Unfortunately MyApp has stopped. How can I solve this?

Asked 10 years, 7 months ago Modified 1 year, 11 months ago

Viewed 562k times Part of Mobile Development Collective

885

I am developing an application, and everytime I run it, I get the message:

> Unfortunately, MyApp has stopped.

What can I do to solve this?

About this question - obviously inspired by What is a stack trace, and how can I use it to debug my application errors?, there are lots of questions stating that their application has crashed, without any further detail. This question aims to instruct novice Android programmers on how to try and fix their problems themselves, or ask the right questions.

MD java android debugging kotlin

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edited Jul 21, 2020 at 22:35

Braiam

4,484 ● 11 ● 49 ● 81

asked Apr 28, 2014 at 23:55

nhaarman

100k ● 55 ● 253 ● 280

33 I've seen many questions getting closed as dupes with this. This is a good reference for helping people post relevant data in their questions. However, this isn't a duplicate of any root problem there but just methodology for digging out the root problem. I think it would be better just to provide the link to this question as a reference and not close as duplicate. – laalto May 18, 2014 at 6:48

42 I think the close function is perfect for this. Most of these questions show little knowledge of the basic debugging skills. Putting them on hold provides a chance for them to clarify their problem, using the method as stated in the answer. Better yet, they might be able to solve the problem themselves. This discussion might be better suited for meta.stackoverflow.com though. – nhaarman May 19, 2014 at 22:06

2 This question is too vague. A better question would be 'using [myIDE] how do I debug' an Android application that's displaying the error 'Unfortunately, MyApp has stopped' – Chris Halcrow Oct 30, 2015 at 0:50

10 @ChrisHalcrow This Q/A is not about debugging at all. It is about guiding beginners in Android how to deal with app crashes. – nhaarman Oct 30, 2015 at 7:58

23 Answers

Sorted by: Highest score (default)

This answer describes the process of retrieving the stack trace. Already have the stack trace? Read up on stack

traces in "[What is a stack trace, and how can I use it to debug my application errors?]"

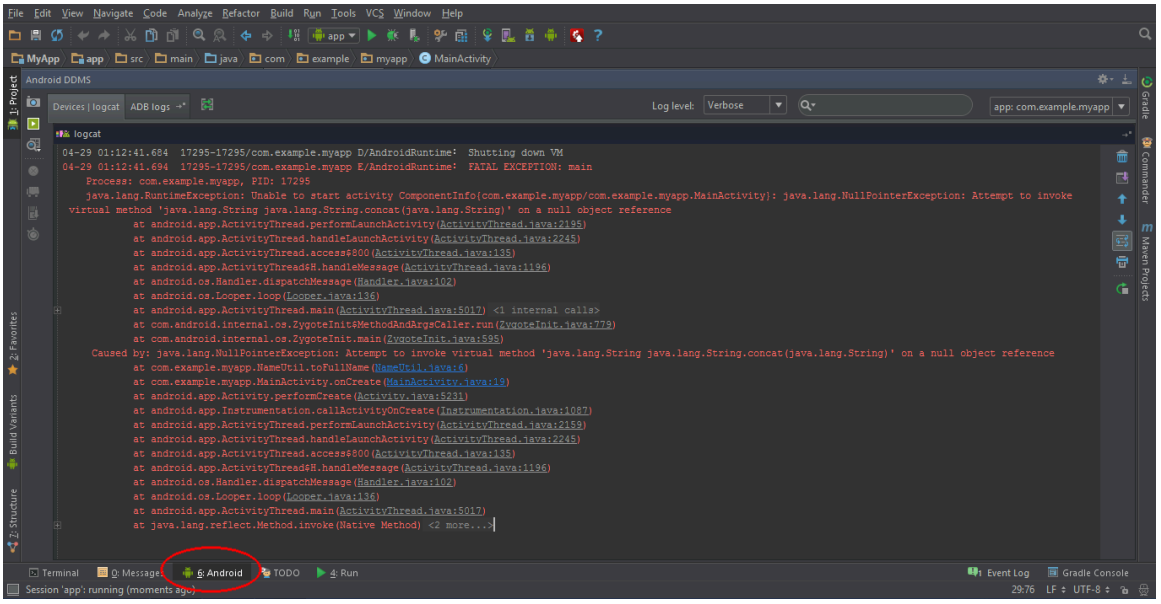
The Problem

Your application quit because an uncaught `RuntimeException` was thrown.
The most common of these is the `NullPointerException`.

How to solve it?

Every time an Android application crashes (or any Java application for that matter), a `Stack trace` is written to the console (in this case, logcat). This stack trace contains vital information for solving your problem.

Android Studio



In the bottom bar of the window, click on the `Logcat` button. Alternatively, you can press `alt` + `6`. Make sure your emulator or device is selected in the `Devices` panel. Next, try to find the stack trace, which is shown in red. There may be a lot of stuff logged into logcat, so you may need to scroll a bit. An easy way to find the stack trace is to clear the logcat (using the recycle bin on the right), and let the app crash again.

I have found the stack trace, now what?

Yay! You're halfway to solving your problem.
You only need to find out what exactly made your application crash, by analyzing the stack trace.

Read up on stack traces in "What is a stack trace, and how can I use it to debug my application errors?"

I still can't solve my problem!

If you've found your `Exception` and the line where it occurred, and still cannot figure out how to fix it, don't hesitate to ask a question on StackOverflow.

Try to be as concise as possible: post the stack trace, and the *relevant* code (e.g. a few lines up to the line which threw the `Exception`).

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edited Mar 12, 2018 at 13:45

community wiki
10 revs, 4 users 77%
nhaarman

44 I know this post is old: but if you use IntelliJ IDEA you can go inside `Android > Devices|Logcat` and add a new filter (i.imgur.com/145dtkx.png), and filter it for `by Log Message` here you can put `FATAL EXCEPTION` (i.imgur.com/HpELhaU.png) so in this Box you can read all `Exceptions` which are throw by your application. With this you don't need to clear logcat and do the crash again. I think Android Studio have this option too. – Marco Acierno Jun 14, 2014 at 14:49

1 Filtering logcat in Eclipse can be done by typing in the java package name in the application name field of the filter. – Stephane Mar 21, 2015 at 12:38

I think the main point is understanding the trace back one gets when the exception happens. FCs are a bit bad when there is no trace back or not a usable one, which is where it gets hairy. but I think this explanation is a nice first intro in finding/identifying such bugs. – DooMMasteR Aug 19, 2015 at 14:43

4 Things are easy when your logcat has some trace of error, but what in case logcat has nothing? stackoverflow.com/questions/32455645/… – Marian Paździoch Sep 8, 2015 at 10:50

4 The problem is the line does not contain the error which is written and pointed by the stack trace. – Hilal Mar 10, 2017 at 13:22

132

You can use Google's ADB tool to get `Logcat file` to analyze the issue.

```
adb logcat > logcat.txt
```

open `logcat.txt` file and search for your application name. There should be information on why it failed, the line number, Class name, etc.

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edited May 5, 2019 at 14:20

Gastón Saillén

13.1k ● 5 ● 73 ● 80

answered Mar 22, 2015 at 23:06

Vlad Bezden

89.2k ● 26 ● 257 ● 188

This is great, it'll show you quickly anything going on on the device even if your debugger is failing to catch it, which can happen for Xamarin if the runtime fails to load.
– Jerod Venema Oct 10, 2015 at 18:47

1 I couldn't see why my app was crashing in the android studio logcat, there were no errors at all. This answer gave me what I needed. Later on however I realised that I had some filter on in the studio logcat which was preventing me from seeing the error. I switched back to "Show only selected application" and I was back up and running. – Yannick Oct 30, 2015 at 23:47

1 you should add `-d`, otherwise you nave to ctrl-C to exit logcat. I do `adb logcat -v time -d > filename.txt`
– Karakuri Dec 6, 2016 at 1:35

45

First, you check which point your app has crashed (`Unfortunately, MyApp has stopped.`). For this, you can use `Log.e("TAG", "Message");`, using this line you can see your app log in logcat.

After that, you find which point your app has stopped it's very easy to solve at your side.

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edited May 5, 2019 at 14:20

Gastón Saillén
13.1k ● 5 ● 73 ● 80

answered Mar 18, 2015 at 8:01

Hiren Vaghela
934 ● 1 ● 10 ● 22

36

Just check the error in log cat.

You get the log cat option from in eclipse:

> window->show view->others->Android->Logcat

Log cat contains error.

Other wise you can also check the error by executing an application in debug mode. Firstly set breakpoint after that by doing:

> right click on project->debug as->Android application

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edited Nov 21, 2015 at 1:18

jiaweizhang

819 ● 1 ● 11 ● 28

answered Jun 11, 2015 at 10:58

Rahil Ali

965 ● 10 ● 25

35

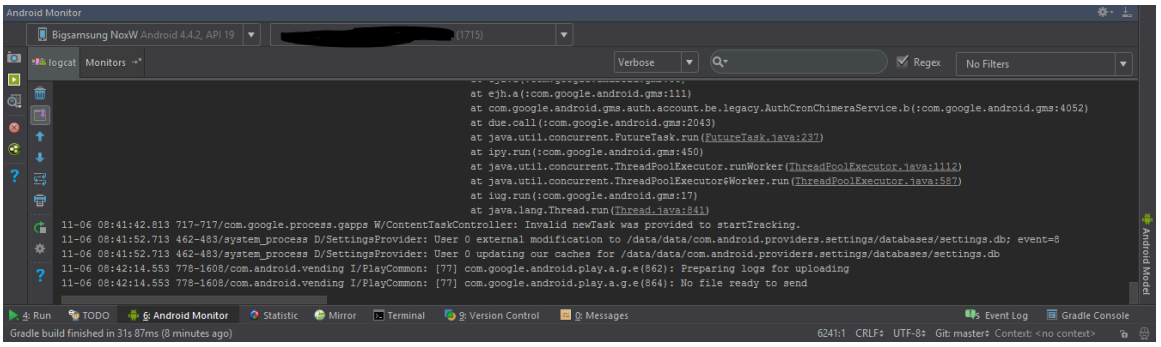
Note: *This answer is using Android Studio 2.2.2*

Note 2: *I am considering that your device is successfully connected.*

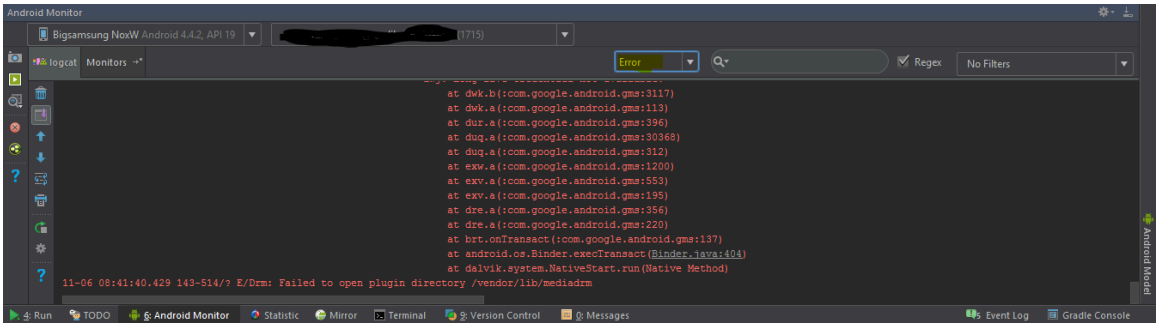
The first thing you do when your application crashes is looking into the LogCat, at the bottom of Android Studio there's a toolbar with a list of menus:

Click on the "Android Monitor" (The one I underlined in the image above. ^)

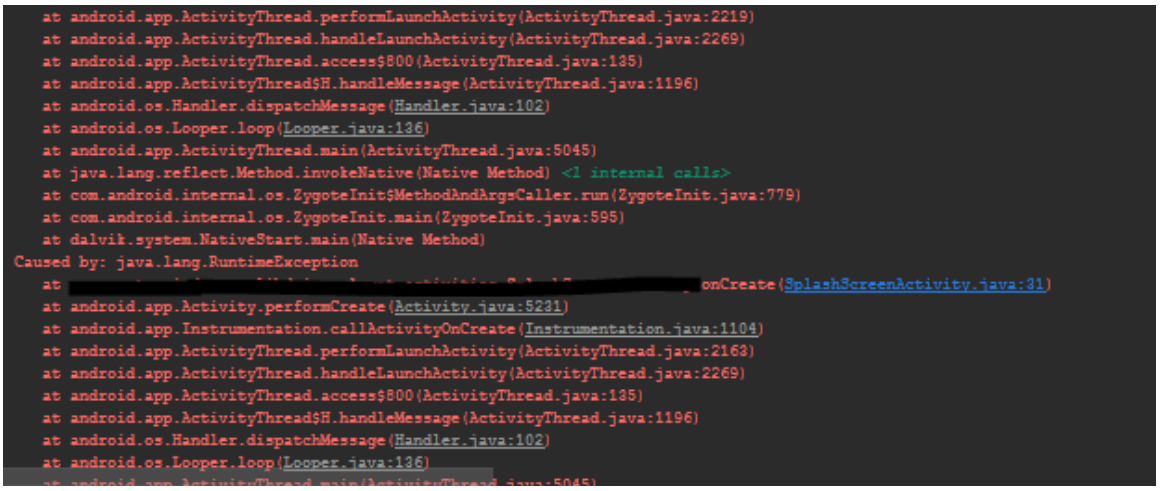
Now, you'll get something like this:



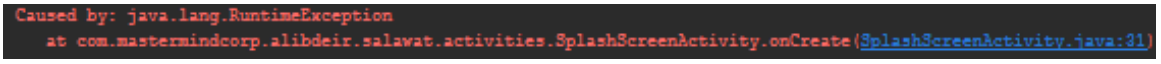
Change "`Verbose`" to "`Error`" Now it will only show you logged errors. Don't worry about all these errors (if you got them) now.



Ok. Now, do what you did to crash your app. After your app crashes, go to your logcat. You should find a new crash log that has a lot of `at:x.x.x`: and `Caused by: TrumpIsPresidentException` for example. Go to that `Caused by:` statement in your logcat.



Next to that `Caused By:`, there should be the Exception that happened. In my case, it's a `RuntimeException` and **under it** there should be a line that contains a **blue link** such as:



If that `Caused by:` DOESN'T have a line with a blue text somewhere under it, then look for another `Caused by:` that does.

Click on that blue link. It should take you to where the problem occurred. In my case, it was due to this line:

```
throw new RuntimeException();
```

So, now I know why it's crashing. It's because I'm throwing the exception myself. **This was an obvious error**.

However, let's say I got another error:

```
java.lang.NullPointerException
```

I checked my logcat, I clicked on the blue link it gave me, and it took me here:

```
mTextView.setText(myString);
```

So, now I want to debug. According to this StackOverflow question, a NullPointerException says that something is `null`.

So, let's find out **what is null**. There are two possibilities. Either `mTextView` is null, or `myString` is null. To find out, before the `mTextView.setText(mString)` line, I add these two lines:

```
Log.d("AppDebug","mTextView is null: " + String.valueO
Log.d("AppDebug","myString is null: " + String.valueOf
```

Now, like we did previously (We changed Verose to Error), we want to change "Error" to "Debug". Since we're logging by debugging. Here are all the Log methods:

```
Log.
  d means Debug
  e means error
  w means warning
  v means verbose
  i means information
  wtf means "What a terrible failure". This is similar
```

So, since we used `Log.d`, we're checking in Debug. That's why we changed it to debug.

Notice `Log.d` has a first parameter,in our case "AppDebug". Click on the "No Filters" drop down menu on the top-right of the logcat. Select "Edit Filter Configuration", give a name to your filter, and in "Log Tag" put "App Debug". Click "OK". Now, you should see two lines in the logcat:

```
yourPackageNameAndApp: mTextView is null: true
yourPackageNameAndApp: myString is null: false
```

So now we know that mTextView is null.

I observe my code, now I notice something.

I have `private TextView mTextView` declared at the top of my class. But, I'm not defining it.

Basically, I forgot to do this in my onCreate():

```
mTextView = (TextView) findViewById(R.id.textview_id_i
```

So THAT'S why `mTextView` is null, because I forgot to tell my app what it is. So I add that line, run my app, and now the app doesn't crash.

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edited Dec 26, 2022 at 7:03

Glenn Antony Sheen

25 ● 1 ● 3

answered Nov 6, 2016 at 9:23

Ali Bdeir

4,335 ● 12 ● 61 ● 127

1 This is good information, but using images of the Stack Trace diminishes its usefulness - images can't be searched, can't be copied and pasted, can't be picked up by screen readers, and are more difficult to read. (I didn't downvote, by the way, just pointing that out). – EJoshuaS - Stand with Ukraine May 18, 2018 at 13:23

+1 images are needed in showing options of tools positioned in the android studio and this type of answer for a better explanation. – Maveň ツ Apr 30 at 11:54

23

This popup shows only when you get a fatal exception in your code which stops the execution of the app. It could be any exception `NullPointerException`, `OutOfMemoryException` etc.

Best way to check is through *Logcat* if you are still developing the app in Android studio which is quick way to read stack trace and check the cause of the app.

If your app is already live, then you can not use *logcat*. So, for that you can implement `Crashlytics` to provide you bug reports of any exception that occurs.

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edited Feb 7, 2019 at 13:31

ppreetikaa

1,237 ● 2 ● 16 ● 22

answered Jul 4, 2017 at 4:38

Ani

1,061 ● 6 ● 15

20

Check your `Logcat` message and see your `Manifest` file. There should be something missing like defining the `Activity,` User permission`, etc.

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edited Dec 15, 2016 at 12:35

Satan Pandeya

3,815 ● 5 ● 29 ● 53

answered Jun 29, 2015 at 11:48

Manoj ahirwar

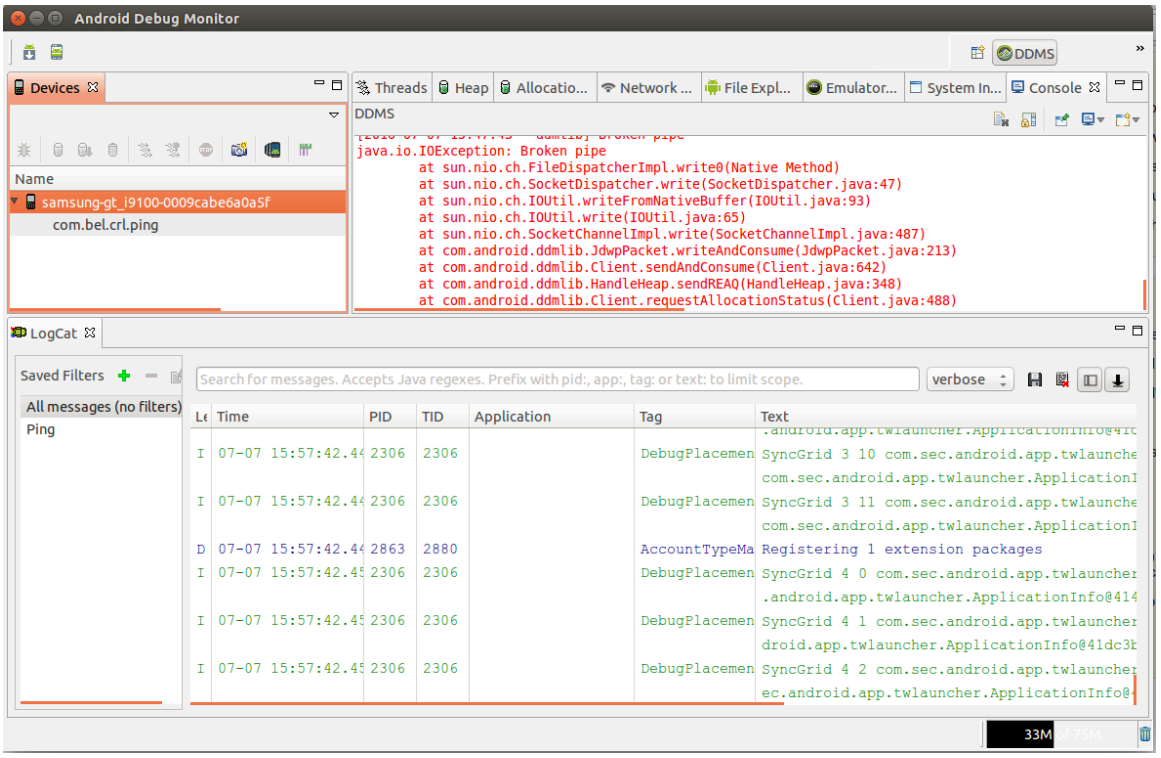
1,106 ● 1 ● 13 ● 28

17

You can use any of these tools:

1. adb logcat
2. adb logcat > logs.txt (you can use editors to open and search errors.)
3. eclipse logcat (If not visible in eclipse, Go to Windows->Show View->Others->Android->LogCat)
4. Android Debug Monitor or Android Device Monitor(type command **monitor** or open

through UI)



5. Android Studio

I suggest to use **Android Debug Monitor**, it is good. Because eclipse hangs when too many logs are there, and through adb logcat filter and all difficult.

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edited Jun 20, 2020 at 9:12

Community Bot

1 ● 1

answered Nov 3, 2015 at 5:47

Shiv Buyya

4,090 ● 2 ● 33 ● 26

You have to check the `Stack trace`

13

How to do that?

on Your IDE Check the windows form LOGCAT

If you cant see the logcat windows go to this path and open it

```
window->show view->others->Android->Logcat
```

if you are using Google-Api go to this path

adb logcat > logcat.txt

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answered Jul 13, 2015 at 8:37

alireza amini

1,742 ● 1 ● 18 ● 33

12

In below showToast() method you have to pass another parameter for context or application context by doing so you can try it.

```
  public void showToast(String error, Context applicat
        LayoutInflater inflater = getLayoutInflater();
        View view = inflater.inflate(R.layout.custom_t
        findViewById(R.id.toast_root));
        TextView text = (TextView) findViewById(R.id.t
        text.setText(error);
        Toast toast = new Toast(applicationContext);
        toast.setGravity(Gravity.TOP | Gravity.FILL_HO
        toast.setDuration(Toast.LENGTH_SHORT);
        toast.setView(view);
        toast.show();
}
```

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edited May 24, 2017 at 14:48

John Joe

12.8k • 19 • 78 • 140

answered Apr 3, 2017 at 9:37

Mayank Nema

233 • 2 • 7

12

Let me share a basic Logcat analysis for when you meet a Force Close (when the app stops working).

DOCS

The basic tool from Android to collect/analyze logs is the logcat.

HERE is the Android's page about logcat

If you use android Studio, you can also check this LINK.

Capturing

Basically, you can MANUALLY capture logcat with the following command (or just check AndroidMonitor window in AndroidStudio):

```
adb logcat
```

There's a lot of parameters you can add to the command which helps you to filter and display the message that you want... This is personal... I always use the command below to get the message timestamp:

```
adb logcat -v time
```

You can redirect the output to a file and analyze it in a Text Editor.

Analyzing

If you app is Crashing, you'll get something like:

```
07-09 08:29:13.474 21144-21144/com.example.khan.abc D/
down VM
07-09 08:29:13.475 21144-21144/com.example.khan.abc E/
EXCEPTION: main
    Process: com.example.khan.abc, PID: 21144
    java.lang.NullPointerException: Attempt to invoke
android.support.v4.app.FragmentActivity.onBackPressed(
reference
     at com.example.khan.abc.AudioFragment$1.onClick(A
     at android.view.View.performClick(View.java:4848)
     at android.view.View$PerformClick.run(View.java:2
     at android.os.Handler.handleCallback(Handler.java
     at android.os.Handler.dispatchMessage(Handler.jav
     at android.os.Looper.loop(Looper.java:194)
     at android.app.ActivityThread.main(ActivityThread
     at java.lang.reflect.Method.invoke(Native Method)
     at java.lang.reflect.Method.invoke(Method.java:37
     at
com.android.internal.os.ZygoteInit$MethodAndArgsCaller
     at com.android.internal.os.ZygoteInit.main(Zygote
07-09 08:29:15.195 21144-21144/com.example.khan.abc I/
PID: 21144 SIG: 9
```

This part of the log shows you a lot of information:

- When the issue happened: `07-09 08:29:13.475`

It is important to check when the issue happened... You may find several errors in a log... you must be sure that you are checking the proper messages :)

- Which app crashed: `com.example.khan.abc`

This way, you know which app crashed (to be sure that you are checking the logs about your message)

- Which ERROR: `java.lang.NullPointerException`

A NULL Pointer Exception error

- Detailed info about the error: `Attempt to invoke virtual method 'void android.support.v4.app.FragmentActivity.onBackPressed()' on a null object reference`

You tried to call method `onBackPressed()` from a `FragmentActivity` object. However, that object was `null` when you did it.

- Stack Trace: Stack Trace shows you the method invocation order... Sometimes, the error happens in the calling method (and not in the called method).

  at com.example.khan.abc.AudioFragment$1.onClick(AudioFragment.java:125)

Error happened in file `com.example.khan.abc.AudioFragment.java`, inside

`onClick()` method at line: `125` (stacktrace shows the line that error happened)

It was called by:

```
at android.view.View.performClick(View.java:4848)
```

Which was called by:

```
at android.view.View$PerformClick.run(View.java:20262)
```

which was called by:

```
at android.os.Handler.handleCallback(Handler.java:815)
```

etc....

Overview

This was just an overview... Not all logs are simple but the error gives specific problem and verbose shows up all problem ... It is just to share the idea and provide entry-level information to you...

I hope I could help you someway... Regards

edited Jun 19, 2020 at 8:16

Subhanshuja

418 ● 1 ● 4 ● 21

answered Jul 14, 2016 at 3:21

guipivoto
18.7k • 9 • 62 • 78

9

Use the **LogCat** and try to find what is causing the app to crash.

To see Logcat if you use **Android Studio** then Press **ALT + 6** or

if you use **Eclipse** then **Window -> Open Perspective -> Other - LogCat**

Go to the LogCat, from the drop down menu select error. This will contain all the required information to help you debug. If that doesn't help, post the LogCat as an edit to your question and somebody will help you out.

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answered May 15, 2016 at 7:45

Biswajit Karmakar
9,897 • 4 • 40 • 43

8

If your app for some reason crashes without good stacktrace. Try debug it from first line, and go line by line until crash. Then you will have answer, which line is causing you trouble. Proably you could then wrapp it into try catch block and print error output.

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answered Oct 2, 2017 at 15:07

felislynx.silae
147 • 4 • 5

7

You can also get this error message on its own, without any stack trace or any further error message.

In this case you need to make sure your Android manifest is configured correctly (including any manifest merging happening from a library and any activity that would come from a library), and pay particular attention to the first activity displayed in your application in your manifest files.

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answered Mar 22, 2015 at 8:50

Pelpotronic

550 ● 7 ● 11

4 I would be interested if you could upload a project that demonstrates this phenomenon. – CommonsWare Apr 28, 2015 at 20:07

6

People make mistakes, and so coding as well.

When ever any `error` happened, always check with the logcat with the text in red color however u can find out the *real problem in blue color text with underline* in those red color text.

Make sure if u create a new `activity`, always declare the `activity` in the `AndroidManifest` file.

If adding Permission, declare it in the `AndroidMainifest` file as well.

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edited May 20, 2018 at 7:15

answered May 19, 2018 at 17:24

Kopi Bryant

1,368 ● 1 ● 17 ● 30

6

Logcat - To check the logs in the development phase of Android Studio

Initially clear the Logcat and let the app crash again so you can get only crashed log detail. You have to check the Stack trace

> While, Unfortunately, MyApp has stopped. There are many reasons for it. You can check same in logs. For this, you can use the Log.e("TAG","Message");

Common error during app crash like:

1. Coding mistake(Wrong use of keywords).
2. Mismatch property name.
3. Unsupported plugin(maybe).
4. Mismatch version(maybe).
5. Activity missing in AndroidManifest file.
6. Permission missing in AndroidManifest file.
7. Most common NullPointerException.

8. Declared but not defined.

To resolve app crash error:

- Keep in mind above points and go through it.
- With the error, you will get the file name also in blue colour (click on them and jump to code from error is occurring).

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answered Mar 26, 2019 at 4:42

Ashish

2,070 ● 18 ● 19

6

Crash during development

Try my favourite tool logview to get the logs and analyze them during development.
Make sure to mark `./logview` and `./lib/logview.jar` as executable when running in Linux.

If you don't like it, there're a lot of alternative desktop log viewers for Android.

Crash in the wild

Integrate a real-time crash reporting tool such as Firebase Crashlytics in order to get stacktraces of unhandled exceptions which occurred on users' devices.

Read How to Release a Buggy App (And Live to Tell the Tale) to know more about handling bugs in the field.

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edited May 26, 2019 at 21:40

answered Sep 11, 2018 at 8:35

naXa stands with Ukraine

37.7k ● 24 ● 202 ● 272

5

If you don't have any kind of interesting log in your terminal (or they are not directly related to your app), maybe your problem is due to a native library. In that case, you should check for the "tombstone" files within your terminal.

The default location for the tombstone files depends on every device, but if that's the case, you will have a log telling: `Tombstone written to: /data/tombstones/tombstone_06`

For more information, check on https://source.android.com/devices/tech/debug.

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answered Jun 12, 2019 at 13:07

zapotec

2,638 ● 4 ● 35 ● 54

4

First, you need to check where and why your app has been crashed `(Unfortunately, MyApp has stopped.)`. With the help of `LOG`, you can figure it out what went wrong.

After that, you find which point your app has stopped fix that from your point.

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answered May 22, 2019 at 10:40

Mehul Solanki

1,131 ● 12 ● 15

3

Also running this command in terminal can help find the problem:

```
gradlew build > log.txt 2>details.txt
```

then you should go to gradlew file location in read two above log files.

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edited Aug 20, 2020 at 4:01

TAbdiukov

1,187 ● 3 ● 14 ● 25

answered Mar 16, 2020 at 10:18

Mohsen Emami

3,132 ● 4 ● 36 ● 47

3

I'll Suggest something like this.

1. Check if your phone has good enough space that the app can run----prior/
2. Check the logcat when the app crashes. It will show the exact line where the app crashed.

3. Check if you are using something on the main thread that uses a lot of memory due to ANR.

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edited Mar 22, 2022 at 13:34

Sambhav Khandelwal

3,765 ● 2 ● 10 ● 42

answered Aug 17, 2021 at 7:55

rajeev ranjan

230 ● 4 ● 10

2

Check your Logcat message. Also, see your Manifest file for missing elements like defining the `Activity`, `User permission`, etc.

To see Logcat if you use **Android Studio** then Press ***alt+6*** or

if you use **Eclipse** then **Window -> Open Perspective -> Other - LogCat**

Now, from the drop-down menu select error.

Alternatively, you can use ADB tool to get the `Logcat file` to analyze the issue.

```
adb logcat > logcat.txt
```

Now open the `logcat.txt` file and search for your application name. There should be information on why it failed, the line number, Class name, etc.

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answered Jul 15, 2022 at 13:06

samnoon

1,733 ● 2 ● 15 ● 25

-3

If your app crashed **without any errors**, and **you didn't use an asset manager** but loaded the textures like:

```
Texture texture = new Texture("myImage.png"); //dont t
```

then that's the problem. I had that happen to me. You should always use an asset manager to avoid a memory overload.

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edited Jun 26, 2021 at 6:02

answered Jun 4, 2021 at 8:13

Kleysley

573 ● 3 ● 13

> @MohammadBahadori OP didn't provide a single line of code, how am I going to post a specific solution? The "complete solution" is to use an asset manager, people can learn how to use the asset manager themselves, there are enough guides. – Kleysley Feb 13, 2022 at 21:05

Highly active question. Earn 10 reputation (not counting the association bonus) in order to answer this question. The reputation

requirement helps protect this question from spam and non-answer activity.