




AutoSRE - Incident Analyzer

Analyze incidents, fetch similar past issues, and recommend resolutions automatically!

 Enter Incident Summary:

```
java.lang.NullPointerException: An error occurred\n  at\n  com.example.module.Class.method(Class.java:25)\n  at\n  com.example.module.OtherClass.anotherMethod(OtherClass.java:50)\n  at\n  java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128)\n  at\n  java.base/java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:628)\n  at\n  java.base/java.lang.Thread.run(Thread.java:829)App crash after update
```

Analyze Incident



Root Cause Identified!

Based on the incident summary, I would determine the most likely root cause as:

"The Java null pointer exception (`NullPointerException`) was caused by a null reference being passed to `Class.method()` at line 25 in `com.example.module.Class` , which was triggered by an update to the code or dependencies."

This conclusion is based on the error message pointing to a specific line of code (line 25) and method (`method`), indicating that the issue is related to a null reference being passed to this method. The fact that it occurred after an update suggests that the issue may have been introduced by changes made to the code or dependencies, rather than being a previously existing problem.



Similar Past Incidents

Incident 1: Date: 2023-06-10 Incident_Number: INC2245 Incident_Category: Software Incident_Summary: App crash after update Incident_Details: The latest version of the app crashes on launch. Incident_RCA: Incompatible library update Incident_Impact: Mobile users unable to use the app Incident_Resolution: Rolled back to previous stable version Incident_Errors: FATAL EXCEPTION Incident_Exception: NullPointerException Incident_Full_Exception: java.lang.NullPointerException Incident_Stacktrace:

```
java.lang.NullPointerException: An error occurred at com.example.module.Class.method(Class.java:25) at
com.example.module.OtherClass.anotherMethod(OtherClass.java:50) at
java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128) at
java.base/java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:628) at
java.base/java.lang.Thread.run(Thread.java:829)
```

Incident 2: Date: 2025-01-10 Incident_Number: INC1901 Incident_Category: Software Incident_Summary: App crash after update Incident_Details: The latest version of the app crashes on launch. Incident_RCA: Incompatible library update Incident_Impact: Mobile users unable to use the app Incident_Resolution: Rolled back to previous stable version Incident_Errors: FATAL EXCEPTION Incident_Exception: NullPointerException Incident_Full_Exception: java.lang.NullPointerException Incident_Stacktrace: java.lang.NullPointerException: An error occurred at com.example.module.Class.method(Class.java:25) at com.example.module.OtherClass.anotherMethod(OtherClass.java:50) at java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128) at java.base/java.util.concurrent.ThreadPoolExecutor\$Worker.run(ThreadPoolExecutor.java:628) at java.base/java.lang.Thread.run(Thread.java:829)

Incident 3: Date: 2023-01-15 Incident_Number: INC2052 Incident_Category: Software Incident_Summary: App crash after update Incident_Details: The latest version of the app crashes on launch. Incident_RCA: Incompatible library update Incident_Impact: Mobile users unable to use the app Incident_Resolution: Rolled back to previous stable version Incident_Errors: FATAL EXCEPTION Incident_Exception: NullPointerException Incident_Full_Exception: java.lang.NullPointerException Incident_Stacktrace: java.lang.NullPointerException: An error occurred at com.example.module.Class.method(Class.java:25) at com.example.module.OtherClass.anotherMethod(OtherClass.java:50) at java.base/java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1128) at java.base/java.util.concurrent.ThreadPoolExecutor\$Worker.run(ThreadPoolExecutor.java:628) at java.base/java.lang.Thread.run(Thread.java:829)

✓ Recommended Resolution

Here are some effective resolution steps to address the `NullPointerException` :

Step 1: Review recent code changes

- Inspect the codebase for any recent updates, modifications, or additions that may have introduced the null reference.
- Verify that all new code is properly tested and reviewed to ensure it does not introduce null pointer exceptions.

Step 2: Analyze method `method` at line 25

- Review the method signature and implementation in `com.example.module.Class` at line 25.
- Check if the method is expecting a non-null argument, and if so, verify that the calling code is providing a valid, non-null reference.

Step 3: Inspect dependencies and libraries

- Verify that all dependencies and libraries used by the application have not been updated to introduce null pointer exceptions.
- Review any recent changes to third-party libraries or frameworks that may be causing issues.

Step 4: Use debugging tools

- Enable Java debugging options (e.g., `-Djava.compiler=None` for Eclipse) to help identify the exact line of code where the `NullPointerException` occurs.
- Run your application with a debugger (e.g., Eclipse's built-in debugger or IntelliJ IDEA's built-in debugger) to step through the code and inspect variables at runtime.

Step 5: Test and isolate the issue

- Create a minimal, reproducible test case to demonstrate the error.
- Isolate the problematic code by temporarily commenting out surrounding code or testing individual components.

Step 6: Fix null pointer exceptions

- In the `method` at line 25, check if the method is expecting a non-null argument and modify it to handle null values correctly (e.g., using `if (obj != null)` or `Optional.ofNullable(obj).orElse(null)`).
- Update the calling code to ensure that it passes valid, non-null references to the `method`.

Step 7: Verify fixes and retest

- Rebuild and test your application to ensure that the issue is resolved.
- Perform additional testing to verify that the fix does not introduce new issues.

By following these steps, you should be able to identify and resolve the root cause of the `NullPointerException` and prevent similar issues from occurring in the future.

Built with ❤️ using LangChain, Ollama, Chroma, HuggingFace, and Streamlit.