# Lint Report

Check performed at Thu Aug 07 16:35:53 PDT 2014.

2 errors and 25 warnings found:

|  |  |
| --- | --- |
|  | [Correctness](#id.gjdgxs) |
| 2 | [WrongManifestParent: Wrong manifest parent](#id.30j0zll) |
| 1 | [DuplicateUsesFeature: Feature declared more than once](#id.1fob9te) |
| 1 | [ManifestOrder: Incorrect order of elements in manifest](#id.3znysh7) |
|  | [Performance](#id.2et92p0) |
| 1 | [Overdraw: Overdraw: Painting regions more than once](#id.tyjcwt) |
| 18 | [UnusedResources: Unused resources](#id.3dy6vkm) |
|  | [Usability:Icons](#id.1t3h5sf) |
| 2 | [IconDensities: Icon densities validation](#id.4d34og8) |
|  | [Internationalization](#id.2s8eyo1) |
| 2 | [HardcodedText: Hardcoded text](#id.17dp8vu) |
|  | [Disabled Checks (14)](#id.3rdcrjn) |

Correctness

WrongManifestParent: Wrong manifest parent

[../../src/main/AndroidManifest.xml](http://docs.google.com/src/main/AndroidManifest.xml):15: The <uses-permission> element must be a direct child of the <manifest> root element

12   
 13 android:label="@string/app\_name"  
 14 android:theme="@style/AppTheme" >  
 15 <uses-permission android:name="android.permission.CAMERA" />  
  
 16 <uses-feature android:name="android.hardware.camera" />  
 17

[../../src/main/AndroidManifest.xml](http://docs.google.com/src/main/AndroidManifest.xml):16: The <uses-feature> element must be a direct child of the <manifest> root element

13 android:label="@string/app\_name"  
 14 android:theme="@style/AppTheme" >  
 15 <uses-permission android:name="android.permission.CAMERA" />  
 16 <uses-feature android:name="android.hardware.camera" />  
  
 17   
 18 <receiver android:name=".Main" >

Priority: 6 / 10

Category: Correctness

Severity: Fatal

Explanation: Checks that various manifest elements are declared in the right place.

The <uses-library> element should be defined as a direct child of the <application> tag, not the <manifest> tag or an <activity> tag. Similarly, a <uses-sdk> tag much be declared at the root level, and so on. This check looks for incorrect declaration locations in the manifest, and complains if an element is found in the wrong place.

More info: <http://developer.android.com/guide/topics/manifest/manifest-intro.html>

To suppress this error, use the issue id "WrongManifestParent" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

DuplicateUsesFeature: Feature declared more than once

[../../src/main/AndroidManifest.xml](http://docs.google.com/src/main/AndroidManifest.xml):16: Duplicate declaration of uses-feature android.hardware.camera

13 android:label="@string/app\_name"  
 14 android:theme="@style/AppTheme" >  
 15 <uses-permission android:name="android.permission.CAMERA" />  
 16 <uses-feature android:name="android.hardware.camera" />  
  
 17   
 18 <receiver android:name=".Main" >

Priority: 5 / 10

Category: Correctness

Severity: Warning

Explanation: Ensures you declare each hardware or software feature only once in the manifest.

A given feature should only be declared once in the manifest.

More info:

To suppress this error, use the issue id "DuplicateUsesFeature" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

ManifestOrder: Incorrect order of elements in manifest

[../../src/main/AndroidManifest.xml](http://docs.google.com/src/main/AndroidManifest.xml):15: <uses-permission> tag appears after <application> tag

12   
 13 android:label="@string/app\_name"  
 14 android:theme="@style/AppTheme" >  
 15 <uses-permission android:name="android.permission.CAMERA" />  
  
 16 <uses-feature android:name="android.hardware.camera" />  
 17

Priority: 5 / 10

Category: Correctness

Severity: Warning

Explanation: Checks for manifest problems like <uses-sdk> after the <application> tag.

The <application> tag should appear after the elements which declare which version you need, which features you need, which libraries you need, and so on. In the past there have been subtle bugs (such as themes not getting applied correctly) when the <application> tag appears before some of these other elements, so it's best to order your manifest in the logical dependency order.

More info:

To suppress this error, use the issue id "ManifestOrder" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

Performance

Overdraw: Overdraw: Painting regions more than once

[../../src/main/res/layout/activity\_tenet\_torch\_application.xml](http://docs.google.com/src/main/res/layout/activity_tenet_torch_application.xml):5: Possible overdraw: Root element paints background @drawable/offstate with a theme that also paints a background (inferred theme is @style/AppTheme)

2 xmlns:tools="http://schemas.android.com/tools"  
 3 android:layout\_width="fill\_parent"  
 4 android:layout\_height="fill\_parent"  
 5 android:background="@drawable/offstate"  
  
 6   
 7 tools:context=".TenetTorchApplication">

Priority: 3 / 10

Category: Performance

Severity: Warning

Explanation: Looks for overdraw issues (where a view is painted only to be fully painted over)

If you set a background drawable on a root view, then you should use a custom theme where the theme background is null. Otherwise, the theme background will be painted first, only to have your custom background completely cover it; this is called "overdraw".

NOTE: This detector relies on figuring out which layouts are associated with which activities based on scanning the Java code, and it's currently doing that using an inexact pattern matching algorithm. Therefore, it can incorrectly conclude which activity the layout is associated with and then wrongly complain that a background-theme is hidden.

If you want your custom background on multiple pages, then you should consider making a custom theme with your custom background and just using that theme instead of a root element background.

Of course it's possible that your custom drawable is translucent and you want it to be mixed with the background. However, you will get better performance if you pre-mix the background with your drawable and use that resulting image or color as a custom theme background instead.

More info:

To suppress this error, use the issue id "Overdraw" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

UnusedResources: Unused resources

[../../src/main/res/layout/activity\_widgetservice.xml](http://docs.google.com/src/main/res/layout/activity_widgetservice.xml): The resource R.layout.activity\_widgetservice appears to be unused

[../../src/main/res/drawable-hdpi/androtroch.png](http://docs.google.com/src/main/res/drawable-hdpi/androtroch.png): The resource R.drawable.androtroch appears to be unused

[../../src/main/res/drawable-hdpi/finallogo.jpg](http://docs.google.com/src/main/res/drawable-hdpi/finallogo.jpg): The resource R.drawable.finallogo appears to be unused

[../../src/main/res/drawable-hdpi/grey.jpg](http://docs.google.com/src/main/res/drawable-hdpi/grey.jpg): The resource R.drawable.grey appears to be unused

[../../src/main/res/drawable-hdpi/ic\_launcher.png](http://docs.google.com/src/main/res/drawable-hdpi/ic_launcher.png): The resource R.drawable.ic\_launcher appears to be unused

+ 3 Additional Locations...

Additional locations:

* [../../src/main/res/drawable-mdpi/ic\_launcher.png](http://docs.google.com/src/main/res/drawable-mdpi/ic_launcher.png)
* [../../src/main/res/drawable-xhdpi/ic\_launcher.png](http://docs.google.com/src/main/res/drawable-xhdpi/ic_launcher.png)
* [../../src/main/res/drawable-xxhdpi/ic\_launcher.png](http://docs.google.com/src/main/res/drawable-xxhdpi/ic_launcher.png)

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| xhdpi | hdpi | mdpi | xxhdpi |

+ 13 More Occurrences...

[../../src/main/res/drawable-hdpi/images.jpg](http://docs.google.com/src/main/res/drawable-hdpi/images.jpg): The resource R.drawable.images appears to be unused

[../../src/main/res/drawable-hdpi/logoaltered.jpg](http://docs.google.com/src/main/res/drawable-hdpi/logoaltered.jpg): The resource R.drawable.logoaltered appears to be unused

[../../src/main/res/drawable-hdpi/logobmp.bmp](http://docs.google.com/src/main/res/drawable-hdpi/logobmp.bmp): The resource R.drawable.logobmp appears to be unused

[../../src/main/res/drawable-hdpi/logojpeg.jpg](http://docs.google.com/src/main/res/drawable-hdpi/logojpeg.jpg): The resource R.drawable.logojpeg appears to be unused

[../../src/main/res/menu/splashscreen.xml](http://docs.google.com/src/main/res/menu/splashscreen.xml): The resource R.menu.splashscreen appears to be unused

[../../src/main/res/values/strings.xml](http://docs.google.com/src/main/res/values/strings.xml):5: The resource R.string.hello\_world appears to be unused

2 <resources>  
 3   
 4 <string name="app\_name">TenetTorchApplication</string>  
 5 <string name="hello\_world">Hello world!</string>  
  
 6 <string name="action\_settings">Settings</string>  
 7 <string name="title\_activity\_splashscreen">Splashscreen</string>

[../../src/main/res/values/strings.xml](http://docs.google.com/src/main/res/values/strings.xml):7: The resource R.string.title\_activity\_splashscreen appears to be unused

4 <string name="app\_name">TenetTorchApplication</string>  
 5 <string name="hello\_world">Hello world!</string>  
 6 <string name="action\_settings">Settings</string>  
 7 <string name="title\_activity\_splashscreen">Splashscreen</string>  
  
 8 <string name="title\_activity\_main">Main</string>  
 9 <string name="title\_activity\_widgetservice">Widgetservice</string>

[../../src/main/res/values/strings.xml](http://docs.google.com/src/main/res/values/strings.xml):8: The resource R.string.title\_activity\_main appears to be unused

5 <string name="hello\_world">Hello world!</string>  
 6 <string name="action\_settings">Settings</string>  
 7 <string name="title\_activity\_splashscreen">Splashscreen</string>  
 8 <string name="title\_activity\_main">Main</string>  
  
 9 <string name="title\_activity\_widgetservice">Widgetservice</string>  
 10

[../../src/main/res/drawable-hdpi/sun.jpg](http://docs.google.com/src/main/res/drawable-hdpi/sun.jpg): The resource R.drawable.sun appears to be unused

[../../src/main/res/drawable-hdpi/tenet.jpeg](http://docs.google.com/src/main/res/drawable-hdpi/tenet.jpeg): The resource R.drawable.tenet appears to be unused

[../../src/main/res/menu/tenet\_torch\_application.xml](http://docs.google.com/src/main/res/menu/tenet_torch_application.xml): The resource R.menu.tenet\_torch\_application appears to be unused

[../../src/main/res/drawable-hdpi/tenetlogo.png](http://docs.google.com/src/main/res/drawable-hdpi/tenetlogo.png): The resource R.drawable.tenetlogo appears to be unused

[../../src/main/res/menu/widgetservice.xml](http://docs.google.com/src/main/res/menu/widgetservice.xml): The resource R.menu.widgetservice appears to be unused

Priority: 3 / 10

Category: Performance

Severity: Warning

Explanation: Looks for unused resources.

Unused resources make applications larger and slow down builds.

More info:

To suppress this error, use the issue id "UnusedResources" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

Usability:Icons

IconDensities: Icon densities validation

[../../src/main/res/drawable-mdpi](http://docs.google.com/src/main/res/drawable-mdpi): Missing the following drawables in drawable-mdpi: androtroch.png, finallogo.jpg, finallogo1.jpg, grey.jpg, images.jpg... (8 more)

[../../src/main/res/drawable-xhdpi](http://docs.google.com/src/main/res/drawable-xhdpi): Missing the following drawables in drawable-xhdpi: androtroch.png, finallogo.jpg, finallogo1.jpg, grey.jpg, images.jpg... (8 more)

Priority: 4 / 10

Category: Usability:Icons

Severity: Warning

Explanation: Ensures that icons provide custom versions for all supported densities.

Icons will look best if a custom version is provided for each of the major screen density classes (low, medium, high, extra high). This lint check identifies icons which do not have complete coverage across the densities.

Low density is not really used much anymore, so this check ignores the ldpi density. To force lint to include it, set the environment variable ANDROID\_LINT\_INCLUDE\_LDPI=true. For more information on current density usage, see <http://developer.android.com/resources/dashboard/screens.html>

More info: <http://developer.android.com/guide/practices/screens_support.html>

To suppress this error, use the issue id "IconDensities" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

Internationalization

HardcodedText: Hardcoded text

[../../src/main/res/layout/activity\_tenet\_torch\_application.xml](http://docs.google.com/src/main/res/layout/activity_tenet_torch_application.xml):23: [I18N] Hardcoded string "Tap to turn on light", should use @string resource

20 android:layout\_width="wrap\_content"  
 21 android:layout\_height="wrap\_content"  
 22 android:textAppearance="?android:attr/textAppearanceLarge"  
 23 android:text="Tap to turn on light"  
  
 24 android:id="@+id/textView2"  
 25 android:textColor="#ffff0500"

[../../src/main/res/layout/activity\_tenet\_torch\_application.xml](http://docs.google.com/src/main/res/layout/activity_tenet_torch_application.xml):32: [I18N] Hardcoded string "New ToggleButton", should use @string resource

29 <ToggleButton  
 30 android:layout\_width="fill\_parent"  
 31 android:layout\_height="fill\_parent"  
 32 android:text="New ToggleButton"  
  
 33 android:id="@+id/toggleButton1"  
 34 android:checked="false"

Note: This issue has an associated quickfix operation in Eclipse/ADT

Priority: 5 / 10

Category: Internationalization

Severity: Warning

Explanation: Looks for hardcoded text attributes which should be converted to resource lookup.

Hardcoding text attributes directly in layout files is bad for several reasons:

\* When creating configuration variations (for example for landscape or portrait)you have to repeat the actual text (and keep it up to date when making changes)

\* The application cannot be translated to other languages by just adding new translations for existing string resources.

In Android Studio and Eclipse there are quickfixes to automatically extract this hardcoded string into a resource lookup.

More info:

To suppress this error, use the issue id "HardcodedText" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

Disabled Checks

The following issues were not run by lint, either because the check is not enabled by default, or because it was disabled with a command line flag or via one or more lint.xml configuration files in the project directories.

BackButton

Disabled By: Default

Priority: 6 / 10

Category: Usability

Severity: Warning

Explanation: Looks for Back buttons, which are not common on the Android platform.

According to the Android Design Guide,

"Other platforms use an explicit back button with label to allow the user to navigate up the application's hierarchy. Instead, Android uses the main action bar's app icon for hierarchical navigation and the navigation bar's back button for temporal navigation."

This check is not very sophisticated (it just looks for buttons with the label "Back"), so it is disabled by default to not trigger on common scenarios like pairs of Back/Next buttons to paginate through screens.

More info: <http://developer.android.com/design/patterns/pure-android.html>

To suppress this error, use the issue id "BackButton" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

EasterEgg

Disabled By: Default

Priority: 6 / 10

Category: Security

Severity: Warning

Explanation: Looks for hidden easter eggs.

An "easter egg" is code deliberately hidden in the code, both from potential users and even from other developers. This lint check looks for code which looks like it may be hidden from sight.

More info:

To suppress this error, use the issue id "EasterEgg" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

FieldGetter

Disabled By: Default

Priority: 4 / 10

Category: Performance

Severity: Warning

Explanation: Suggests replacing uses of getters with direct field access within a class.

Accessing a field within the class that defines a getter for that field is at least 3 times faster than calling the getter. For simple getters that do nothing other than return the field, you might want to just reference the local field directly instead.

**NOTE**: As of Android 2.3 (Gingerbread), this optimization is performed automatically by Dalvik, so there is no need to change your code; this is only relevant if you are targeting older versions of Android.

More info: <http://developer.android.com/guide/practices/design/performance.html#internal_get_set>

To suppress this error, use the issue id "FieldGetter" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

GradleDynamicVersion

Disabled By: Default

Priority: 4 / 10

Category: Correctness

Severity: Warning

Explanation: Looks for dependencies using a dynamic version rather than a fixed version.

Using + in dependencies lets you automatically pick up the latest available version rather than a specific, named version. However, this is not recommended; your builds are not repeatable; you may have tested with a slightly different version than what the build server used. (Using a dynamic version as the major version number is more problematic than using it in the minor version position.)

More info:

To suppress this error, use the issue id "GradleDynamicVersion" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

IconExpectedSize

Disabled By: Default

Priority: 5 / 10

Category: Usability:Icons

Severity: Warning

Explanation: Ensures that launcher icons, notification icons etc have the correct size.

There are predefined sizes (for each density) for launcher icons. You should follow these conventions to make sure your icons fit in with the overall look of the platform.

More info: <http://developer.android.com/design/style/iconography.html>

To suppress this error, use the issue id "IconExpectedSize" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

NewerVersionAvailable

Disabled By: Default

Priority: 4 / 10

Category: Correctness

Severity: Warning

Explanation: Looks for Gradle library dependencies that can be replaced by newer versions.

This detector checks with a central repository to see if there are newer versions available for the dependencies used by this project.

This is similar to the GradleDependency check, which checks for newer versions available in the Android SDK tools and libraries, but this works with any MavenCentral dependency, and connects to the library every time, which makes it more flexible but also **much** slower.

More info:

To suppress this error, use the issue id "NewerVersionAvailable" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

RtlCompat

Disabled By: Default

Priority: 6 / 10

Category: Bi-directional Text

Severity: Error

Explanation: Looks for compatibility issues with RTL support.

API 17 adds a textAlignment attribute to specify text alignment. However, if you are supporting older versions than API 17, you must **also** specify a gravity or layout\_gravity attribute, since older platforms will ignore the textAlignment attribute.

More info:

To suppress this error, use the issue id "RtlCompat" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

RtlEnabled

Disabled By: Default

Priority: 3 / 10

Category: Bi-directional Text

Severity: Warning

Explanation: Looks for usages of right-to-left text constants without enabling RTL support.

To enable right-to-left support, when running on API 17 and higher, you must set the android:supportsRtl attribute in the manifest <application> element.

If you have started adding RTL attributes, but have not yet finished the migration, you can set the attribute to false to satisfy this lint check.

More info:

To suppress this error, use the issue id "RtlEnabled" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

RtlHardcoded

Disabled By: Default

Priority: 5 / 10

Category: Bi-directional Text

Severity: Warning

Explanation: Looks for hardcoded left/right constants which could be start/end for bidirectional text.

Using Gravity#LEFT and Gravity#RIGHT can lead to problems when a layout is rendered in locales where text flows from right to left. Use Gravity#START and Gravity#END instead. Similarly, in XML gravity and layout\_gravity attributes, use start rather than left.

For XML attributes such as paddingLeft and layout\_marginLeft, use paddingStart and layout\_marginStart. **NOTE**: If your minSdkVersion is less than 17, you should add **both** the older left/right attributes **as well as** the new start/right attributes. On older platforms, where RTL is not supported and the start/right attributes are unknown and therefore ignored, you need the older left/right attributes. There is a separate lint check which catches that type of error.

(Note: For Gravity#LEFT and Gravity#START, you can use these constants even when targeting older platforms, because the start bitmask is a superset of the left bitmask. Therefore, you can use gravity="start" rather than gravity="left|start".)

More info:

To suppress this error, use the issue id "RtlHardcoded" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

RtlSymmetry

Disabled By: Default

Priority: 6 / 10

Category: Bi-directional Text

Severity: Error

Explanation: Ensures that specifying padding on one side is matched by padding on the other.

If you specify padding or margin on the left side of a layout, you should probably also specify padding on the right side (and vice versa) for right-to-left layout symmetry.

More info:

To suppress this error, use the issue id "RtlSymmetry" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

SelectableText

Disabled By: Default

Priority: 7 / 10

Category: Usability

Severity: Warning

Explanation: Looks for TextViews which should probably allow their text to be selected.

If a <TextView> is used to display data, the user might want to copy that data and paste it elsewhere. To allow this, the <TextView> should specify android:textIsSelectable="true".

This lint check looks for TextViews which are likely to be displaying data: views whose text is set dynamically. This value will be ignored on platforms older than API 11, so it is okay to set it regardless of your minSdkVersion.

More info:

To suppress this error, use the issue id "SelectableText" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

StopShip

Disabled By: Default

Priority: 10 / 10

Category: Correctness

Severity: Warning

Explanation: Looks for comment markers of the form //STOPSHIP which indicates that code should not be released yet.

Using the comment // STOPSHIP can be used to flag code that is incomplete but checked in. This comment marker can be used to indicate that the code should not be shipped until the issue is addressed, and lint will look for these.

More info:

To suppress this error, use the issue id "StopShip" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

TypographyQuotes

Note: This issue has an associated quickfix operation in Eclipse/ADT

Disabled By: Default

Priority: 5 / 10

Category: Usability:Typography

Severity: Warning

Explanation: Looks for straight quotes which can be replaced by curvy quotes.

Straight single quotes and double quotes, when used as a pair, can be replaced by "curvy quotes" (or directional quotes). This can make the text more readable.

Note that you should never use grave accents and apostrophes to quote, `like this'.

(Also note that you should not use curvy quotes for code fragments.)

More info: <http://en.wikipedia.org/wiki/Quotation_mark>

To suppress this error, use the issue id "TypographyQuotes" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

UnusedIds

Disabled By: Default

Priority: 1 / 10

Category: Performance

Severity: Warning

Explanation: Looks for unused id's.

This resource id definition appears not to be needed since it is not referenced from anywhere. Having id definitions, even if unused, is not necessarily a bad idea since they make working on layouts and menus easier, so there is not a strong reason to delete these.

More info:

To suppress this error, use the issue id "UnusedIds" as explained in the [Suppressing Warnings and Errors](#id.qsh70q) section.

Suppressing Warnings and Errors

Lint errors can be suppressed in a variety of ways:

1. With a @SuppressLint annotation in the Java code

2. With a tools:ignore attribute in the XML file

3. With a lint.xml configuration file in the project

4. With a lint.xml configuration file passed to lint via the --config flag

5. With the --ignore flag passed to lint.

To suppress a lint warning with an annotation, add a @SuppressLint("id") annotation on the class, method or variable declaration closest to the warning instance you want to disable. The id can be one or more issue id's, such as "UnusedResources" or {"UnusedResources","UnusedIds"}, or it can be "all" to suppress all lint warnings in the given scope.

To suppress a lint warning in an XML file, add a tools:ignore="id" attribute on the element containing the error, or one of its surrounding elements. You also need to define the namespace for the tools prefix on the root element in your document, next to the xmlns:android declaration:

\* xmlns:tools="http://schemas.android.com/tools"

To suppress lint warnings with a configuration XML file, create a file named lint.xml and place it at the root directory of the project in which it applies. (If you use the Eclipse plugin's Lint view, you can suppress errors there via the toolbar and Eclipse will create the lint.xml file for you.).

The format of the lint.xml file is something like the following:

<?xml version="1.0" encoding="UTF-8"?>

<lint>

<!-- Disable this given check in this project -->

<issue id="IconMissingDensityFolder" severity="ignore" />

<!-- Ignore the ObsoleteLayoutParam issue in the given files -->

<issue id="ObsoleteLayoutParam">

<ignore path="res/layout/activation.xml" />

<ignore path="res/layout-xlarge/activation.xml" />

</issue>

<!-- Ignore the UselessLeaf issue in the given file -->

<issue id="UselessLeaf">

<ignore path="res/layout/main.xml" />

</issue>

<!-- Change the severity of hardcoded strings to "error" -->

<issue id="HardcodedText" severity="error" />

</lint>

To suppress lint checks from the command line, pass the --ignore flag with a comma separated list of ids to be suppressed, such as:

"lint --ignore UnusedResources,UselessLeaf /my/project/path"