

## Android Studio says “cannot resolve symbol” but project compiles

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I'm importing twitter4j in AndroidStudio, using the following in my build.gradle:

```
dependencies {  
    compile 'com.android.support:support-v4:18.0.+'  
    compile files('libs/twitter4j-core-3.0.4.jar')  
}
```

The project compiles fine, and I can create twitter objects without a problem. However, in Android studio, anything referencing that library shows "cannot resolve symbol" and displays in red. What do I need to do to get Android Studio to recognize the library?

I have already tried rebuilding the project, ./gradlew clean, and closing and re-opening my project.



android



android-studio

asked Oct 22 '13 at 3:52



TG-T

1,169 2 13 20

possible duplicate of [Android Studio cannot resolve symbol but code executes correctly](#) – danben May 26 '15 at 0:36

year 2018, Android Studio 3+: sometimes, Android Studio and

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I had the same issue after importing an exercise project into Android Studio. When imported Android Studio gave me warnings and suggested to update the sdk version, so I followed the advice. After that something was not compatible anymore, so Android Studio suggested to change another version of something else. After following all these advices I had the same "cannot find symbol" issues. I reversed the changed, imported the project again and didn't follow the hints of Android Studio this time. After that the errors were gone. Be careful with blindly following the suggestions of that program. – [David](#) May 14 '18 at 21:14

Related post - [Android Studio suddenly cannot resolve symbols](#) – [RBT](#) Aug 6 '18 at 0:04

## 27 Answers



226

No idea if this will work or not but my only thought so far: right click the jar file in file tree within AS and select "Add as library..."



EDIT: *You can do "File" -> "Invalidate Caches...", and select "Invalidate and Restart" option to fix this.*



EDIT 2: *This fix should work for all similar incidents and is not a twitter4j specific resolution.*


[edited May 9 '14 at 10:15](#)

answered Oct 22 '13 at 12:11

[doydoy](#)**2,737** 2 14 29

I'm not getting that as an option when I right-click the jar. I'm

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File>Project Structure and confirm you see the .jar file in the modules node. – [doydoy](#) Oct 22 '13 at 13:50 

- 
- 7 Invalidating the caches and restarting does not work for me. I have also tried reinstalling android studio and reimporting the project. This is very annoying... – [clocksmith](#) Nov 21 '13 at 0:20
- 
- 2 The "File" -> "Invalidate Caches..." just saved my day. I wasted so much time on this issue. Why was this answer not a top search result? Thank you so much! – [Eric Cochran](#) Jun 29 '14 at 0:34
- 
- 2 @Helix See above Ans.. Go to File > Invalidate Caches / Restart... – [Mohammed Ali](#) Nov 20 '14 at 12:54
- 



Try changing the order of dependencies in File > Project Structure > (select your project) > Dependencies.

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Invalidate Caches didn't work for me, but moving my build from the bottom of the list to the top did.

answered May 15 '15 at 14:35



[Naurashaun](#)

793 6 10

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Changing the order of dependencies helps me, I tried all the solutions given in the answers, only yours help me, thanks. – [wqycsu](#) Aug 5 '15 at 2:24

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- 4 Nothing worked for me except this solution! Thanks. – [chabislav](#) May 30 '16 at 1:58
- 

Moving only one dependency up did the trick for me! (Android Studio 3.0.1). – [Sébastien](#) Nov 30 '17 at 13:02

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This works for Android Studio 3.0.1. – [Nikhil Tambe](#) Mar 9 '18 at 5:16

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Yeah it's not important what dependency you move, just

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This is what worked for me.

11

In the Project panel, right click on the project name, and select `Open Module Settings` from the popup menu.



then change the `Compile SDK Version` to the minimum version available (the minimum sdk version you set in the project). wait for android studio to load everything.

It will give you some errors, ignore those.

Now go to your java file and android studio will suggest you import

```
import android.support.v4.app.FragmentActivity;
```

Import it, then go back to `Open Module Settings` and change the compile sdk version back to what it was before.

Wait for things to load and voila.

edited Jul 5 '16 at 17:44



[Alastair](#)

5,673 2 30 29

answered May 19 '15 at 22:29



[Georgi Dimitrov](#)

111 1 3

it's brilliant work. in my case, Android Studio reported me all the Classes of SDK cannot resolved(included String, Integer, TextView etc.). before that, aStudio also told me she cannot find out the android-14 SDK which I used to compile my projects. I ignored that so the problems occurred. finally, I found this answer and follow, change the compile sdk version

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Now go to your java file and android studio will suggest you import Not in my case – [NineCattoRules](#) Feb 2 '17 at 16:13

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For mine was caused by the imported library project, type something in build.gradle and delete it again and press sync now, the error gone.



[edited Nov 14 '17 at 3:33](#)

answered Jun 1 '16 at 8:37



[Beeing Jk](#)

2,271 1 12 24

Thanks that worked for me – [1800 INFORMATION](#) Feb 23 '17 at 21:16

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I also had this issue with my Android app depending on some of my own Android libraries (using Android Studio 3.0 and 3.1.1).



Whenever I updated a lib and go back to the app, triggering a Gradle Sync, Android Studio was not able to detect the code changes I made to the lib. Compilation worked fine, but Android Studio showed red error lines on some code using the lib.

After investigating, I found that it's because gradle keeps pointing to an old compiled version of my libs. If you go to yourProject/.idea/libraries/ you'll see a list of xml files that contains the link to the compiled version of your libs.

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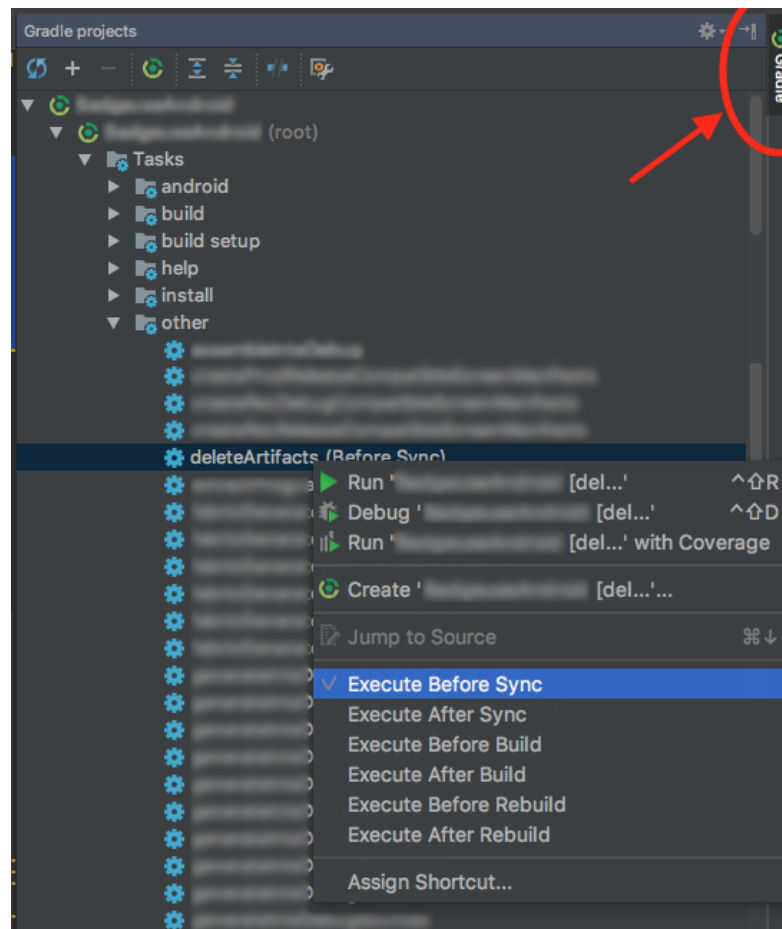
So in order for Android Studio to take the latest version of your libs, you need to delete these `Gradle__artifacts_*.xml` files, and Android Studio will regenerate them, pointing to the latest compiled version of your libs.

If you don't want to do that manually every time you click on "Gradle sync" (who would want to do that...), you can add this small gradle task in the `build.gradle` file of your app.

```
task deleteArtifacts {
    doFirst {
        File librariesFolderPath = file(getProjectDir()).absoluteFile()
        File[] files = librariesFolderPath.listFiles({ File file, int index, File[] array) -> {
            file.name.startsWith("Gradle__artifacts_") } as FileFilter

        for (int i = 0; i < files.length; i++) {
            files[i].delete()
        }
    }
}
```

And in order for your app to always execute this task before doing a gradle sync, you just need to go to the Gradle window, then find the "deleteArtifacts" task under yourApp/Tasks/other/, right click on it and select "Execute Before Sync" (see below).



Now, every time you do a Gradle sync, Android Studio will be forced to use the latest version of your libs.

answered May 28 '18 at 15:46



[nah0y](#)

101 1 5

1 Thanks a lot, this worked for me as well! – [Display name](#) Jun 28 '18 at 9:51

- ▲ When i lived to this problem(red color codes but they work correctly) in my project;
- 4 As first, i made it that (File -> Invalidate Cashes) --> (Invalidate and Restart).
- ▼ As last, i resync my build.gradle file in my app. After problem was resolved.

answered Nov 14 '15 at 7:28



[oguzhan](#)

970 11 15

- ▲ Invalidate Caches / Restart didn't work for me this time.
- 3 Found a solution like this:
- ▼
1. Remove the `compile ***` or `implementation ***` line in build.gradle.
  2. Clean and rebuild. Errors should be raised here.
  3. Add the line in step 1 back to build.gradle.
  4. Clean and rebuild.
- Weird...

answered May 16 '18 at 18:17



[ZhangLei](#)

158 4 14

That worked for me when nothing else did. – [Van](#) Sep 24 '18 at 15:00



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location. I was using another location I had previously from ADT, since I was trying to avoid re-downloading everything. Once I pointed the project back to the SDK location in Android Studio's install location the problem went away.

answered Jul 23 '14 at 0:58



DaveTrux

476 5 11

Yeah I guess that is also a good shout: by default android studio will decide all SDK's are installed in the default android studio install directory. This will need to be amended if anything doesn't follow that pattern. — [doydoy](#) Jan 15 '15 at 22:08

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I had this problem for a couple of days now and finally figured it out! All other solutions didn't work for me btw.

Solution: I had special characters in my project path!

Just make sure to have none of those and you should be fine or at least one of the other solutions should work for you.

Hope this helps someone!

answered Aug 20 '15 at 12:01



grAPPfruit

512 8 24

Please check if you have a project path which has special characters like ! (exclamation mark). In a similar problem that I experienced [stackoverflow.com/questions/32477067/...](https://stackoverflow.com/questions/32477067/...), this was the root cause. Many Java applications seem not to tolerate such special characters (e.g. defining a "hard drive" path).

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once I had removed the ! from the path and did a clean build, Android Studio magically worked. – [Jim C](#) Sep 17 '15 at 1:16

WOW AMAZING! Thanks :) – [Josep Escobar](#) Jan 23 '17 at 23:38



1



I had the very same problem recently with Android Studio 1.3. The only working solution was to remove the .gradle and .idea folders and re-import the project into Android Studio.

answered Jul 31 '15 at 7:53

[ticofab](#)

4,260 8 37 74



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For those, who tried the accepted answer and have no success,

I tried also the accepted answer and did not work for me. After that, I updated my project with the repository and synchronized the project and the could not resolve warnings are gone.

answered Feb 11 '16 at 12:41

[drJava](#)

79 2 19



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Invalidate Caches didn't work for me (this time). For me it was enough changing the gradle and syncing again. Or <https://stackoverflow.com/a/29565362/2000162>

edited May 23 '17 at 12:03

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answered Apr 3 '17 at 14:17



TomCobo

1,576 1 19 25



In my case, I had created a new file using the GUI and defined an interface within the file. I kept getting this symbol error because the file was not a "java" file. It had no extension on it at all.



After modifying the file extension to ".java", the system correctly finds the symbols.

answered May 25 '15 at 16:15



user3549463

1 1



In my case the jar file did not have a META-INF/MANIFEST.MF file. After adding one, it worked!



answered Jan 24 '17 at 11:46



Mahe

429 1 3 18

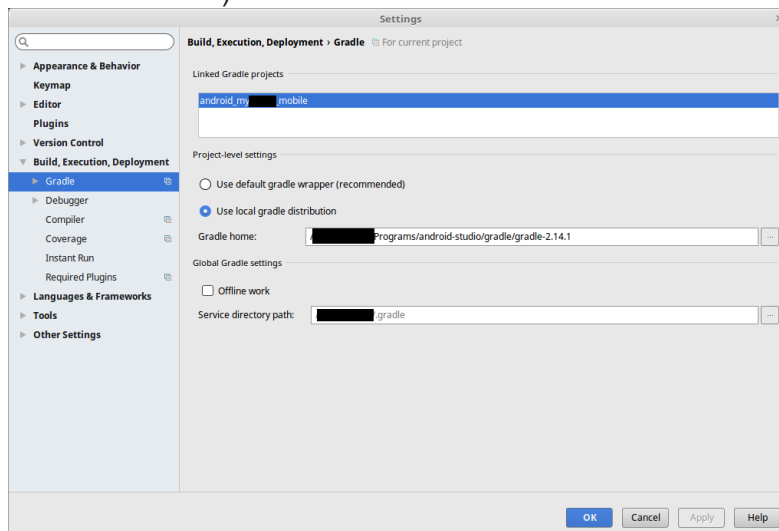


For my case working with AndroidStudio 2.2.3 the solution was to change the gradle wrapper/distribution to use local one in the Gradle Settings (despite of being



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"recommended").



answered Feb 21 '17 at 11:35



Hack06

308 3 10



This worked for me-- (File -> Invalidate Caches) --> (Invalidate and Restart).

0



answered Jun 19 '17 at 4:14



Shubham Soni

1,461 1 15 30



I tried Invalidate cache/restart or clean Project -> rebuild project. These didn't work for me.

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The final solution was open Project window on the left side of IDE, under Project mode, delete .gradle and .idea folder, THEN you can invalidate caches and restart. This fixed it.

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user4106398



If nothing else helped, you could do as [Android Studio suddenly cannot resolve symbols](#) recommends:

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- Exit Android Studio
- Back up your project
- Delete all the .iml files and the .idea folder
- Relaunch Android Studio and reimport your project

answered May 25 '18 at 12:25

[serv-inc](#)

16.1k 5 75 91



Change compile to implementation in the build.gradle.

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answered Jul 21 '18 at 17:59

[Raulp](#)

3,258 8 54 103



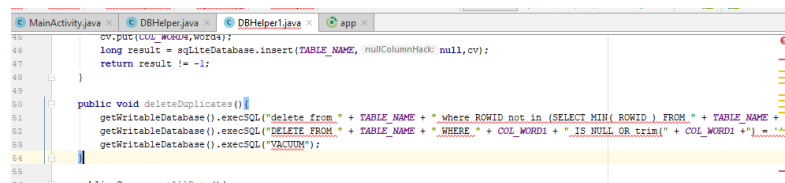
**Changing the language injection settings worked for me.**

0

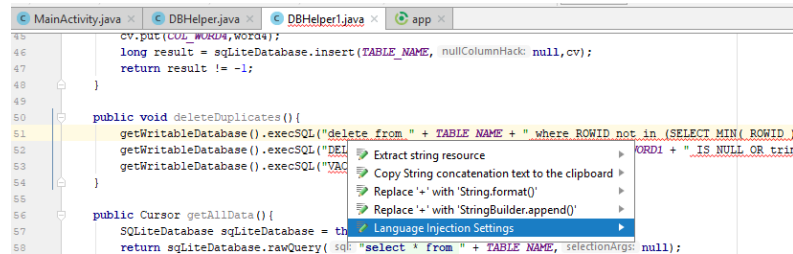


Place the cursor on any of the red underlined code and  
Alt + Enter

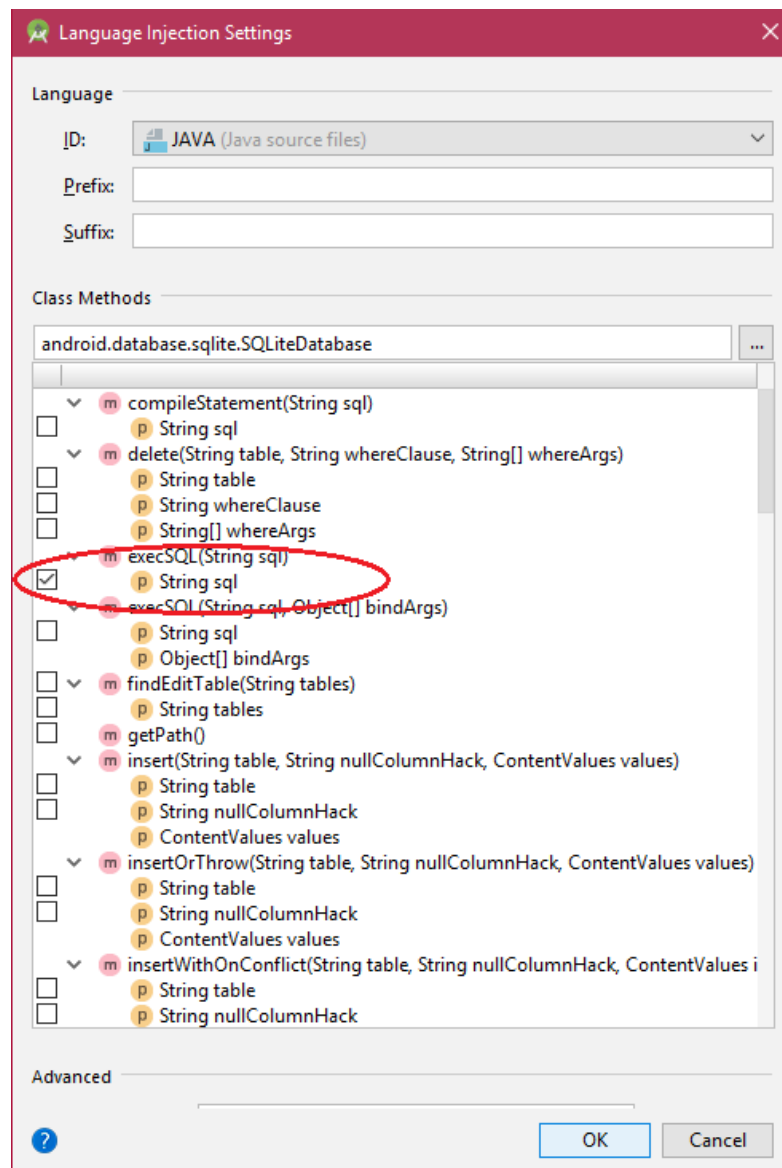
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Now select Language Injection Settings and a window will open as shown below.



Uncheck the selected option and click Ok



Hope this helps somebody.

answered Aug 19 '18 at 20:18



Tricky Bay

510 6 15

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It happened to me when I removed the whole files in `.gradle/caches`, then studio downloaded the dependencies. The dependencies not showed in the `External Libraries` but I can build App successfully. `rebuild` `clean` `Invalidate` and `Restart` have no effect. I solved the problem by the steps:

- Close Android Studio completely
- Remove `.idea` package in your project
- Restart Android Studio

edited Sep 11 '18 at 11:41

answered Sep 11 '18 at 11:35



joe

379 3 8



I have tried this but nothing worked for me:

- Invalidate Caches / Restart
- Changing the order of dependencies
- Sync project with Gradle Files
- Clean -> Rebuild Project

In my case, just do:

- Delete all files in `.idea/libraries` folder
- Rebuild Project

answered Sep 20 '18 at 3:38



Conan

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For me I updated **gradle-wrapper.properties** into **4.4**

0

distributionUrl=https\://*services.gradle.org/distributions*,



answered Nov 5 '18 at 8:15



[Gowthaman M](#)

4,796 6 19 41



**I found easiest way**

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Identify the library which is causing syntax error in Studio.



**For Example** if `AppCompatActivity` is showing error then you will perform below operation on `AppCompatActivity` Dependency.

- Remove dependency which is showing syntax error & Sync.
- Add again & Sync.

That's It, error gone!

**Before**

```
Disposable disposable = new RxPermissions(this).requestPermissions(  
    if (granted) initView();  
});
```

**After**

```
Disposable disposable = new RxPermissions( act
```

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answered Nov 22 '18 at 11:30

**Khemraj****18.1k** 8 68 93

None of the answers above works for me.

0



After a lots of attempts, I upgraded  
com.android.tools.build:gradle in Project/build.gradle from  
2.3.0 to 3.0.1, and it works.

I guess the version of the com.android.tools.build:gradle  
should be match to the version of AndroidStudio, and my  
AS version is 3.2.1

answered Jan 14 at 9:25

**Hao Qi****148** 1 7

Closing all files and closing Android Studio works for me.

0



answered Apr 18 at 9:14

**Sayali Shinde****173** 1 4

You need to restart Android Studio.

-2



edited Nov 5 '16 at 23:22

**Maher Abuthraa****11.3k** 6 55 80

answered Nov 5 '16 at 22:14

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**protected** by [Community](#) ♦ Sep 5 '16 at 18:59

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