UTF-8 4 spaces

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

Android

Project

Resource Manager

Gradle

1: Project

app

- manifests
- AndroidManifest.xml
- java

 - edu.udayton.sailingadventures
 - MainActivity

- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2: Structure

3: Favorites

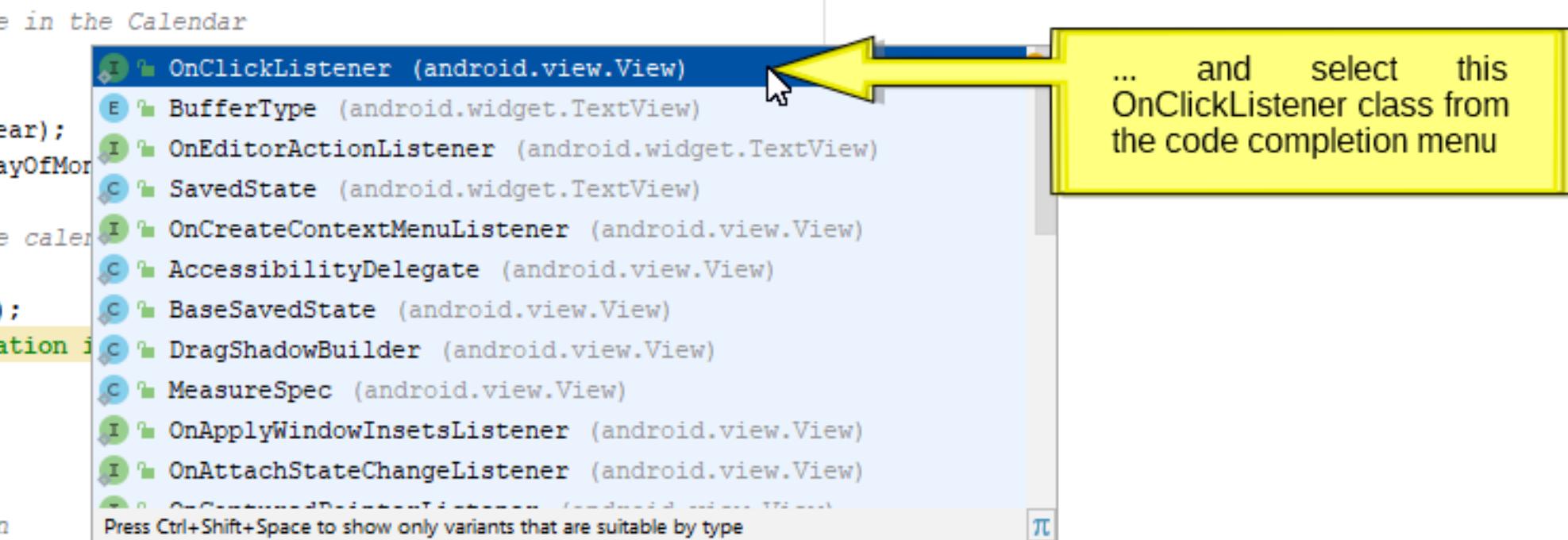
Build Variants

Layout Captures

MainActivity.java

```
public class MainActivity extends AppCompatActivity {  
    private TextView resTextView; // output TextView  
    private static final Calendar cal = Calendar.getInstance();  
    private static final DateFormat fmtDate = DateFormat.getDateInstance();  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        // get UI component references  
  
        resTextView = (TextView) findViewById(R.id.resTextView);  
        Button btnDate = (Button) findViewById(R.id.btnDate);  
    } // end onCreate method  
  
    // set up listener for user choosing a date  
    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {  
        @Override  
        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {  
  
            // set the selected date and time in the Calendar  
  
            cal.set(Calendar.YEAR, year);  
            cal.set(Calendar.MONTH, monthOfYear);  
            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);  
  
            // get the selected date from the calendar  
  
            Date reservedDate = cal.getTime();  
            resTextView.setText("Your reservation is on " + fmtDate.format(reservedDate));  
        } // end onDateSet handler  
    };  
  
    // set up listener for the btnDate Button  
    Button.OnClickListener btnDateListener = new Button.OnClickListener() {  
        public void onClick(View v) {  
            DatePickerDialog dialog = new DatePickerDialog(MainActivity.this, dateListener, cal.get(Calendar.YEAR), cal.get(Calendar.MONTH), cal.get(Calendar.DAY_OF_MONTH));  
            dialog.show();  
        }  
    };  
}  
} // end MainActivity class
```

... and select this OnClickListener class from the code completion menu



Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

Android

app

- manifests
- AndroidManifest.xml
- java

 - edu.udayton.sailingadventures

 - MainActivity

 - edu.udayton.sailingadventures (androidTest)
 - edu.udayton.sailingadventures (test)

- generatedJava
- res

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

Gradle Scripts

2:Structure

Favorites

Build Variants

Layout Captures

MainActivity

```
public class MainActivity extends AppCompatActivity {  
    private TextView resTextView; // output TextView  
    private static final Calendar cal = Calendar.getInstance();  
    private static final DateFormat fmtDate = DateFormat.getDateInstance();  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_main);  
  
        // get UI component references  
  
        resTextView = (TextView) findViewById(R.id.resTextView);  
        Button btnDate = (Button) findViewById(R.id.btnDate);  
    } // end onCreate method  
  
    // set up listener for user choosing a date  
    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {  
        @Override  
        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {  
  
            // set the selected date and time in the Calendar  
  
            cal.set(Calendar.YEAR, year);  
            cal.set(Calendar.MONTH, monthOfYear);  
            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);  
  
            // get the selected date from the calendar, and show it to the user  
  
            Date reservedDate = cal.getTime();  
            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));  
        } // end onDateSet handler  
    };  
  
    // set up listener for the btnDate Button  
    Button.OnClickListener btnDateListener = new Button.OnClickListener() {  
    } // end MainActivity class
```

Place the cursor at the end of this line, hit the Enter key ...

Device File Explorer

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

activity_main.xml MainActivity.java

16 private TextView resTextView; // output TextView
17
18 private static final Calendar cal = Calendar.getInstance();
19
20 private static final DateFormat fmtDate = DateFormat.getDateInstance();
21
22 @Override
23 protected void onCreate(Bundle savedInstanceState) {
24 super.onCreate(savedInstanceState);
25 setContentView(R.layout.activity_main);
26
27 // get UI component references
28
29 resTextView = (TextView) findViewById(R.id.resTextView);
30 Button btnDate = (Button) findViewById(R.id.btnDate);
31 } // end onCreate method
32
33 // set up listener for user choosing a date
34 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
35 @Override
36 public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
37
38 // set the selected date and time in the Calendar
39
40 cal.set(Calendar.YEAR, year);
41 cal.set(Calendar.MONTH, monthOfYear);
42 cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
43
44 // get the selected date from the calendar, and show it to the user
45
46 Date reservedDate = cal.getTime();
47 resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
48
49 } // end onDateSet handler
50 };
51
52 // set up listener for the btnDate Button
53 Button.OnClickListener btnDateListener = new Button.OnClickListener()
54 {
55 };
56 };
57 } // end MainActivity class

MainActivity

... and add the statement block for the btnListener
Don't forget the semi-colon to end the data field declaration/initialization

TODO Terminal Build Logcat Event Log

Source generation ended in 718 ms (today 12:52 PM) 56:7 CRLF UTF-8 4 spaces

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SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
15
16     private TextView resTextView; // output TextView
17
18     private static final Calendar cal = Calendar.getInstance();
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47             Date reservedDate = cal.getTime();
48             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
49
50         } // end onDateSet handler
51     };
52
53     // set up listener for the btnDate Button
54     Button.OnClickListener btnDateListener = new Button.OnClickListener()
55     {
56
57     }; // end MainActivity class
58 }
```

MainActivity > btnDateListener > new OnClickListener

Click anywhere in this red-underlined text ...

TODO Terminal Build Logcat Event Log

Class 'Anonymous class derived from OnClickListener' must either be declared abstract or implement abstract method 'onClick(View)' in 'OnClickListener'

53:62 CRLF ÷ UTF-8 ÷ 4 spaces ÷

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2:Structure

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46
47             Date reservedDate = cal.getTime();
48             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
49
50         } // end onDateSet handler
51     };
52
53     Button.OnClickListener btnDateListener = new OnClickListener() {
54
55     };
56
57 } // end MainActivity class
```

MainActivity > btnDateListener > new OnClickListener()

... click the red lightbulb ...

TODO Terminal Build Logcat Event Log

Class 'Anonymous class derived from OnClickListener' must either be declared abstract or implement abstract method 'onClick(View)' in 'OnClickListener'

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colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

activity_main.xml

MainActivity.java

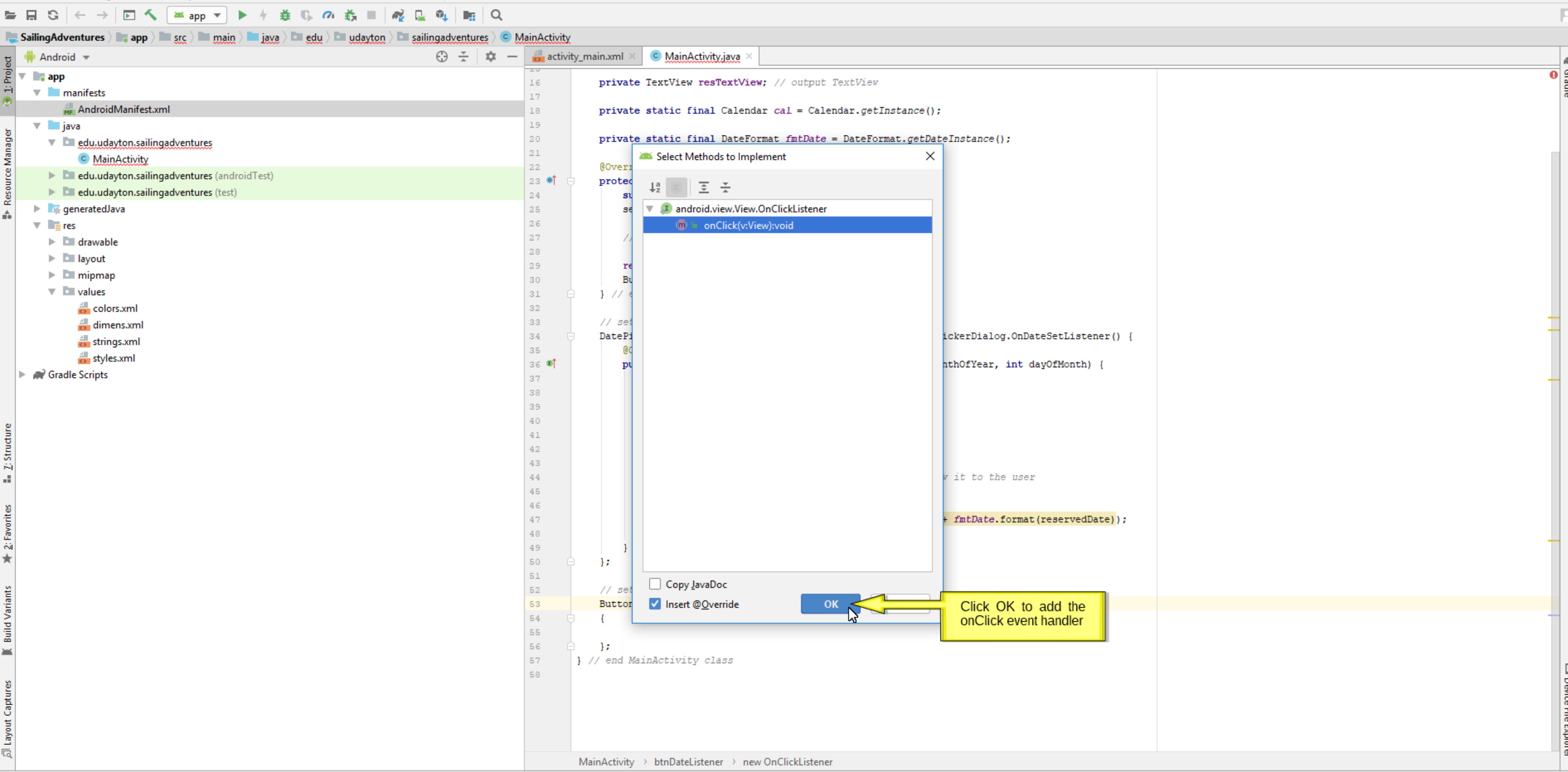
```
15  
16     private TextView resTextView; // output TextView  
17  
18     private static final Calendar cal = Calendar.getInstance();  
19  
20     private static final DateFormat fmtDate = DateFormat.getDateInstance();  
21  
22     @Override  
23     protected void onCreate(Bundle savedInstanceState) {  
24         super.onCreate(savedInstanceState);  
25         setContentView(R.layout.activity_main);  
26  
27         // get UI component references  
28  
29         resTextView = (TextView) findViewById(R.id.resTextView);  
30         Button btnDate = (Button) findViewById(R.id.btnDate);  
31     } // end onCreate method  
32  
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34     DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {  
35         @Override  
36         public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {  
37  
38             // set the selected date and time in the Calendar  
39  
40             cal.set(Calendar.YEAR, year);  
41             cal.set(Calendar.MONTH, monthOfYear);  
42             cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);  
43  
44             // get the selected date from the calendar, and show it to the user  
45  
46             Date reservedDate = cal.getTime();  
47             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));  
48  
49         } // end onDateSet handler  
50     };  
51  
52     // set up listener for the btnDate Button  
53     Button.OnClickListener btnDateListener = new Button.OnClickListener()  
54     {  
55         @Override  
56         public void onClick(View v) {  
57             // get the current date  
58             Date currentDate = new Date();  
59             cal.set(Calendar.YEAR, currentDate.getYear());  
60             cal.set(Calendar.MONTH, currentDate.getMonth());  
61             cal.set(Calendar.DAY_OF_MONTH, currentDate.getDate());  
62  
63             // set the selected date and time in the Calendar  
64  
65             cal.set(Calendar.YEAR, year);  
66             cal.set(Calendar.MONTH, monthOfYear);  
67             cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);  
68  
69             // get the selected date from the calendar, and show it to the user  
70  
71             Date reservedDate = cal.getTime();  
72             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));  
73         }  
74     };  
75  
76     // set up listener for the btnCancel Button  
77     Button.OnClickListener btnCancelListener = new Button.OnClickListener()  
78     {  
79         @Override  
80         public void onClick(View v) {  
81             // cancel the reservation  
82             finish();  
83         }  
84     };  
85  
86     // set up listener for the btnSave Button  
87     Button.OnClickListener btnSaveListener = new Button.OnClickListener()  
88     {  
89         @Override  
90         public void onClick(View v) {  
91             // save the reservation  
92             // update the database  
93             // send confirmation email  
94             // finish the activity  
95             finish();  
96         }  
97     };  
98 } // end MainActivity class
```

MainActivity > btnDateListener > new OnClickListener

TODO Terminal Build Logcat Event Log

Class 'Anonymous class derived from OnClickListener' must either be declared abstract or implement abstract method 'onClick(View)' in 'OnClickListener'

53:62 CRLF ÷ UTF-8 ÷ 4 spaces ÷



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SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

Resource Manager

2:Structure

3:Favorites

Build Variants

Layout Captures

activity_main.xml

MainActivity.java

```
20
21     private static final DateFormat fmtDate = DateFormat.getDateInstance();
22
23     @Override
24     protected void onCreate(Bundle savedInstanceState) {
25         super.onCreate(savedInstanceState);
26         setContentView(R.layout.activity_main);
27
28         // get UI component references
29
30         resTextView = (TextView) findViewById(R.id.resTextView);
31         Button btnDate = (Button) findViewById(R.id.btnDate);
32     } // end onCreate method
33
34     // set up listener for user choosing a date
35     DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
36
37         @Override
38         public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
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40             // set the selected date and time in the Calendar
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42             cal.set(Calendar.YEAR, year);
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45
46             // get the selected date from the calendar, and show it to the user
47
48             Date reservedDate = cal.getTime();
49             resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
50
51         } // end onDateSet handler
52     };
53
54     // set up listener for the btnDate Button
55     Button.OnClickListener btnDateListener = new Button.OnClickListener()
56     {
57
58         @Override
59         public void onClick(View v) {
60
61             } // end onClick handler
62         }; // end MainActivity class
63     } // end MainActivity class
64
65     // set up listener for the btnCancel Button
66     Button.OnClickListener btnCancelListener = new Button.OnClickListener()
67     {
68
69         @Override
70         public void onClick(View v) {
71
72             } // end onClick handler
73         }; // end MainActivity class
74     } // end MainActivity class
75
76     // set up listener for the btnOk Button
77     Button.OnClickListener btnOkListener = new Button.OnClickListener()
78     {
79
80         @Override
81         public void onClick(View v) {
82
83             } // end onClick handler
84         }; // end MainActivity class
85     } // end MainActivity class
86
87     // set up listener for the btnCancel Button
88     Button.OnClickListener btnCancelListener = new Button.OnClickListener()
89     {
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91         @Override
92         public void onClick(View v) {
93
94             } // end onClick handler
95         }; // end MainActivity class
96     } // end MainActivity class
97
98     // set up listener for the btnOk Button
99     Button.OnClickListener btnOkListener = new Button.OnClickListener()
100    {
101
102        @Override
103        public void onClick(View v) {
104
105            } // end onClick handler
106        }; // end MainActivity class
107    } // end MainActivity class
108
109    // set up listener for the btnCancel Button
110    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
111    {
112
113        @Override
114        public void onClick(View v) {
115
116            } // end onClick handler
117        }; // end MainActivity class
118    } // end MainActivity class
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120    // set up listener for the btnOk Button
121    Button.OnClickListener btnOkListener = new Button.OnClickListener()
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124        @Override
125        public void onClick(View v) {
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128        }; // end MainActivity class
129    } // end MainActivity class
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131    // set up listener for the btnCancel Button
132    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
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135        @Override
136        public void onClick(View v) {
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138            } // end onClick handler
139        }; // end MainActivity class
140    } // end MainActivity class
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142    // set up listener for the btnCancel Button
143    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
144    {
145
146        @Override
147        public void onClick(View v) {
148
149            } // end onClick handler
150        }; // end MainActivity class
151    } // end MainActivity class
152
153    // set up listener for the btnOk Button
154    Button.OnClickListener btnOkListener = new Button.OnClickListener()
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157        @Override
158        public void onClick(View v) {
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160            } // end onClick handler
161        }; // end MainActivity class
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164    // set up listener for the btnCancel Button
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179        @Override
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183        }; // end MainActivity class
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186    // set up listener for the btnOk Button
187    Button.OnClickListener btnOkListener = new Button.OnClickListener()
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194        }; // end MainActivity class
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534            } // end onClick handler
535        }; // end MainActivity class
536    } // end MainActivity class
537
538    // set up listener for the btnCancel Button
539    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
540    {
541
542        @Override
543        public void onClick(View v) {
544
545            } // end onClick handler
546        }; // end MainActivity class
547    } // end MainActivity class
548
549    // set up listener for the btnOk Button
550    Button.OnClickListener btnOkListener = new Button.OnClickListener()
551    {
552
553        @Override
554        public void onClick(View v) {
555
556            } // end onClick handler
557        }; // end MainActivity class
558    } // end MainActivity class
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560    // set up listener for the btnCancel Button
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568        }; // end MainActivity class
569    } // end MainActivity class
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571    // set up listener for the btnCancel Button
572    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
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611            } // end onClick handler
612        }; // end MainActivity class
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620        public void onClick(View v) {
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622            } // end onClick handler
623        }; // end MainActivity class
624    } // end MainActivity class
625
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627    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
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634        }; // end MainActivity class
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645        }; // end MainActivity class
646    } // end MainActivity class
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655            } // end onClick handler
656        }; // end MainActivity class
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667        }; // end MainActivity class
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678        }; // end MainActivity class
679    } // end MainActivity class
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689        }; // end MainActivity class
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700        }; // end MainActivity class
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715    Button.OnClickListener btnOkListener = new Button.OnClickListener()
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720
721            } // end onClick handler
722        }; // end MainActivity class
723    } // end MainActivity class
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725    // set up listener for the btnCancel Button
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727    {
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730        public void onClick(View v) {
731
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733        }; // end MainActivity class
734    } // end MainActivity class
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736    // set up listener for the btnCancel Button
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739
740        @Override
741        public void onClick(View v) {
742
743            } // end onClick handler
744        }; // end MainActivity class
745    } // end MainActivity class
746
747    // set up listener for the btnOk Button
748    Button.OnClickListener btnOkListener = new Button.OnClickListener()
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752        public void onClick(View v) {
753
754            } // end onClick handler
755        }; // end MainActivity class
756    } // end MainActivity class
757
758    // set up listener for the btnCancel Button
759    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
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763        public void onClick(View v) {
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765            } // end onClick handler
766        }; // end MainActivity class
767    } // end MainActivity class
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777        }; // end MainActivity class
778    } // end MainActivity class
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782    {
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784        @Override
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787            } // end onClick handler
788        }; // end MainActivity class
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801
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804    {
805
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807        public void onClick(View v) {
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809            } // end onClick handler
810        }; // end MainActivity class
811    } // end MainActivity class
812
813    // set up listener for the btnOk Button
814    Button.OnClickListener btnOkListener = new Button.OnClickListener()
815    {
816
817        @Override
818        public void onClick(View v) {
819
820            } // end onClick handler
821        }; // end MainActivity class
822    } // end MainActivity class
823
824    // set up listener for the btnCancel Button
825    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
826    {
827
828        @Override
829        public void onClick(View v) {
830
831            } // end onClick handler
832        }; // end MainActivity class
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843        }; // end MainActivity class
844    } // end MainActivity class
845
846    // set up listener for the btnOk Button
847    Button.OnClickListener btnOkListener = new Button.OnClickListener()
848    {
849
850        @Override
851        public void onClick(View v) {
852
853            } // end onClick handler
854        }; // end MainActivity class
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856
857    // set up listener for the btnCancel Button
858    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
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860
861        @Override
862        public void onClick(View v) {
863
864            } // end onClick handler
865        }; // end MainActivity class
866    } // end MainActivity class
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873        public void onClick(View v) {
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875            } // end onClick handler
876        }; // end MainActivity class
877    } // end MainActivity class
878
879    // set up listener for the btnOk Button
880    Button.OnClickListener btnOkListener = new Button.OnClickListener()
881    {
882
883        @Override
884        public void onClick(View v) {
885
886            } // end onClick handler
887        }; // end MainActivity class
888    } // end MainActivity class
889
890    // set up listener for the btnCancel Button
891    Button.OnClickListener btnCancelListener = new Button.OnClickListener()
892    {
893
894        @Override
895        public void onClick(View v) {
896
897            } //
```

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

activity_main.xml MainActivity.java

Android

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

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
27
28     // get UI component references
29
30     resTextView = (TextView)findViewById(R.id.resTextView);
31     Button btnDate = (Button)findViewById(R.id.btnDate);
32 } // end onCreate method
33
34 // set up listener for user choosing a date
35 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
36     @Override
37     public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
38
39         // set the selected date and time in the Calendar
40
41         cal.set(Calendar.YEAR, year);
42         cal.set(Calendar.MONTH, monthOfYear);
43         cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
44
45         // get the selected date from the calendar, and show it to the user
46
47         Date reservedDate = cal.getTime();
48         resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
49
50     } // end onDateSet handler
51 }
52
53 // set up listener for the btnDate Button
54 Button.OnClickListener btnDateListener = new Button.OnClickListener()
55 {
56
57     @Override
58     public void onClick(View v) {
59
60         // get the currently-selected date from the Calendar
61         // if no date/time have been selected yet, show the current date/time
62
63         int year = cal.get(Calendar.YEAR);
64         int monthOfYear = cal.get(Calendar.MONTH);
65         int dayOfMonth = cal.get(Calendar.DAY_OF_MONTH); [I]
66
67     } // end onClick handler
68 }
69 } // end MainActivity class
70
```

Add this code to get the date previously selected in the Calendar

Note that the first time this event occurs, no date will have been selected yet in the Calendar, so today's date is retrieved by default

MainActivity > btnDateListener > new OnClickListener > onClick()

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM)

65:61 CRLF ÷ UTF-8 ÷ 4 spaces ÷

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

Android

Project

Resource Manager

Gradle

1:Project

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

Gradle Scripts

2:Structure

3:Favorites

Build Variants

Layout Captures

MainActivity.java

```
34 // set up listener for user choosing a date
35 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
36     @Override
37     public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
38
39         // set the selected date and time in the Calendar
40
41         cal.set(Calendar.YEAR, year);
42         cal.set(Calendar.MONTH, monthOfYear);
43         cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
44
45         // get the selected date from the calendar, and show it to the user
46
47         Date reservedDate = cal.getTime();
48         resTextview.setText("Your reservation is set for " + fmtDate.format(reservedDate));
49
50     } // end onDateSet handler
51 }
52
53 // set up listener for the btnDate Button
54 Button.OnClickListener btnDateListener = new Button.OnClickListener()
55 {
56
57     @Override
58     public void onClick(View v) {
59
60         // get the currently-selected date from the Calendar
61         // if no date/time have been selected yet, show the current date/time
62
63         int year = cal.get(Calendar.YEAR);
64         int monthOfYear = cal.get(Calendar.MONTH);
65         int dayOfMonth = cal.get(Calendar.DAY_OF_MONTH);
66
67         // create/show DatePickerDialog with the currently-selected date
68
69         DatePickerDialog datePickDlog = new DatePickerDialog(MainActivity.this,
70             dateListener, year, monthOfYear, dayOfMonth);
71         datePickDlog.show(); []
72
73     } // end onClick handler
74 }
75 } // end MainActivity class
```

MainActivity > btnDateListener > new OnClickListener > onClick()

Add this code to create and display the DatePickerDialog with the retrieved date

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project Resource Manager 2:Structure Favorites Build Variants Layout Captures 3:Layout Explorer Device File Explorer

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22
23        // set listener for btnDate button
24
25        btnDate.setOnClickListener(btnDateListener);
26
27    } // end onCreate method
28
29
30    // set up listener for user choosing a date
31    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
32
33        @Override
34        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
35
36            // set the selected date and time in the Calendar
37
38            cal.set(Calendar.YEAR, year);
39            cal.set(Calendar.MONTH, monthOfYear);
40            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
41
42            // get the selected date from the calendar, and show it to the user
43
44            Date reservedDate = cal.getTime();
45            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
46
47        } // end onDateSet handler
48
49    };
50
51
52    // set up listener for the btnDate Button
53    btnDate.setOnClickListener(dateListener);
54
55
56
57
58}
```

activity_main.xml MainActivity.java

Go back to onCreate's statement block, and add this code to set the btnListener as the btnDate Button's OnClickListener

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...app\src\main\java\edu\udayton\sailingadventures>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)

1:Project SailingAdventure 1:Gradle

Resource Manager

1:Project

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

generatedJava

res

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

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

activity_main.xml MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
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7     private TextView resTextView; // output TextView
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13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
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27    } // end onCreate method
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33        @Override
34        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
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36            // set the selected date and time in the Calendar
37
38            cal.set(Calendar.YEAR, year);
39            cal.set(Calendar.MONTH, monthOfYear);
40            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
41
42            // get the selected date from the calendar, and show it to the user
43
44            Date reservedDate = cal.getTime();
45            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
46
47        } // end onDateSet handler
48
49    };
50
51
52    // set up listener for the btnDate Button
53    btnDate.setOnClickListener(dateListener);
54
55
56
57
58}
```

MainActivity > onCreate()

TODO Terminal Build Logcat

Source generation ended in 718 ms (today 12:52 PM) 35:53 CRLF ÷ UTF-8 ÷ 4 spaces ÷

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

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

Open the AVD Manager

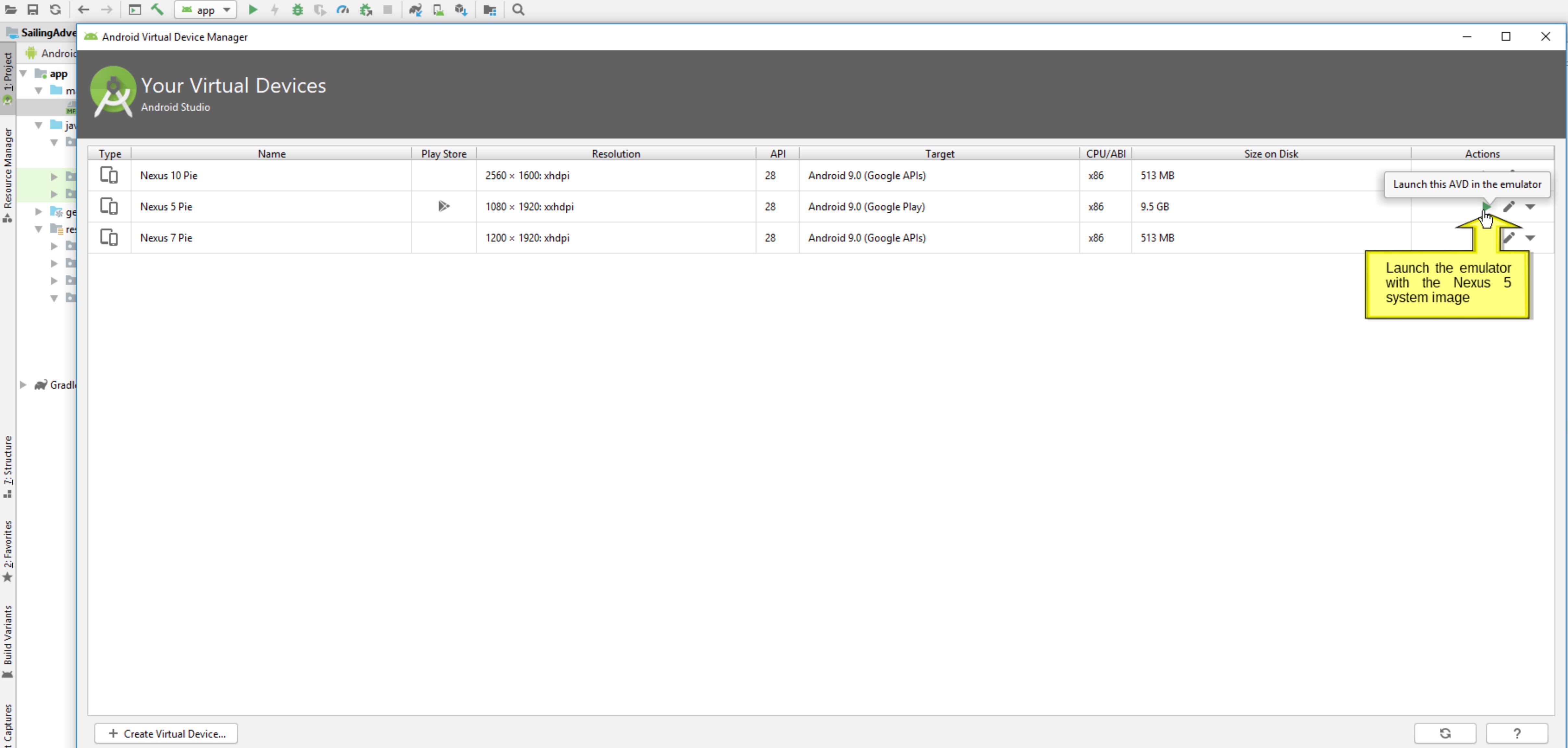
SailingAdventures > app > src > main > java > edu > udayton > sailingadventures > MainActivity

1:Project Resource Manager 2:Structure Favorites Build Variants Layout Captures 3:Logcat

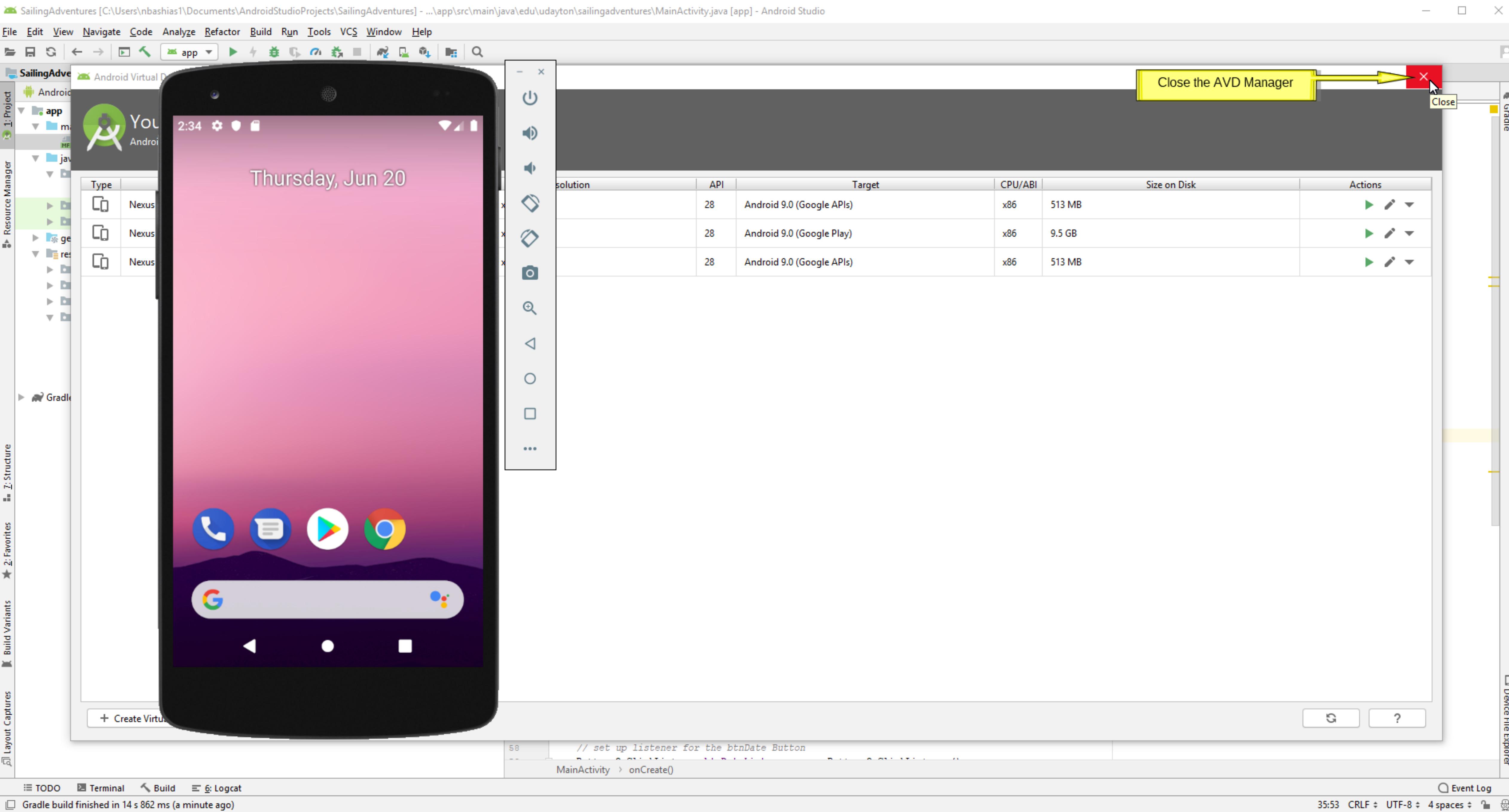
AVD Manager

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22
23        // set listener for btnDate button
24
25        btnDate.setOnClickListener(btnDateListener);
26
27    } // end onCreate method
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29
30    // set up listener for user choosing a date
31    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
32
33        @Override
34        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
35
36            // set the selected date and time in the Calendar
37
38            cal.set(Calendar.YEAR, year);
39            cal.set(Calendar.MONTH, monthOfYear);
40            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
41
42            // get the selected date from the calendar, and show it to the user
43
44            Date reservedDate = cal.getTime();
45            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
46
47        } // end onDateSet handler
48
49    };
50
51
52    // set up listener for the btnDate Button
53    btnDate.setOnClickListener(dateListener);
54
55
56
57
58 }
```

MainActivity > onCreate()



```
// set up listener for the btnDate Button
```



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

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

SailingAdventures app

1:Project

Resource Manager

2:Structure

3:Favorites

Build Variants

Layout Captures

4:Logcat

5:TODO

6:Terminal

7:Build

8:Gradle build finished in 14 s 862 ms (a minute ago)

9:Event Log

10:Device File Explorer

11:Gradle

12:main.xml

13:MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

    private TextView resTextView;
    private static String date;
    private static DateFormat fmtDate = new SimpleDateFormat("EEE, MMM dd");

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        // get UI component references

        resTextView = (TextView) findViewById(R.id.resTextView);
        Button btnDate = (Button) findViewById(R.id.btnDate);

        // set listener for btnDate button

        btnDate.setOnClickListener(btnDateListener);
    } // end onCreate method

    // set up listener for user choosing a date
    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
        @Override
        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {

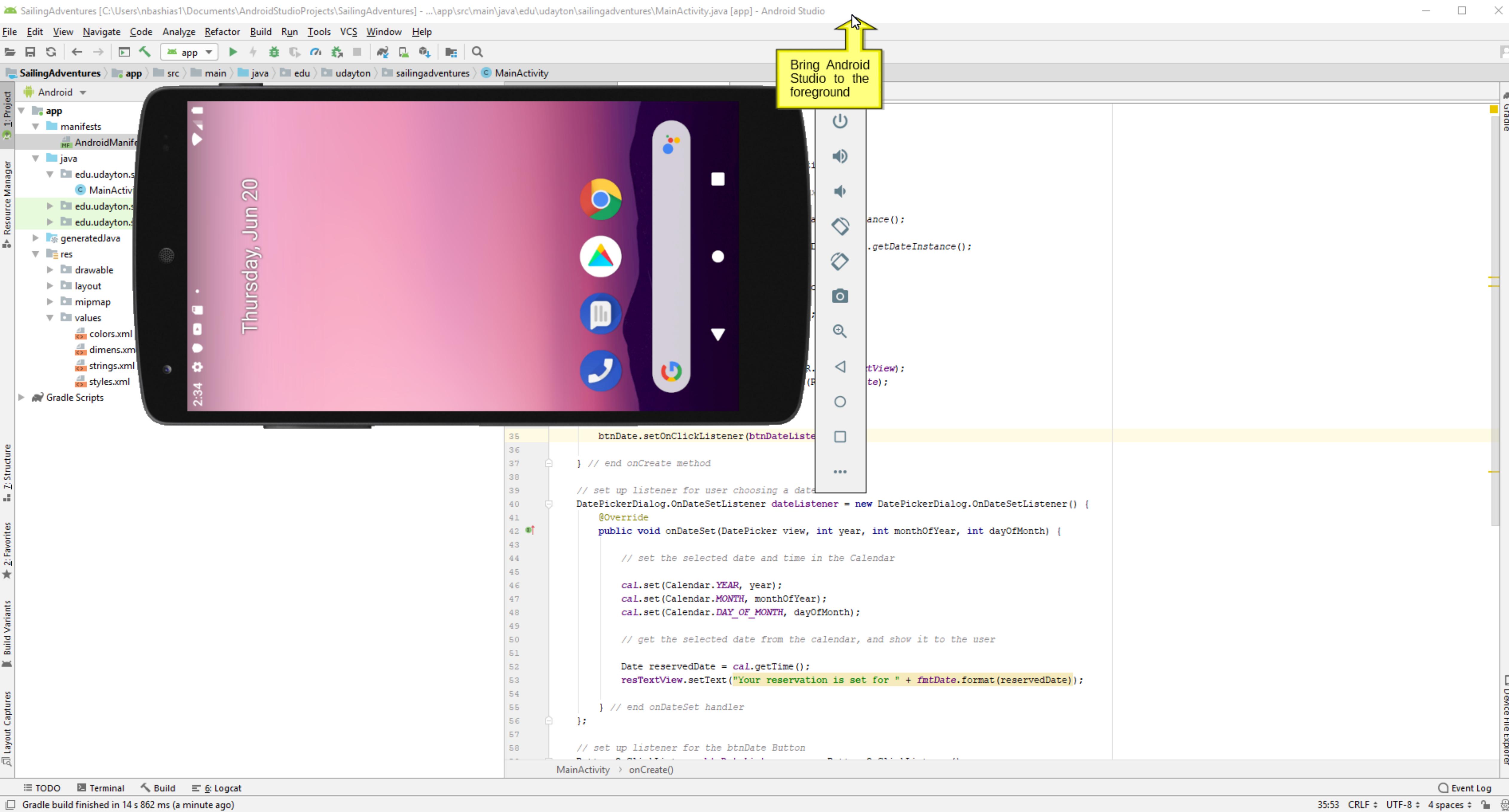
            // set the selected date and time in the Calendar

            cal.set(Calendar.YEAR, year);
            cal.set(Calendar.MONTH, monthOfYear);
            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);

            // get the selected date from the calendar, and show it to the user

            Date reservedDate = cal.getTime();
            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
        } // end onDateSet handler
    };

    // set up listener for the btnDate Button
    View.OnClickListener btnDateListener = new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            DatePickerDialog dialog = new DatePickerDialog(MainActivity.this, dateListener, cal.getYear(), cal.getMonth(), cal.getDate());
            dialog.show();
        }
    };
}
```



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

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

Run the app Run 'app' (Shift+F10)

1:Project SailingAdventures app src sailingadventures MainActivity

Android

app

- manifests
- AndroidManifest.xml

java

- edu.udayton.sailingadventures
- MainActivity

edu.udayton.sailingadventures (androidTest)

edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

Resource Manager

1:Structure

2:Favorites

Build Variants

Layout Captures

Device File Explorer

activity_main.xml MainActivity.java

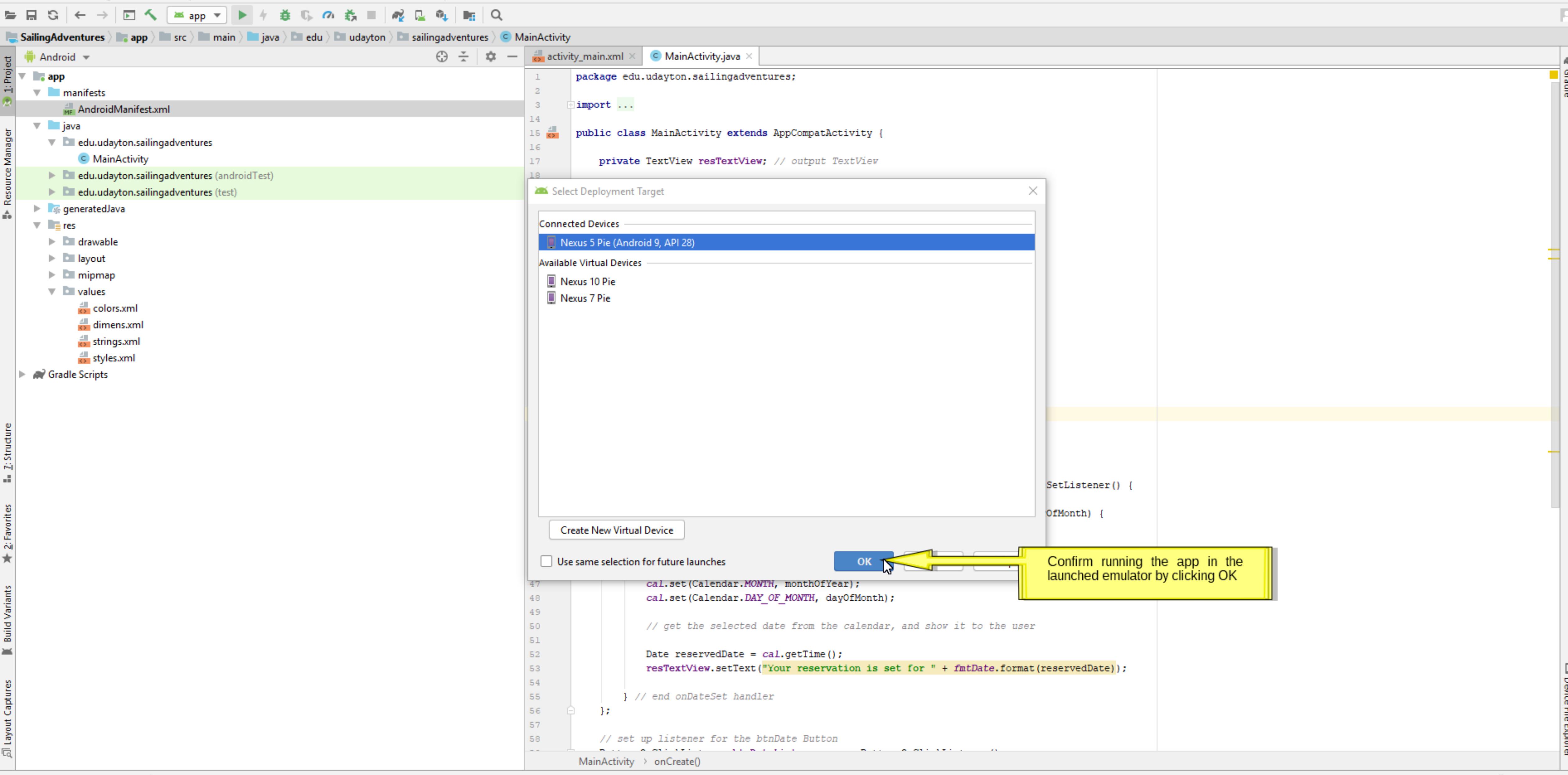
```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resTextView);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22
23        // set listener for btnDate button
24
25        btnDate.setOnClickListener(btnDateListener);
26
27    } // end onCreate method
28
29
30    // set up listener for user choosing a date
31    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
32
33        @Override
34        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
35
36            // set the selected date and time in the Calendar
37
38            cal.set(Calendar.YEAR, year);
39            cal.set(Calendar.MONTH, monthOfYear);
40            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
41
42            // get the selected date from the calendar, and show it to the user
43
44            Date reservedDate = cal.getTime();
45            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
46
47        } // end onDateSet handler
48
49    };
50
51
52    // set up listener for the btnDate Button
53    btnDate.setOnClickListener(dateListener);
54
55
56
57
58 }
```

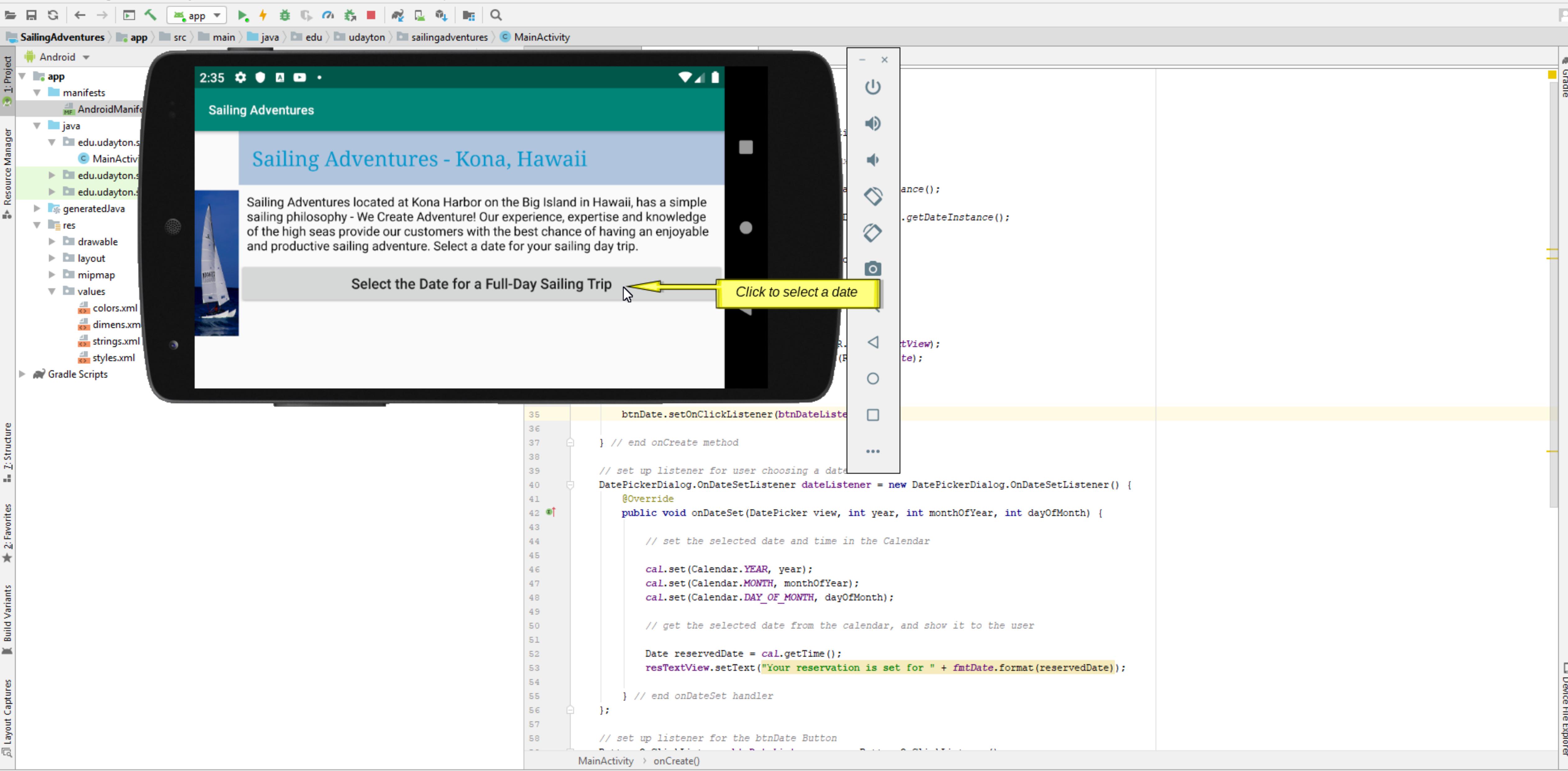
MainActivity > onCreate()

TODO Terminal Build Logcat

Run selected configuration

35:53 CRLF UTF-8 4 spaces





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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

Device File Explorer

2:Logcat

4:Run

Gradle build finished in 13 s 678 ms (moments ago)

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45 // get the selected date from the calendar, and show it to the user
46 Date reservedDate = cal.getTime();
47 resTxtView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
48 } // end onDateSet handler
49 };
50 // set up listener for the btnDate Button
51 btnDate.setOnClickListener(new View.OnClickListener() {
52 @Override
53 public void onClick(View v) {
54 // open the date picker dialog
55 dateListener.onDateSet(btnDate, 2019, 7, 4);
56 }
57 });
58 }

MainActivity > onCreate()

2:35 SailingAdventures

2019

Thu, Jun 20

June 2019

Let's say we want to go on August 4, 2019, so click twice to change the month to August

CANCEL OK

A yellow callout box with the text "Let's say we want to go on August 4, 2019, so click twice to change the month to August" is positioned over the date 20 in the June 2019 calendar. A yellow arrow points from the text towards the date 20.

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle Scripts

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Layout Captures

Device File Explorer

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity.java

generatedJava

res

drawable

layout

mipmap

values

colors.xml

dimens.xml

strings.xml

styles.xml

2:36

SailingAdventures

2019

August 2019

Thu, Jun 20

Click to select August 5

CANCEL OK

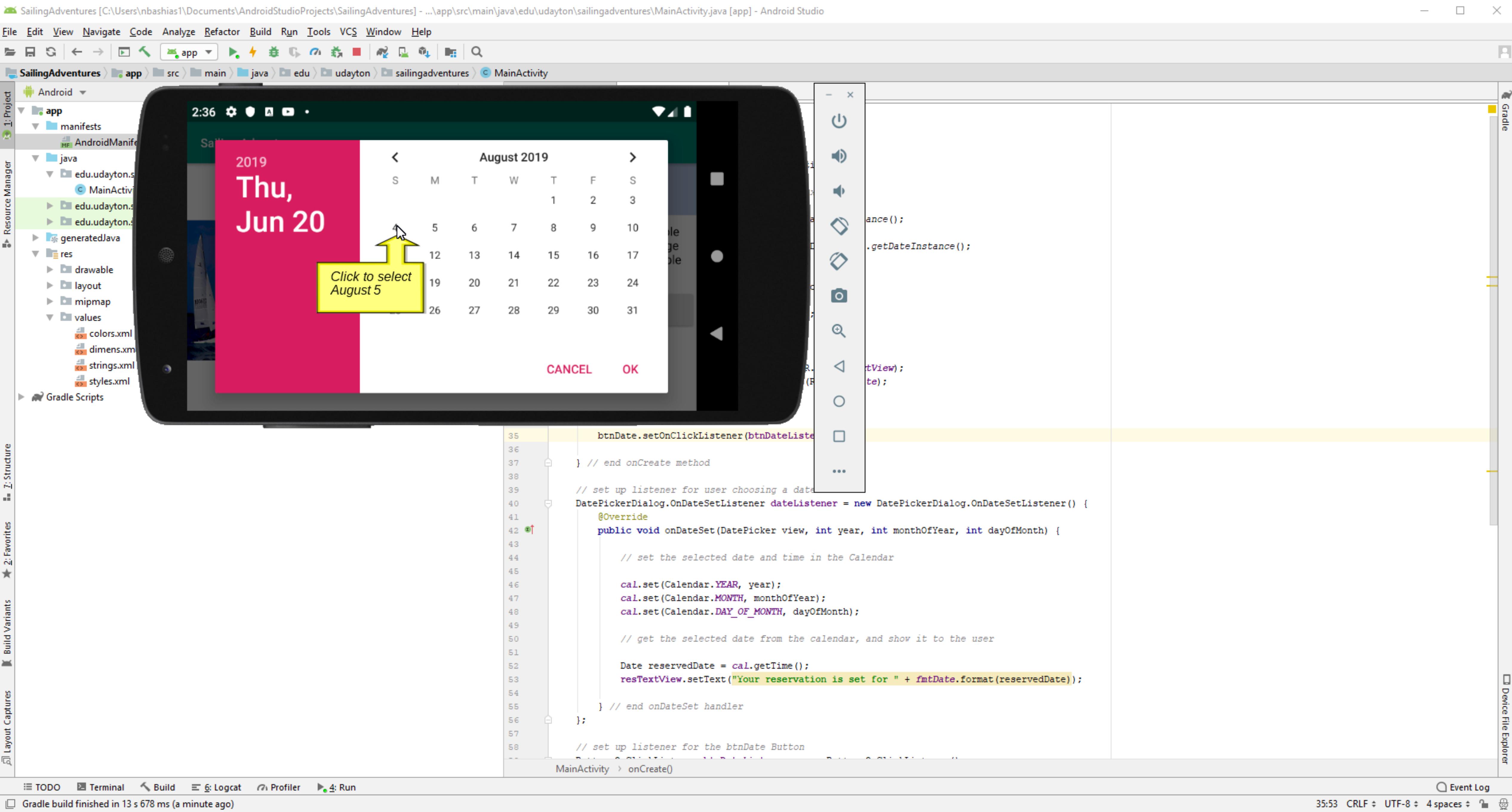
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// get the selected date from the calendar, and show it to the user
Date reservedDate = cal.getTime();
resTextview.setText("Your reservation is set for " + fmtDate.format(reservedDate));
} // end onDateSet handler
};
// set up listener for the btnDate Button

MainActivity > onCreate()

TODO Terminal Build Logcat Profiler Run Event Log

Gradle build finished in 13 s 678 ms (a minute ago) 35:53 CRLF UTF-8 4 spaces

The screenshot shows the Android Studio IDE with the project 'SailingAdventures' open. In the center, a virtual device screen displays a date picker dialog for August 2019. The date 'August 5' is highlighted with a yellow callout bubble containing the text 'Click to select August 5'. A yellow arrow points from this callout to the date '5' in the calendar grid. The calendar shows the days of the week from Sunday (S) to Saturday (S). The month header 'August 2019' is at the top, with navigation arrows for previous and next months. Below the header is a grid of dates from 1 to 31. At the bottom of the dialog are 'CANCEL' and 'OK' buttons. To the right of the device screen is the Java code for the 'onCreate' method of 'MainActivity'. The code initializes a date picker and sets up a listener to handle date selection. A specific line of code, `resTextview.setText("Your reservation is set for " + fmtDate.format(reservedDate));`, is highlighted in yellow. The code editor has syntax highlighting and line numbers. On the far left, the project structure is visible, showing packages like 'app', 'manifests', 'java', and 'res'. The 'res' package contains sub-folders for 'drawable', 'layout', 'mipmap', and 'values' with files like 'colors.xml', 'dimens.xml', 'strings.xml', and 'styles.xml'. The 'java' package contains 'MainActivity.java'. The bottom navigation bar includes tabs for 'TODO', 'Terminal', 'Build', 'Logcat', 'Profiler', 'Run', 'Event Log', and 'Gradle build finished in 13 s 678 ms (a minute ago) 35:53 CRLF UTF-8 4 spaces'.

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

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2: TODO Terminal Build Logcat Profiler Run

Gradle build finished in 13 s 678 ms (a minute ago) 35:53 CRLF UTF-8 4 spaces

2: MainActivity onCreate()

2: Click OK to select this date

2: 2019 August 2019 Sun, Aug 4

2: CANCEL OK

2: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

2: ance();
2: .getDateInstance();
2: etView);
2: te);
2: etOnClickListener(btnDateListe
2: eate method
2: // set up listener for user choosing a date
2: DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
2: @Override
2: public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
2: // set the selected date and time in the Calendar
2: cal.set(Calendar.YEAR, year);
2: cal.set(Calendar.MONTH, monthOfYear);
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2: // get the selected date from the calendar, and show it to the user
2: Date reservedDate = cal.getTime();
2: resTxtView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
2: } // end onDateSet handler
2: };
2: // set up listener for the btnDate Button

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

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Resource Manager

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3:Favorites

Build Variants

Layout Captures

4:TODO Terminal Build 6:Logcat Profiler 4:Run

Gradle

Android

app

manifests

AndroidManifest.xml

java

edu.udayton.sailingadventures

MainActivity.java

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Gradle Scripts

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Gradle build finished in 13 s 678 ms (a minute ago)

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46 Date reservedDate = cal.getTime();

47 resTxtView.setText("Your reservation is set for " + fmtDate.format(reservedDate));

48 } // end onDateSet handler

49 };

50 // set up listener for the btnDate Button

51 btnDate.setOnClickListener(new View.OnClickListener() {

52 @Override

53 public void onClick(View v) {

54 // get the current date and time

55 Date currentDate = new Date();

56 // format the date and time

57 SimpleDateFormat sdf = new SimpleDateFormat("MM/dd/yyyy HH:mm:ss");

58 String formattedDate = sdf.format(currentDate);

59 // display the formatted date and time

60 resTxtView.setText("Current Date and Time: " + formattedDate);

61 };

62 // set up listener for the btnCancel Button

63 btnCancel.setOnClickListener(new View.OnClickListener() {

64 @Override

65 public void onClick(View v) {

66 // close the dialog

67 dismiss();

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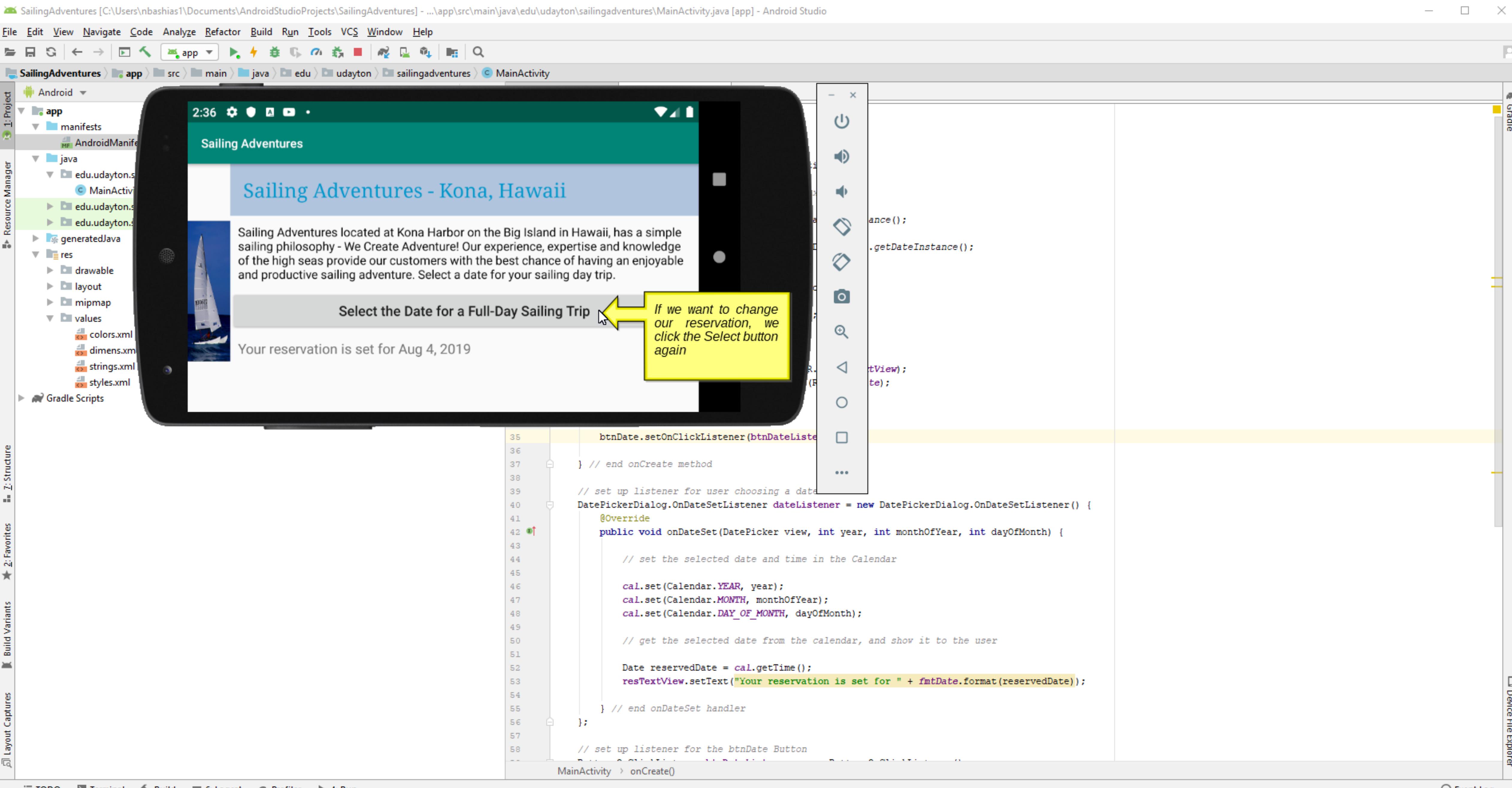
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524 // set up listener for the btnCancel Button</p



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

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SailingAdventures app src main java edu udayton sailingadventures MainActivity

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2:Favorites

Build Variants

Layout Captures

Device File Explorer

2:Logcat

4:Run

Gradle build finished in 13 s 678 ms (a minute ago)

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36
37 } // end onCreate method
38
39 // set up listener for user choosing a date
40 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
41 @Override
42 public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
43
44 // set the selected date and time in the Calendar
45
46 cal.set(Calendar.YEAR, year);
47 cal.set(Calendar.MONTH, monthOfYear);
48 cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
49
50 // get the selected date from the calendar, and show it to the user
51
52 Date reservedDate = cal.getTime();
53 resTxtView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
54
55 } // end onDateSet handler
56 };
57
58 // set up listener for the btnDate Button

MainActivity > onCreate()

The screenshot shows an Android application running in the Android Studio emulator. The app's interface includes a large red button labeled 'Sun, Aug 4'. A yellow callout box with black text is overlaid on the button, stating: 'Let's say we want to change our reservation one week forward to August 11, 2019, so we click on that date'. A yellow arrow points from this text to the date '11' in the date picker. The date picker itself shows the month of August 2019, with the 11th highlighted. The 'OK' button at the bottom right of the date picker is also highlighted with a yellow arrow.

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

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

SailingAdventures app src main java edu udayton sailingadventures MainActivity

1:Project

Resource Manager

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

Device File Explorer

2: TODO Terminal Build Logcat Profiler Run Event Log

Gradle build finished in 13 s 678 ms (a minute ago) 35:53 CRLF UTF-8 4 spaces

2:36

SailingAdventures

2019

Sun, Aug 11

August 2019

S M T W T F S

1 2 3

4 5 6 7 8 9 10

11 12 13 14 15 16 17

18 19 20 21 22 23 24

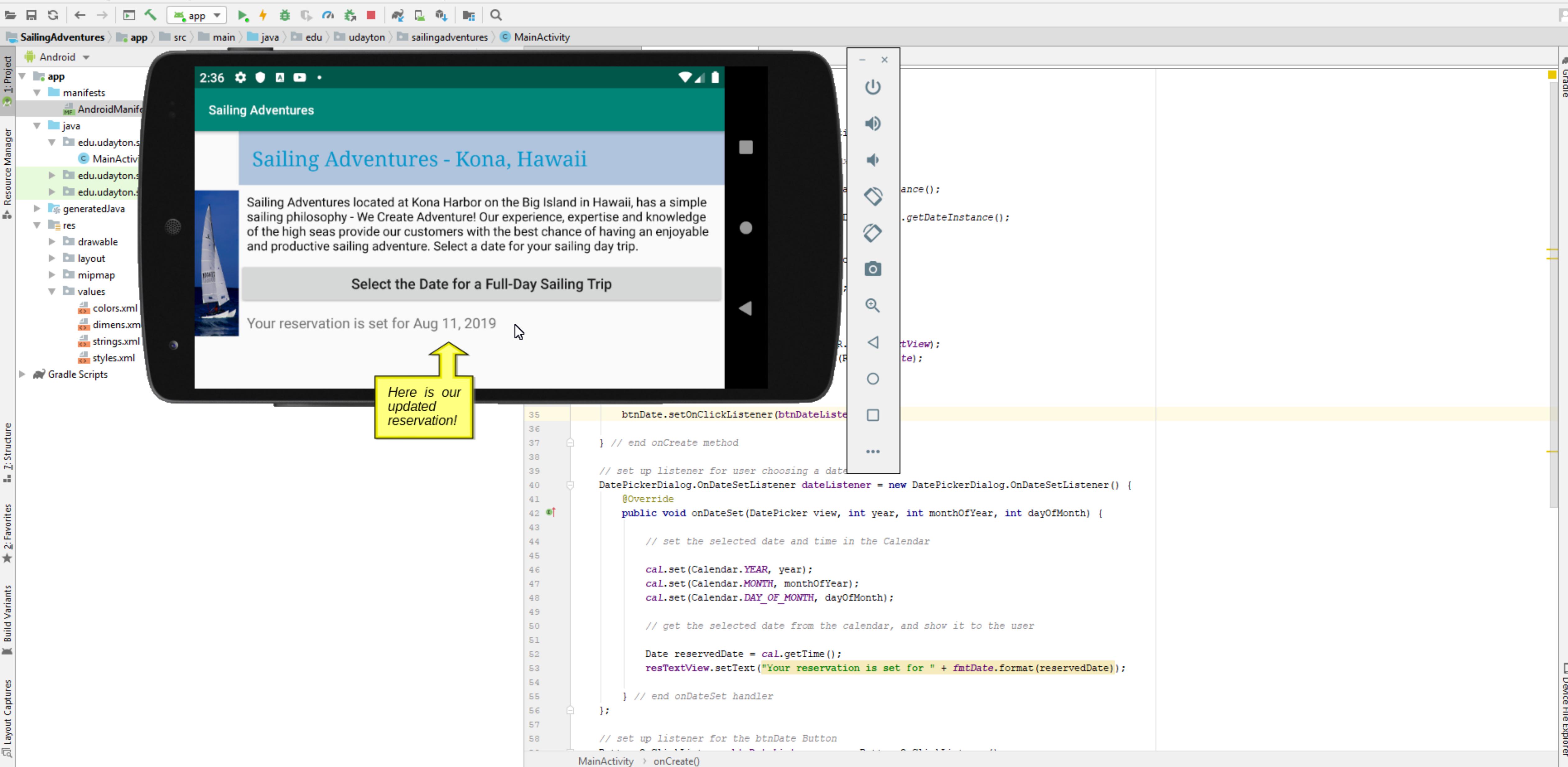
25 26 27 28 29 30 31

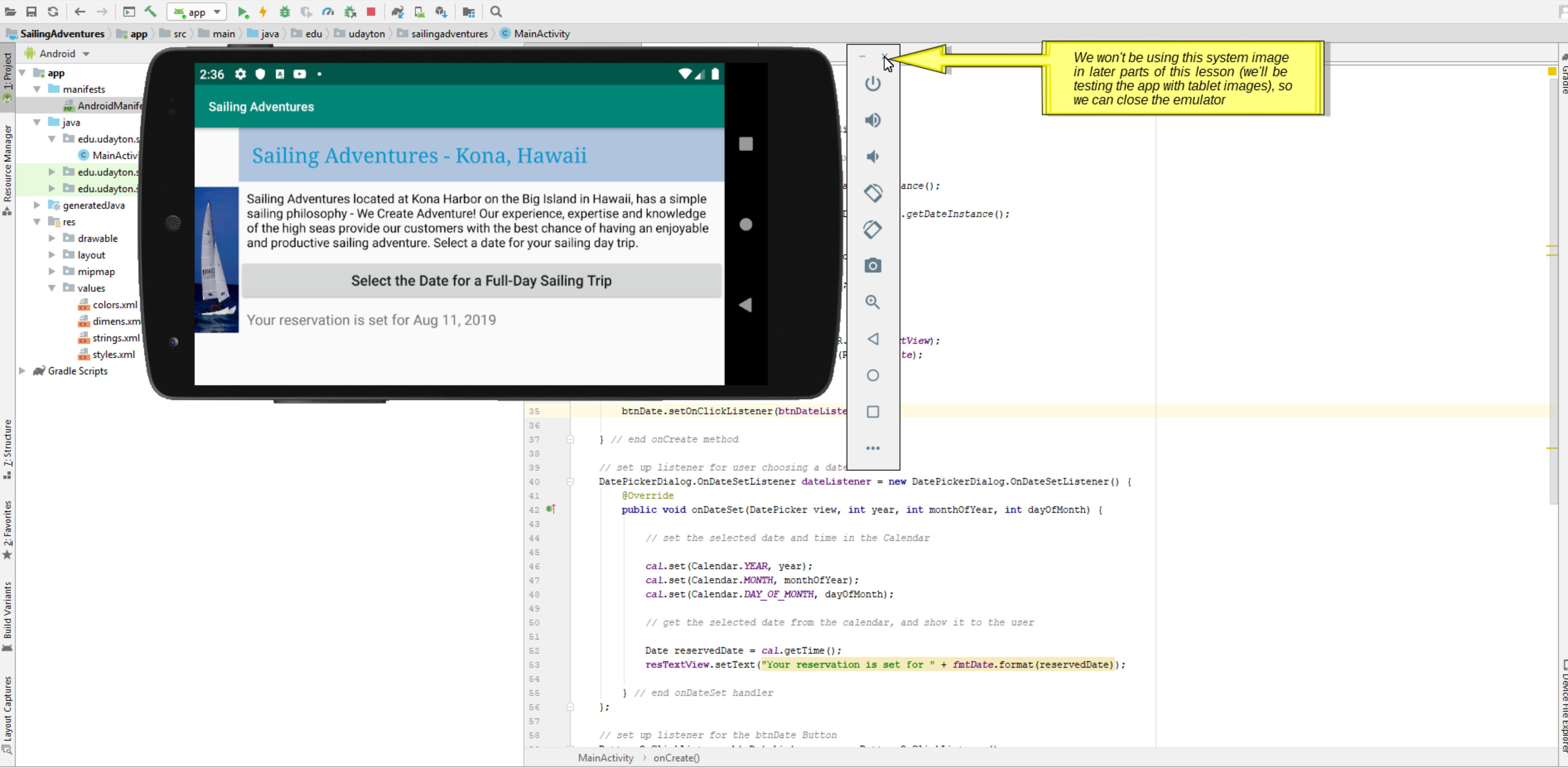
CANCEL OK

We click OK to change the reserved date

```
35     btnDate.setOnClickListener(btnDateListe
36
37 } // end onCreate method
38
39 // set up listener for user choosing a date
40 DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
41     @Override
42     public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
43
44         // set the selected date and time in the Calendar
45
46         cal.set(Calendar.YEAR, year);
47         cal.set(Calendar.MONTH, monthOfYear);
48         cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
49
50
51         // get the selected date from the calendar, and show it to the user
52
53         Date reservedDate = cal.getTime();
54         resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
55
56     } // end onDateSet handler
57
58 }
59
60 // set up listener for the btnDate Button
```

MainActivity > onCreate()





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

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

SailingAdventures app src main java ed [app] C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures\app\src\main\res\layout\activity_main.xml

1:Project

Resource Manager

Gradle

Android

app

- manifests
- AndroidManifest.xml
- java
- edu.udayton.sailingadventures
- MainActivity
- edu.udayton.sailingadventures (androidTest)
- edu.udayton.sailingadventures (test)

generatedJava

res

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

Gradle Scripts

2:Structure

2:Favorites

Build Variants

Layout Captures

MainActivity.java

```
1 package edu.udayton.sailingadventures;
2
3 import ...
4
5 public class MainActivity extends AppCompatActivity {
6
7     private TextView resTextView; // output TextView
8
9     private static final Calendar cal = Calendar.getInstance();
10
11    private static final DateFormat fmtDate = DateFormat.getDateInstance();
12
13    @Override
14    protected void onCreate(Bundle savedInstanceState) {
15        super.onCreate(savedInstanceState);
16        setContentView(R.layout.activity_main);
17
18        // get UI component references
19
20        resTextView = (TextView) findViewById(R.id.resText);
21        Button btnDate = (Button) findViewById(R.id.btnDate);
22
23        // set listener for btnDate button
24
25        btnDate.setOnClickListener(btnDateList);
26
27    } // end onCreate method
28
29
30    // set up listener for user choosing a date
31    DatePickerDialog.OnDateSetListener dateListener = new DatePickerDialog.OnDateSetListener() {
32        @Override
33        public void onDateSet(DatePicker view, int year, int monthOfYear, int dayOfMonth) {
34
35            // set the selected date and time in the Calendar
36
37            cal.set(Calendar.YEAR, year);
38            cal.set(Calendar.MONTH, monthOfYear);
39            cal.set(Calendar.DAY_OF_MONTH, dayOfMonth);
40
41            // get the selected date from the calendar, and show it to the user
42
43            Date reservedDate = cal.getTime();
44            resTextView.setText("Your reservation is set for " + fmtDate.format(reservedDate));
45
46        } // end onDateSet handler
47
48    };
49
50
51    // set up listener for the btnDate Button
52    btnDate.setOnClickListener(dateListener);
53
54
55} // end MainActivity class
```

This concludes Part 3 of this lesson.

In Part 4 of Lesson 6, we see how Android Studio implements Responsive Design to easily develop an "extra large" layout for a 10-inch tablet

MainActivity > onCreate()

TODO Terminal Build Logcat Profiler Run Event Log

Emulator: Process finished with exit code 0 (moments ago) 35:53 CRLF UTF-8 4 spaces