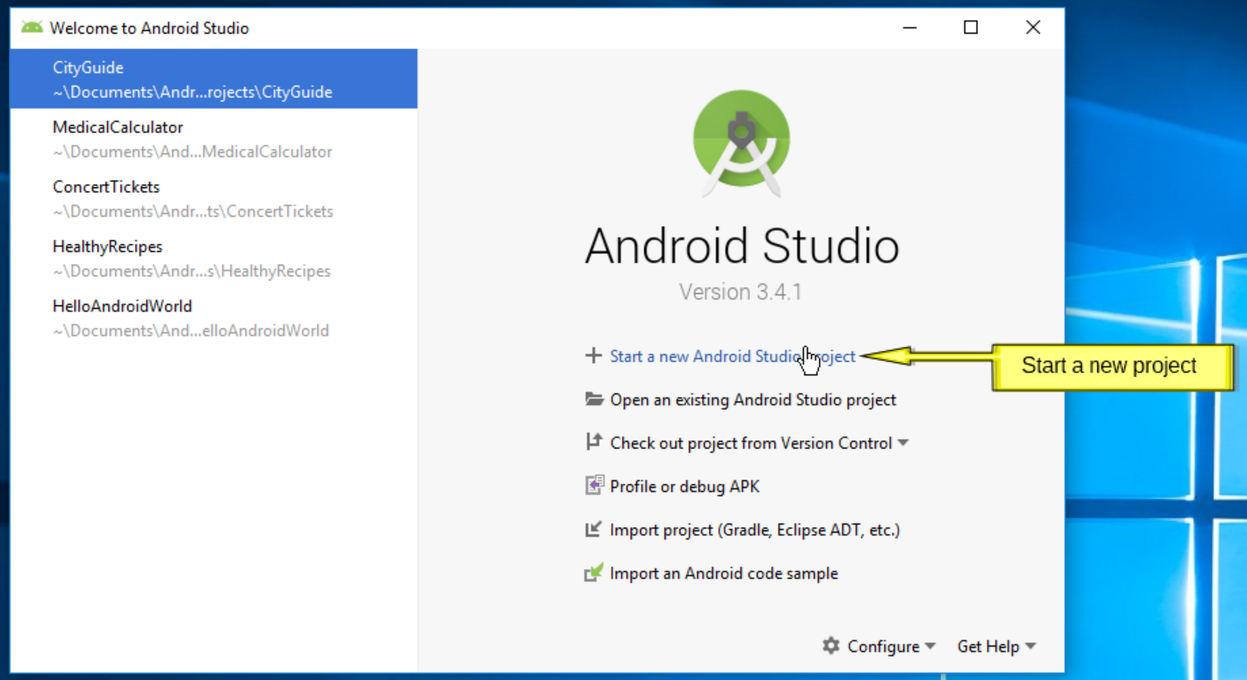
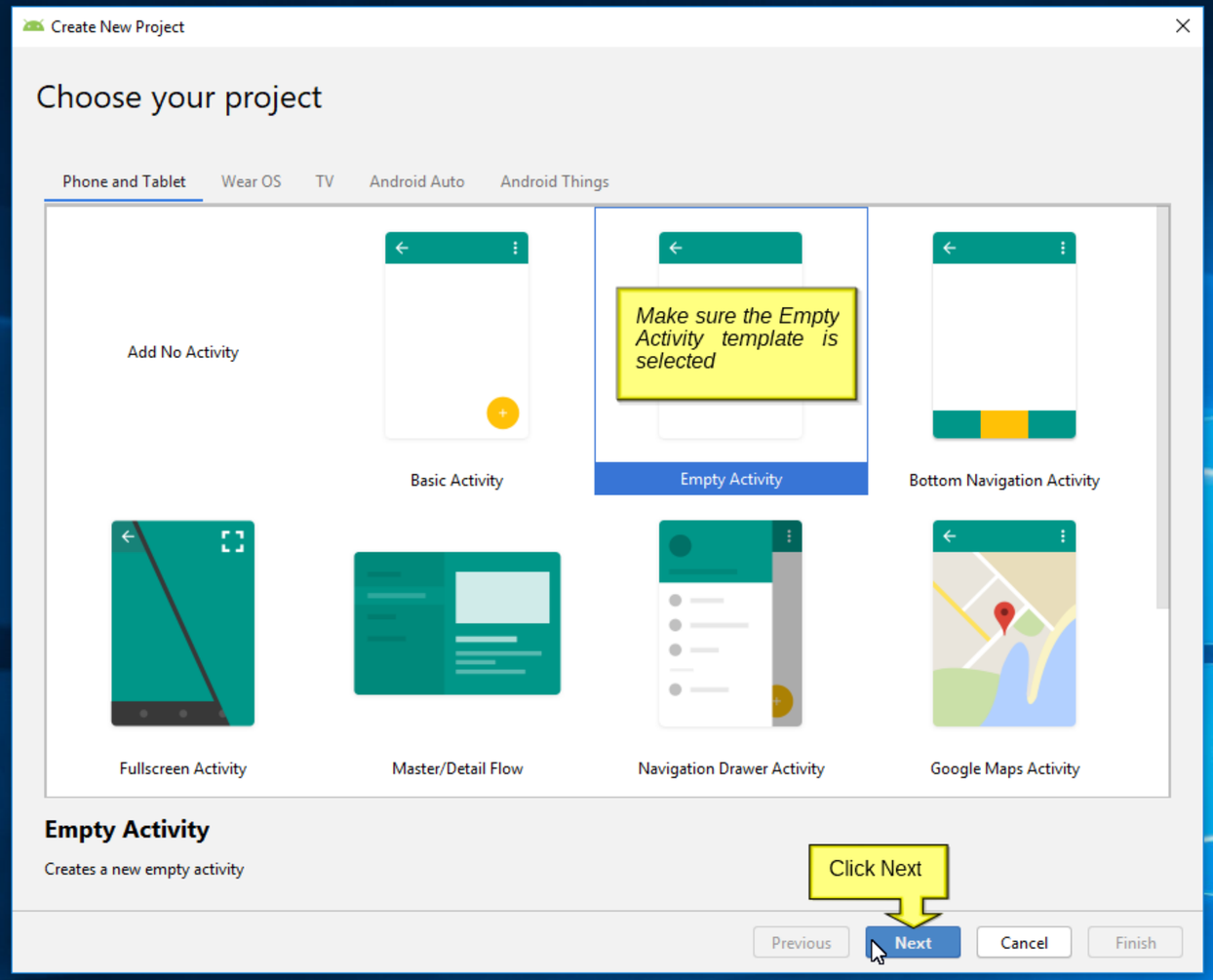
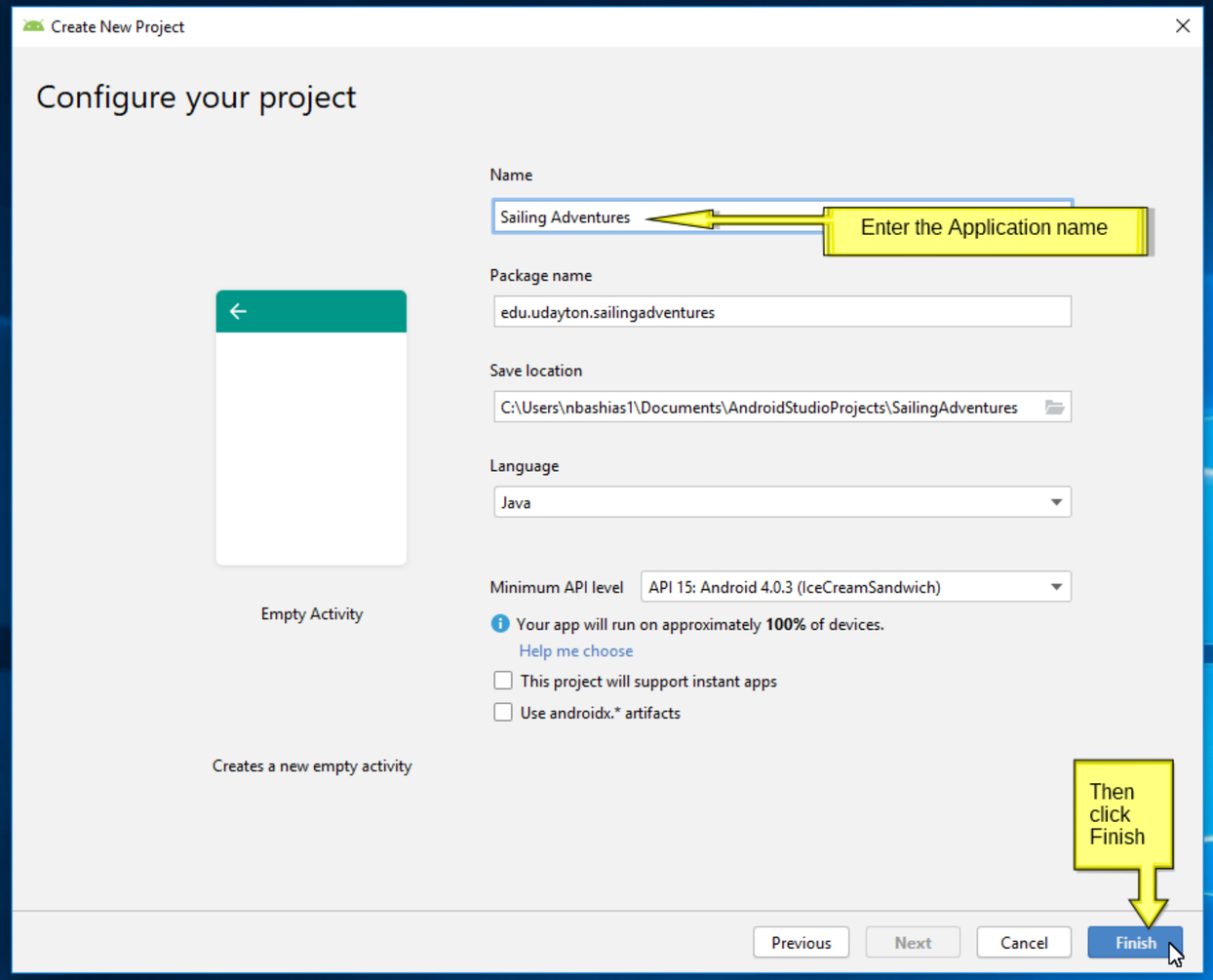
This lesson is loosely based on Android Boot Camp Chapter 8 (Design! Using DatePicker on a Tablet). This lesson also shows how to set up the app with multiple layouts, so that it uses responsive design to display the correct layout on the device (phone or tablet) on which it is launched.

In this part of Lesson 6, we:

1. *create the project*
2. *add emulator system images for a Nexus 7 (7" tablet) and a Nexus 10 (10" tablet)*
3. *add a custom icon*
4. *import an image file into the project*
5. *add dimension, string and color resources.*


Welcome to Android Studio
CityGuide
~\Documents\Andr...rojects\CityGuide
MedicalCalculator
~\Documents\And...MedicalCalculator
ConcertTickets
~\Documents\Andr...ts\ConcertTickets
HealthyRecipes
~\Documents\Andr...s\HealthyRecipes
HelloAndroidWorld
~\Documents\And...elloAndroidWorld
Android Studio
Version 3.4.1
Start a new Android Studio project
Open an existing Android Studio project
Check out project from Version Control
Profile or debug APK
Import project (Gradle, Eclipse ADT, etc.)
Import an Android code sample
Configure
Get Help
Start a new project


Create New Project
Choose your project
Phone and Tablet
Wear OS
TV
Android Auto
Android Things
Add No Activity
Basic Activity
Make sure the Empty Activity template is selected
Empty Activity
Bottom Navigation Activity
Fullscreen Activity
Master/Detail Flow
Navigation Drawer Activity
Google Maps Activity
Empty Activity
Creates a new empty activity
Click Next
Previous
Next
Cancel
Finish


Create New Project
Configure your project
Name
Sailing Adventures
Enter the Application name
Package name
edu.udayton.sailingadventures
Save location
C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures
Language
Java
Minimum API level
API 15: Android 4.0.3 (IceCreamSandwich)
Your app will run on approximately 100% of devices.
Help me choose
This project will support instant apps
Use androidx.* artifacts
Empty Activity
Creates a new empty activity
Then click Finish
Previous
Next
Cancel
Finish

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

app

AVD Manager

We need to add tablet system images, so open the AVD Manager

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

Android

app
- manifests
- java
  - edu.udayton.sailingadventures
    - MainActivity
  - edu.udayton.sailingadventures (androidTest)
  - edu.udayton.sailingadventures (test)
- generatedJava
- res
- Gradle Scripts

MainActivity.java

```
u.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO Terminal Build 6: Logcat

Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (moments ago)

1:1 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

app

Android Virtual Device Manager

Your Virtual Devices

Android Studio

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

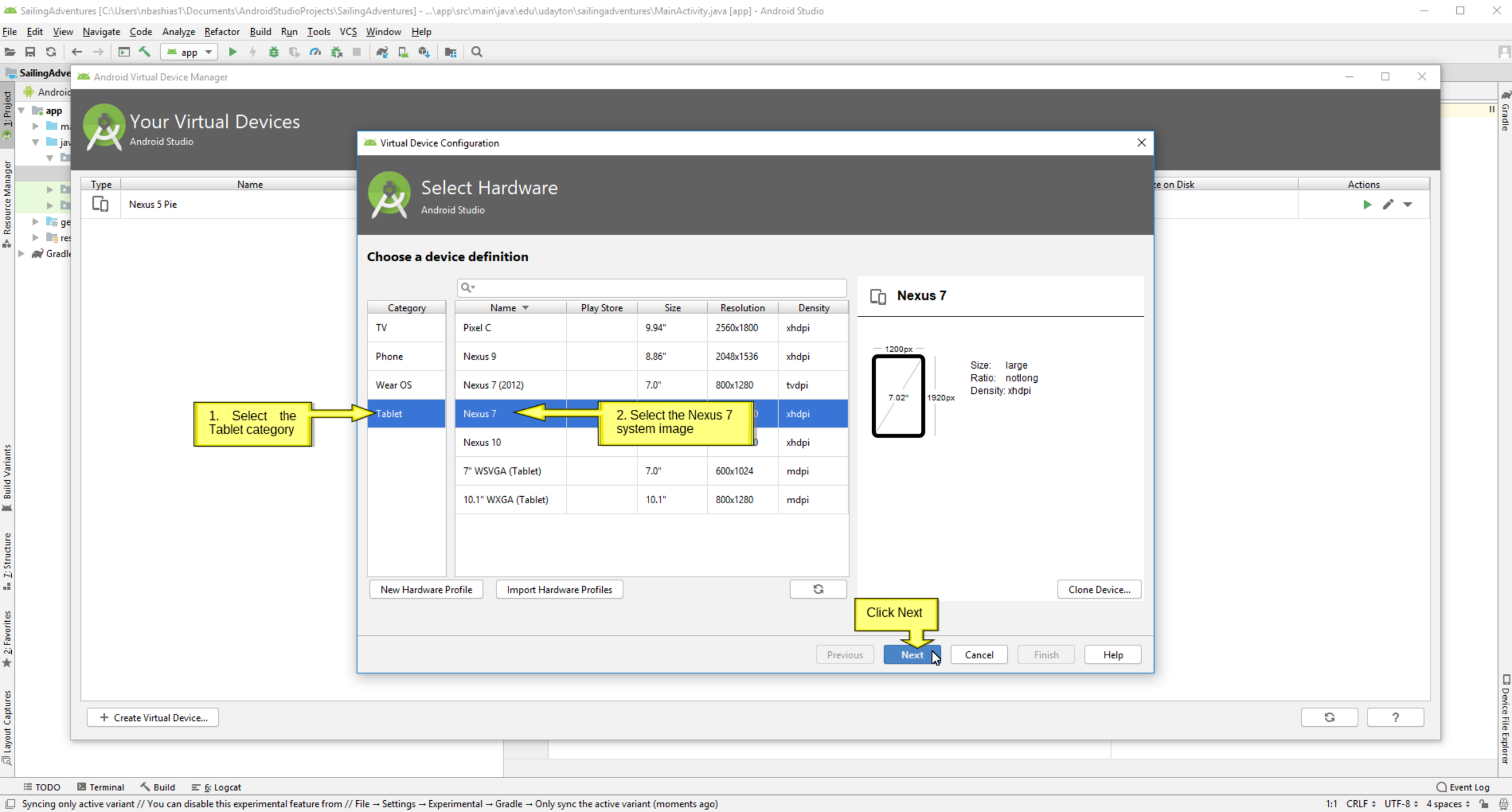
+ Create Virtual Device...

Create a new system image

TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (moments ago)

1:1 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
Android Virtual Device Manager
Your Virtual Devices
Android Studio
Type
Name
Nexus 5 Pie
Actions
Virtual Device Configuration
Select Hardware
Android Studio
Choose a device definition
Category
Name
Play Store
Size
Resolution
Density
TV
Pixel C
9.94"
2560x1800
xhdpi
Phone
Nexus 9
8.86"
2048x1536
xhdpi
Wear OS
Nexus 7 (2012)
7.0"
800x1280
tvdpi
Tablet
Nexus 7
xhdpi
Nexus 10
xhdpi
7" WSVGA (Tablet)
7.0"
600x1024
mdpi
10.1" WXGA (Tablet)
10.1"
800x1280
mdpi
1. Select the Tablet category
2. Select the Nexus 7 system image
Nexus 7
1200px
7.02"
1920px
Size: large
Ratio: notlong
Density: xhdpi
New Hardware Profile
Import Hardware Profiles
Clone Device...
Click Next
Previous
Next
Cancel
Finish
Help
Create Virtual Device...
TODO
Terminal
Build
6: Logcat
Event Log
Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (moments ago)

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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		

+ Create Virtual Device...

Virtual Device Configuration

System Image

Android Studio

Select a system image

Recommended x86 Images Other Images

Release Name	API Level	ABI	Target
Q Download	29	x86	Android 9.+ (Google APIs)
Pie Download			Android 9.0 (Google APIs)
Oreo Download			Android 8.1 (Google APIs)
Oreo Download	26	x86	Android 8.0 (Google APIs)
Nougat Download	25	x86	Android 7.1.1 (Google APIs)
Nougat Download	24	x86	Android 7.0 (Google APIs)
Marshmallow Download	23	x86	Android 6.0 (Google APIs)
Lollipop Download	22	x86	Android 5.1 (Google APIs)

Download the Android 9 (Pie) system image

Pie

API Level
28

Android
9.0

Google Inc.

System Image
x86

We recommend these images because they run the fastest and support Google APIs.

Questions on API level?
See the API level distribution chart

A system image must be selected to continue.

Previous Next Cancel Finish Help

TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (moments ago)

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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		

+ Create Virtual Device...

Virtual Device Configuration

System Image

Android Studio

Select a system image

Recommended x86 Images Other Images

Release Name	API Level	ABI	Target
Q Download	29	x86	Android 9.+ (Google APIs)
Pie	28	x86	Android 9.0 (Google APIs)
Oreo Download	27	x86	Android 8.1 (Google APIs)
Oreo Download	26	x86	Android 8.0 (Google APIs)
Nougat Download	25	x86	Android 7.1.1 (Google APIs)
Nougat Download	24	x86	Android 7.0 (Google APIs)
Marshmallow Download	23	x86	Android 6.0 (Google APIs)
Lollipop Download	22	x86	Android 5.1 (Google APIs)

Pie

API Level
28

Android
9.0
Google Inc.

System Image
x86

We recommend these images because they run the fastest
gle APIs.

level?
distribution chart

Once the download is done, click Next

Previous Next Cancel Finish Help

TODO Terminal Build 6: Logcat Event Log

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1:1 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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		

+ Create Virtual Device...

Virtual Device Configuration

Android Virtual Device (AVD)

Android Studio

Verify Configuration

AVD Name: Nexus 7 Pie

Optionally, you can change the virtual device name

Nexus 7 — 7.02 1200x1920 xhdpi — Change...

Pie — Android 9.0 x86 — Change...

Startup orientation: Portrait, Landscape

Emulated Performance — Graphics: Automatic

Device Frame — Enable Device Frame

Show Advanced Settings

AVD Name

The name of this AVD.

Click Finish

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (moments ago)

1:1 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

app

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Play Store	Resolution	API	Target	CPU/ABI	Size on Disk	Actions
	Nexus 5 Pie		1080 × 1920: xxhdpi	28	Android 9.0 (Google Play)	x86	9.5 GB	
	Nexus 7 Pie		1200 × 1920: xhdpi	28	Android 9.0 (Google APIs)	x86	513 MB	

+ Create Virtual Device...

Create another system image for a larger, 10" tablet

TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

Android Virtual Device Manager

Your Virtual Devices
Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		
	Nexus 7 Pie		

+ Create Virtual Device...

Virtual Device Configuration

Select Hardware
Android Studio

Choose a device definition

Category	Name	Play Store	Size	Resolution	Density
TV	Pixel C		9.94"	2560x1800	xhdpi
Phone	Nexus 9		8.86"	2048x1536	xhdpi
Wear OS	Nexus 7 (2012)		7.0"	800x1280	tvdpi
Tablet	Nexus 7		7.02"	1200x1920	xhdpi
	Nexus 10				xhdpi
	7" WSVGA (Tablet)				mdpi
	10.1" WXGA (Tablet)		10.1"	800x1280	mdpi

1. Select the Tablet category

2. Select the Nexus 10 system image

New Hardware Profile | Import Hardware Profiles

Nexus 10

2560px
10.05"
1600px

Size: xlarge
Ratio: notlong
Density: xhdpi

Clone Device...

Click Next

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		
	Nexus 7 Pie		

+ Create Virtual Device...

Virtual Device Configuration

System Image

Android Studio

Select a system image

Recommended x86 Images Other Images

Release Name	API Level	ABI	Target
Q Download	29	x86	Android 9.+ (Google APIs)
Pie			Android 9.0 (Google APIs)
Oreo Download			Android 8.1 (Google APIs)
Oreo Download	26	x86	Android 8.0 (Google APIs)
Nougat Download	25	x86	Android 7.1.1 (Google APIs)
Nougat Download	24	x86	Android 7.0 (Google APIs)
Marshmallow Download	23	x86	Android 6.0 (Google APIs)
Lollipop Download	22	x86	Android 5.1 (Google APIs)

Select the Android 9 system image

Pie

API Level
28

Android
9.0

Google Inc.

System Image
x86

We recommend these images because they run the fastest and support Google APIs.

Questions on API level?
vel distribution chart

Then click Next

Previous Next Cancel Finish Help

TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

Type	Name	Size on Disk	Actions
	Nexus 5 Pie		
	Nexus 7 Pie		

+ Create Virtual Device...

Virtual Device Configuration

Android Virtual Device (AVD)

Android Studio

Verify Configuration

AVD Name: Nexus 10 Pie

Optionally, you can change the virtual device name

Nexus 10 — 10.055 2560x1600 xhdpi — Change...

Pie — Android 9.0 x86 — Change...

Startup orientation: Portrait, Landscape

Emulated Performance — Graphics: Automatic

Device Frame: Enable Device Frame

Show Advanced Settings

AVD Name

The name of this AVD.

Click Finish

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

Android Virtual Device Manager

Your Virtual Devices

Android Studio

We have created our virtual devices, so we can close the AVD Manager for now

Type	Name	Play Store	Resolution	API	Target	CPU/ABI	Size on Disk
	Nexus 10 Pie		2560 × 1600: xhdpi	28	Android 9.0 (Google APIs)	x86	513 MB
	Nexus 5 Pie		1080 × 1920: xxhdpi	28	Android 9.0 (Google Play)	x86	9.5 GB
	Nexus 7 Pie		1200 × 1920: xhdpi	28	Android 9.0 (Google APIs)	x86	513 MB

+ Create Virtual Device...

TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

app

SailingAdventures 〉 app

Android

app
- manifests
- java
  - edu.udayton.sailingadventu
    - MainActivity
  - edu.udayton.sailingadventures (androidTest)
  - edu.udayton.sailingadventures (test)
- generatedJava
- res
- Gradle Scripts

Let's add a custom icon

Select, then right-click the 'app' in the Project explorer

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Source generation ended in 718 ms (2 minutes ago)

1:1 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

app

SailingAdventures > app

Android

app
manif
java
ed
ed
ed
gener
res
Gradle Sc

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

- New
- Link C++ Project with Gradle
- Cut Ctrl+X
- Copy Ctrl+C
- Copy Path Ctrl+Shift+C
- Copy Relative Path Ctrl+Alt+Shift+C
- Paste Ctrl+V
- Find Usages Alt+F7
- Find in Path... Ctrl+Shift+F
- Replace in Path... Ctrl+Shift+R
- Analyze
- Refactor
- Add to Favorites
- Show Image Thumbnails Ctrl+Shift+T
- Reformat Code Ctrl+Alt+L
- Optimize Imports Ctrl+Alt+O
- Run 'All Tests' Ctrl+Shift+F10
- Debug 'All Tests'
- Run 'All Tests' with Coverage
- Create 'All Tests'...
- Show in Explorer
- Open in Terminal
- Local History
- Synchronize 'app'
- Edit Scopes...
- Directory Path Ctrl+Alt+F12
- Compare With... Ctrl+D
- Open Module Settings F4
- Load/Unload Modules...
- Remove BOM
- Create Gist...
- Convert Java File to Kotlin File Ctrl+Alt+Shift+K

- Module
- Android Resource File
- Android Resource Directory
- Sample Data Directory
- File
- Scratch File Ctrl+Alt+Shift+Insert
- Directory
- C++ Class
- C/C++ Source File
- C/C++ Header File
- Image Asset
- Vector Asset
- module-info.java
- .editorconfig file
- Kotlin Script
- Gradle Kotlin DSL Build Script
- Gradle Kotlin DSL Settings
- Edit File Templates...
- AIDL
- Activity
- Android Auto
- Folder
- Fragment
- Google
- Other
- Service
- UI Component
- Wear
- Widget
- XML
- Resource Bundle

Select New > Image Asset from the menu that appears

TODO | Terminal | Build | 6: Logcat | Event Log

Open Asset Studio to create an image asset

1:1 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

app

SailingAdventures > app

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;
```

Asset Studio

Configure Image Asset

Android Studio

Icon Type: Launcher Icons (Adaptive and Legacy)

Name: ic_launcher

Foreground Layer | Background Layer | Legacy

Layer Name: ic_launcher_foreground

Source Asset

Asset Type: Image | Clip Art | Text

Path: wable-v24\ic_launcher_foreground.xml

Click to select the image file

Scaling

Trim: Yes | No

Resize: 100 %

Preview — xhdpi — Show Safe Zone — Show Grid

Circle | Squircle | Rounded Square | Square

Full Bleed Layers | Legacy Icon | Round Icon | Google Play Store

An icon with the same name already exists and will be overwritten.

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Source generation ended in 718 ms (2 minutes ago)

1:1 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

app

SailingAdventures > app

Android

- app
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    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;
```

Asset Studio

Configure Image Ass

Android Studio

Icon Type: Launcher Icons (Adaptive and Legacy

Name: ic_launcher

Foreground Layer Background Layer Legacy

Layer Name: ic_launcher_foreground

Source Asset

Asset Type: Image Clip Art Text

Path: wable-v24\ic_launcher_foreground

Scaling

Trim: Yes No

Resize:

dpi Show Safe Zone Show Grid

Full Ble Legacy Icon Round Icon Google Play Store

An icon with the same name already exists and will be overwritten.

Previous Next Cancel Finish Help

Select Path

Hide path

\CPS499\Summer2019\Data Files\Chapter08\ic_launcher_sailboat.png

- Data Files
  - Chapter02
  - Chapter03
  - Chapter04
  - Chapter05
  - Chapter06
  - Chapter07
  - Chapter08
    - hike.png
    - ic_launcher_sailboat.png
    - sail.png
    - sled.png
  - Chapter09
  - Chapter10
  - Chapter11
- HowTos

Drag and drop a file into the space above to quickly locate it in the tree

OK Cancel Help

Navigate to and select the launcher image file (from the Data Files for Chapter 8 of Android Boot Camp)

Then click OK

TODO Terminal Build 6: Logcat Event Log

Source generation ended in 718 ms (2 minutes ago)

1:1 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

app

SailingAdventures 〉 app

Android

- app
  - manifests
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activity_main.xml | MainActivity.java

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Asset Studio

Configure Image Asset

Android Studio

Icon Type: Launcher Icons (Adaptive and Legacy)

Name: ic_launcher

Foreground Layer | Background Layer | Legacy

Layer Name: ic_launcher_foreground

Source Asset

Asset Type: Image | Clip Art | Text

Path: les\Chapter08\ic_launcher_sailboat.png

Scaling

Trim: Yes | No

Resize: 100 %

Preview xhdpi Show Safe Zone Show Grid

Circle | Squircle | Rounded Square | Square

Full Bleed Layers | Legacy Icon | Round Icon | Google Play Store

Click Next

An icon with the same name already exists and will be overwritten.

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Source generation ended in 718 ms (2 minutes ago)

1:1 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

app

SailingAdventures 〉 app

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- app
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  - res
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;
```

Asset Studio

Confirm Icon Path

Android Studio

Res Directory: main

Output Directories:

- main
  - ic_launcher-web.png
  - res
    - drawable
      - ic_launcher_background.xml
    - mipmap-anydpi-v26
      - ic_launcher.xml
      - ic_launcher_round.xml
    - mipmap-xxxhdpi
      - ic_launcher.png
      - ic_launcher_foreground.png
      - ic_launcher_round.png
    - mipmap-xxhdpi
      - ic_launcher.png
      - ic_launcher_foreground.png
      - ic_launcher_round.png
    - mipmap-xhdpi
      - ic_launcher.png
      - ic_launcher_foreground.png
      - ic_launcher_round.png
    - mipmap-hdpi

Output File

File Type:	PNG File
Density:	nodpi
Size (dp):	512x512
Size (px):	512x512

Click Finish

Some existing files will be overwritten by this operation.
Files which replace existing files are marked red in the preview above.

Previous | Next | Cancel | Finish | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Source generation ended in 718 ms (2 minutes ago)

1:1 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

app

SailingAdventures 〉 app

Minimize

To import the sailboard image file, start by minimizing Android Studio

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
- Gradle Scripts

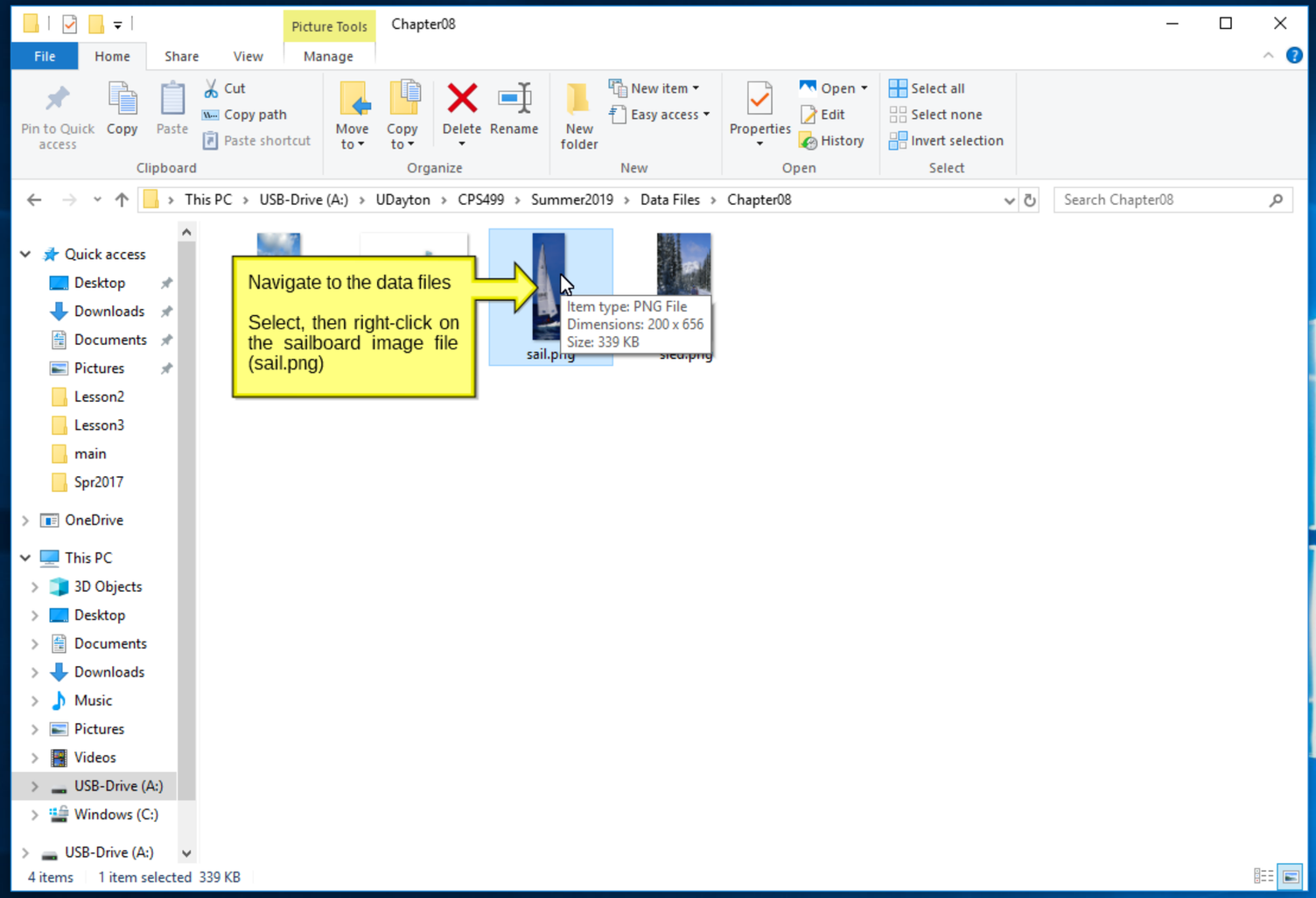
activity_main.xml | MainActivity.java

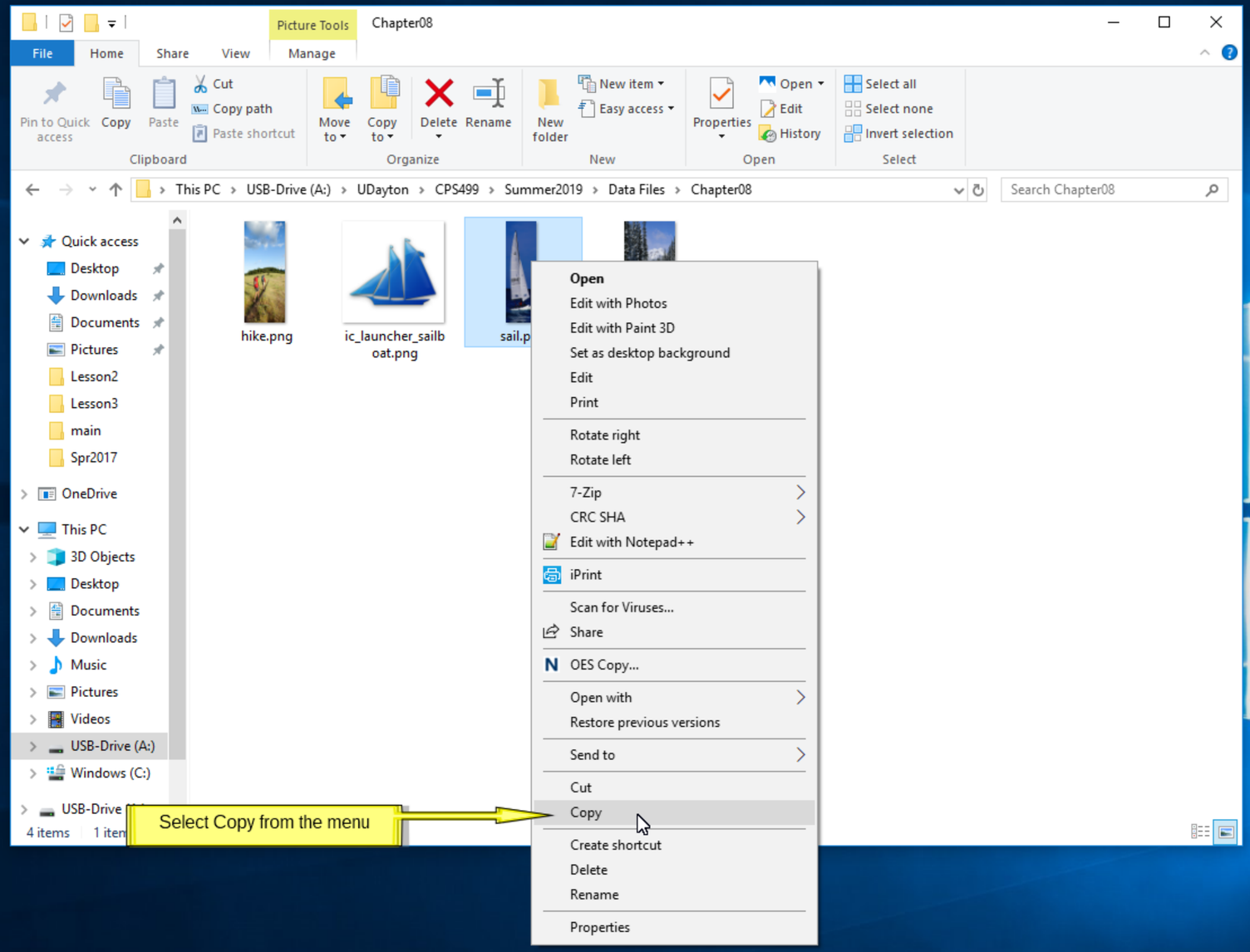
```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Source generation ended in 718 ms (3 minutes ago)

1:1 CRLF ÷ UTF-8 ÷ 4 spaces ÷


Picture Tools
Chapter08
File
Home
Share
View
Manage
Pin to Quick access
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New item
Easy access
New
Properties
Open
Edit
History
Select all
Select none
Invert selection
Select
This PC › USB-Drive (A:) › UDayton › CPS499 › Summer2019 › Data Files › Chapter08
Search Chapter08
Quick access
Desktop
Downloads
Documents
Pictures
Lesson2
Lesson3
main
Spr2017
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
USB-Drive (A:)
Windows (C:)
USB-Drive (A:)
Navigate to the data files
Select, then right-click on the sailboard image file (sail.png)
Item type: PNG File
Dimensions: 200 x 656
Size: 339 KB
sail.png
4 items
1 item selected 339 KB


Picture Tools
Chapter08
File
Home
Share
View
Manage
Pin to Quick access
Copy
Paste
Cut
Copy path
Paste shortcut
Clipboard
Move to
Copy to
Delete
Rename
Organize
New folder
New item
Easy access
New
Properties
Open
Edit
History
Select all
Select none
Invert selection
Select
This PC › USB-Drive (A:) › UDayton › CPS499 › Summer2019 › Data Files › Chapter08
Search Chapter08
Quick access
Desktop
Downloads
Documents
Pictures
Lesson2
Lesson3
main
Spr2017
OneDrive
This PC
3D Objects
Desktop
Documents
Downloads
Music
Pictures
Videos
USB-Drive (A:)
Windows (C:)
USB-Drive
4 items
hike.png
ic_launcher_sailboat.png
sail.p
Open
Edit with Photos
Edit with Paint 3D
Set as desktop background
Edit
Print
Rotate right
Rotate left
7-Zip
CRC SHA
Edit with Notepad++
iPrint
Scan for Viruses...
Share
OES Copy...
Open with
Restore previous versions
Send to
Cut
Copy
Create shortcut
Delete
Rename
Properties
Select Copy from the menu

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

app

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

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
- Gradle Scripts

After restoring Android Studio, expand the app/res folder in the Project explorer

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

app

SailingAdventures > app > src > main > res > drawable-v24

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

Select, then right-click on the app/res/drawable folder

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

app

SailingAdventures > app > src > main > res > drawable-v24

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
  - Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

New	
Link C++ Project with Gradle	
Cut	Ctrl+X
Copy	Ctrl+C
Copy Paths	Ctrl+Shift+C
Copy References	Ctrl+Alt+Shift+C
Paste	
Find Usages	
Analyze	
Refactor	
Add to Favorites	
Show Image Thumbnails	Ctrl+Shift+T
Reformat Code	Ctrl+Alt+L
Optimize Imports	Ctrl+Alt+O
Delete...	Delete
Run 'Tests in 'drawable-v24''	Ctrl+Shift+F10
Debug 'Tests in 'drawable-v24''	
Run 'Tests in 'drawable-v24'' with Coverage	
Create 'Tests in 'drawable-v24''...	
Show in Explorer	
Open in Terminal	
Local History	
Synchronize selected files	
Edit Scopes...	
File Path	Ctrl+Alt+F12
Compare Directories	Ctrl+D
Load/Unload Modules...	
Remove BOM	
Create Gist...	
Convert Java File to Kotlin File	Ctrl+Alt+Shift+K
Convert to WebP...	

Select Paste from the menu

TODO Terminal Event Log

Paste from clipboard

1:1 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

app

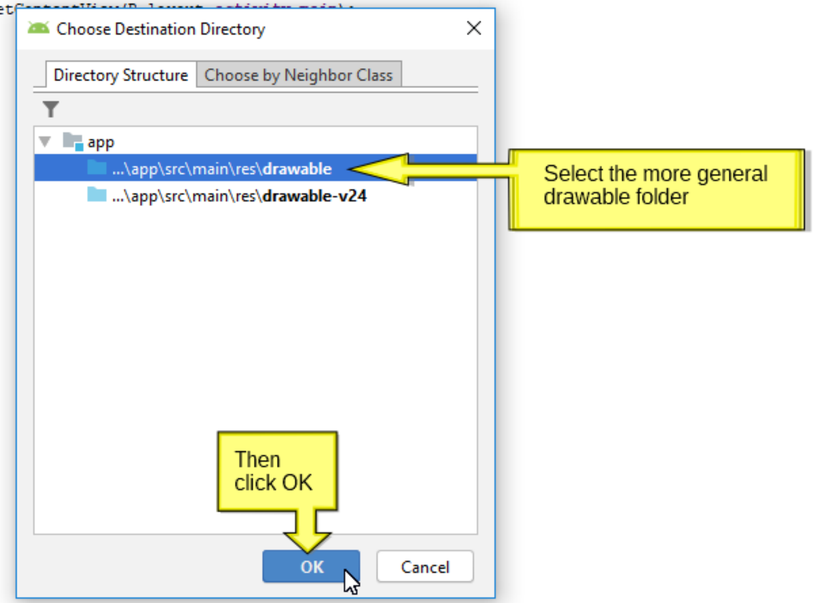
SailingAdventures > app > src > main > res > drawable-v24

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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



TODO Terminal Build 6: Logcat Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

app

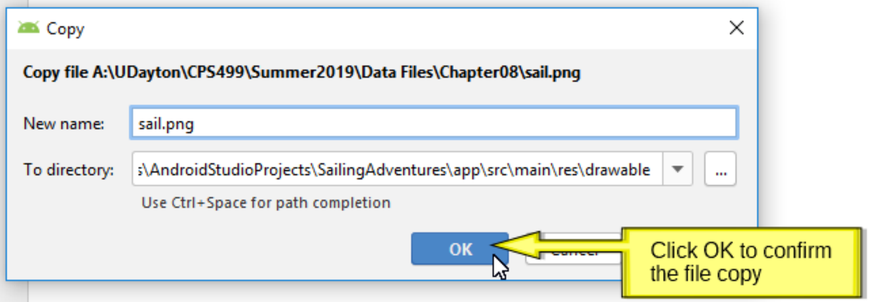
SailingAdventures > app > src > main > res > drawable-v24

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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



TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:9 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

app

SailingAdventures > app > src > main > res > values

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

To add dimension resources, first select and right-click the app/res/values folder

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 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

app

SailingAdventures > app > src > main > res > values

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

New
- Link C++ Project with Gradle
- Cut Ctrl+X
- Copy Ctrl+C
- Copy Path Ctrl+Shift+C
- Copy Reference Ctrl+Alt+Shift+C
- Paste Ctrl+V
- Find Usages Alt+F7
- Find in Path... Ctrl+Shift+F
- Replace in Path... Ctrl+Shift+R
- Analyze
- Refactor
- Add to Favorites
- Show Image Thumbnails Ctrl+Shift+T
- Reformat Code Ctrl+Alt+L
- Optimize Imports Ctrl+Alt+O
- Delete... Delete
- Run 'Tests in 'values'' Ctrl+Shift+F10
- Debug 'Tests in 'values''
- Run 'Tests in 'values'' with Coverage
- Create 'Tests in 'values''...
- Show in Explorer
- Open in Terminal
- Local History
- Synchronize 'values'
- Edit Scopes...
- Directory Path Ctrl+Alt+F12
- Compare With... Ctrl+D
- Load/Unload Modules...
- Remove BOM

- Kotlin File/Class
- Values resource file
- Sample Data Directory
- File
- Scratch File Ctrl+Alt+Shift+Insert
- Directory
- C++ Class
- C/C++ Source File
- C/C++ Header File
- Image Asset
- Vector Asset
- module-info.java
- .editorconfig file
- Kotlin Script
- Singleton
- Gradle Kotlin DSL Build Script
- Gradle Kotlin DSL Settings
- Edit File Templates...
- AIDL
- Activity
- Android Auto
- Folder
- Fragment
- Google
- Other
- Service
- UI Component
- Wear
- Widget
- XML
- Resource Bundle

Select New > Values resource file from the menu that appears

TODO | Terminal | Event Log

Create a new Values r...

1:1 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

app

SailingAdventures > app > src > main > res > values

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
    - edu.udayton.sailingadventures (test)
  - generatedJava
  - res
    - drawable
    - layout
    - mipmap
    - values
- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

New Resource File

File name: dimens.xml

1. Enter the file name 'dimens.xml'

Source set: main

Directory name: values

Available qualifiers:

- Country Code
- Network Code
- Locale
- Layout Direction
- Smallest Screen Width
- Screen Width
- Screen Height
- Size
- Ratio
- Orientation
- UI Mode
- Night Mode
- Density

>>

<<

Chosen qualifiers:

Nothing to show

2. Click OK

OK | Cancel | Help

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 CRLF ÷ UTF-8 ÷ 4 spaces ÷

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\dimens.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > dimens.xml

Android

- app
  - manifests
  - 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 | dimens.xml

```
<?xml version="1.0" encoding="utf-8"?>
<resources></resources>
```

Place the cursor inside the resources container, and hit the Enter key

resources

TODO | Terminal | Build | 6: Logcat | Event Log

XML tag has empty body

2:12 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\dimens.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > dimens.xml

Android

- app
  - manifests
  - 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 | dimens.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="stdSailWidth">99dp</dimen>
    <dimen name="stdSailHeight">295dp</dimen>
    <dimen name="stdViewHeight">27dp</dimen>
    <dimen name="stdTitleTextSize">23sp</dimen>
    <dimen name="stdTitlePadding">15dp</dimen>
    <dimen name="stdDescTextSize">14sp</dimen>
    <dimen name="stdDescPadding">9dp</dimen>
    <dimen name="stdBtnTextSize">16sp</dimen>
    <dimen name="stdBtnPadding">9dp</dimen>
    <dimen name="stdResTextSize">16sp</dimen>
    <dimen name="stdResPadding">9dp</dimen>
</resources>
```

Add these dimension resources for the "standard" (default) phone layout

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

14:13 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\dimens.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > dimens.xml

Android

- app
  - manifests
  - 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 | dimens.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="stdSailWidth">99dp</dimen>
    <dimen name="stdSailHeight">295dp</dimen>
    <dimen name="stdViewHeight">27dp</dimen>
    <dimen name="stdTitleTextSize">23sp</dimen>
    <dimen name="stdTitlePadding">15dp</dimen>
    <dimen name="stdDescTextSize">14sp</dimen>
    <dimen name="stdDescPadding">9dp</dimen>
    <dimen name="stdBtnTextSize">16sp</dimen>
    <dimen name="stdBtnPadding">9dp</dimen>
    <dimen name="stdResTextSize">16sp</dimen>
    <dimen name="stdResPadding">9dp</dimen>

    <dimen name="xlrgSailWidth">200dp</dimen>
    <dimen name="xlrgSailHeight">656dp</dimen>
    <dimen name="xlrgViewHeight">60dp</dimen>
    <dimen name="xlrgTitleTextSize">50sp</dimen>
    <dimen name="xlrgTitlePadding">50dp</dimen>
    <dimen name="xlrgDescTextSize">30sp</dimen>
    <dimen name="xlrgDescPadding">20dp</dimen>
    <dimen name="xlrgBtnTextSize">30sp</dimen>
    <dimen name="xlrgBtnPadding">20dp</dimen>
    <dimen name="xlrgResTextSize">36sp</dimen>
    <dimen name="xlrgResPadding">20dp</dimen>
</resources>
```

Then, add these dimension resources for the "extra large" 10-inch tablet layout

Notice how the name suffices are the same, and name pairs only differ by prefix?

For example, "stdSailWidth" is the width of the sailboat image in the phone layout, while "xlrgSailWidth" is the width of the sailboard image in the 10-inch tablet layout

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

26:13 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\dimens.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > dimens.xml

Close. Alt-click to close others

Close the dimens.xml file

Android

- app
  - manifests
  - 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 | dimens.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <dimen name="stdSailWidth">99dp</dimen>
    <dimen name="stdSailHeight">295dp</dimen>
    <dimen name="stdViewHeight">27dp</dimen>
    <dimen name="stdTitleTextSize">23sp</dimen>
    <dimen name="stdTitlePadding">15dp</dimen>
    <dimen name="stdDescTextSize">14sp</dimen>
    <dimen name="stdDescPadding">9dp</dimen>
    <dimen name="stdBtnTextSize">16sp</dimen>
    <dimen name="stdBtnPadding">9dp</dimen>
    <dimen name="stdResTextSize">16sp</dimen>
    <dimen name="stdResPadding">9dp</dimen>

    <dimen name="xlrgSailWidth">200dp</dimen>
    <dimen name="xlrgSailHeight">656dp</dimen>
    <dimen name="xlrgViewHeight">60dp</dimen>
    <dimen name="xlrgTitleTextSize">50sp</dimen>
    <dimen name="xlrgTitlePadding">50dp</dimen>
    <dimen name="xlrgDescTextSize">30sp</dimen>
    <dimen name="xlrgDescPadding">20dp</dimen>
    <dimen name="xlrgBtnTextSize">30sp</dimen>
    <dimen name="xlrgBtnPadding">20dp</dimen>
    <dimen name="xlrgResTextSize">36sp</dimen>
    <dimen name="xlrgResPadding">20dp</dimen>
</resources>
```

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

26:13 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

app

SailingAdventures > app > src > main > res > values > strings.xml

Android

- app
  - manifests
  - 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

Open the strings.xml file to add string resources

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

Syncing only active variant // You can disable this experimental feature from // File → Settings → Experimental → Gradle → Only sync the active variant (today 3:36 PM)

1:1 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\strings.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > strings.xml

Android

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

activity_main.xml | MainActivity.java | strings.xml

Edit translations for all locales in the translations editor. Open editor Hide notification

```
1 <resources>
2   <string name="app_name">Sailing Adventures</string>
3 </resources>
4
```

As in previous lessons, use the Translations editor to add the string resources (not shown here)

resources

TODO Terminal Build 6: Logcat Event Log

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1:1 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\strings.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > strings.xml

Android

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

activity_main.xml | MainActivity.java | strings.xml

Edit translations for all locales in the translations editor. Open editor Hide notification

```
<resources>
    <string name="app_name">Sailing Adventures</string>
    <string name="txtSailBoat">sailboat</string>
    <string name="txtTitle">Sailing Adventures - Kona, Hawaii</string>
    <string name="txtDescription">Sailing Adventures located at Kona Harbor on the Big Island in Hawaii has a simple sailing philosophy - We Create Adventure! Our experier
    <string name="btnDate">Select the Date for a Full-Day Sailing Trip</string>
</resources>
```

Add these string resources

Note that the full text for txtDescription is:

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.

TODO Terminal Build 6: Logcat Event Log

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7:13 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\strings.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > strings.xml

Close. Alt-click to close others

Close the strings.xml file

Android

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

activity_main.xml | MainActivity.java | strings.xml

Edit translations for all locales in the translations editor. Open editor Hide notification

```
1 <resources>
2     <string name="app_name">Sailing Adventures</string>
3     <string name="txtSailBoat">sailboat</string>
4     <string name="txtTitle">Sailing Adventures - Kona, Hawaii</string>
5     <string name="txtDescription">Sailing Adventures located at Kona Harbor on the Big Island in Hawaii has a simple sailing philosophy - We Create Adventure! Our experier
6     <string name="btnDate">Select the Date for a Full-Day Sailing Trip</string>
7 </resources>
8
```

TODO Terminal Build 6: Logcat Event Log

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7:13 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

app

SailingAdventures > app > src > main > res > values > colors.xml

Android

- app
  - manifests
  - 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

Open the colors.xml file to add a color resource for the title's background color

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

TODO | Terminal | Build | 6: Logcat | Event Log

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1:1 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\colors.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > colors.xml

Android

- app
  - manifests
  - 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 | colors.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#008577</color>
    <color name="colorPrimaryDark">#00574B</color>
    <color name="colorAccent">#D81B60</color>

    <color name="titleBackground">#b0c4de</color>
</resources>
```

Note the color preview here

Add this color resource for the title background color

resources

TODO | Terminal | Build | 6: Logcat | Event Log

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7:50 CRLF UTF-8 4 spaces

SailingAdventures [C:\Users\nbashias1\Documents\AndroidStudioProjects\SailingAdventures] - ...\app\src\main\res\values\colors.xml [app] - Android Studio

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

app

SailingAdventures > app > src > main > res > values > colors.xml

Close. Alt-click to close others

Close the colors.xml file

Android

- app
  - manifests
  - 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 | colors.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#008577</color>
    <color name="colorPrimaryDark">#00574B</color>
    <color name="colorAccent">#D81B60</color>

    <color name="titleBackground">#b0c4de</color>
</resources>
```

resources

TODO | Terminal | Build | 6: Logcat | Event Log

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7:50 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

app

SailingAdventures > app > src > main > java

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

Android

- app
  - manifests
  - java
    - edu.udayton.sailingadventures
      - MainActivity
    - edu.udayton.sailingadventures (androidTest)
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- Gradle Scripts

activity_main.xml | MainActivity.java

```
package edu.udayton.sailingadventures;

import ...

public class MainActivity extends AppCompatActivity {

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

This concludes Part 1 of Lesson 6.

In Part 2, we build the "standard" (default) phone layout.

TODO | Terminal | Build | 6: Logcat | Event Log

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1:1 CRLF UTF-8 4 spaces