

The bug life cycle describes the journey of a software bug from the moment it is discovered until it is resolved. This process helps software teams track, manage, and fix bugs efficiently, ensuring the quality and reliability of the software.

New / Opened

A bug is reported for the first time with important details, such as how serious it is, a description of the problem, steps to reproduce it, and any screenshots. The bug is recorded in the tracking system for review.

Assigned

The project manager or team lead assigns the bug to a developer who will fix it. This ensures someone is responsible for solving the problem.

In Progress / Active

The developer starts working on fixing the bug. This involves analyzing the problem, making code changes, and testing possible solutions.

Resolved / Fixed

Once the developer thinks the bug is fixed, it is marked as resolved. The fix and any changes made are documented.

Verified / Tested

The QA team checks the fix to make sure the bug is really solved and that no new issues were introduced. If everything works, the bug moves to the next stage.

Closed / Reopened

Closed: The bug is completely fixed and no further action is needed.

Reopened: If the bug still exists or happens again, it can be reopened, and the cycle starts again.

References

Pressman, R. S. (2014). *Software Engineering: A Practitioner's Approach* (8th ed.). McGraw-Hill.

Bugzilla. (n.d.). *Bug life cycle*. Retrieved from <https://www.bugzilla.org/docs/>

TutorialsPoint – Software Testing Dictionary:

https://www.tutorialspoint.com/software_testing_dictionary/bug_life_cycle.htm

