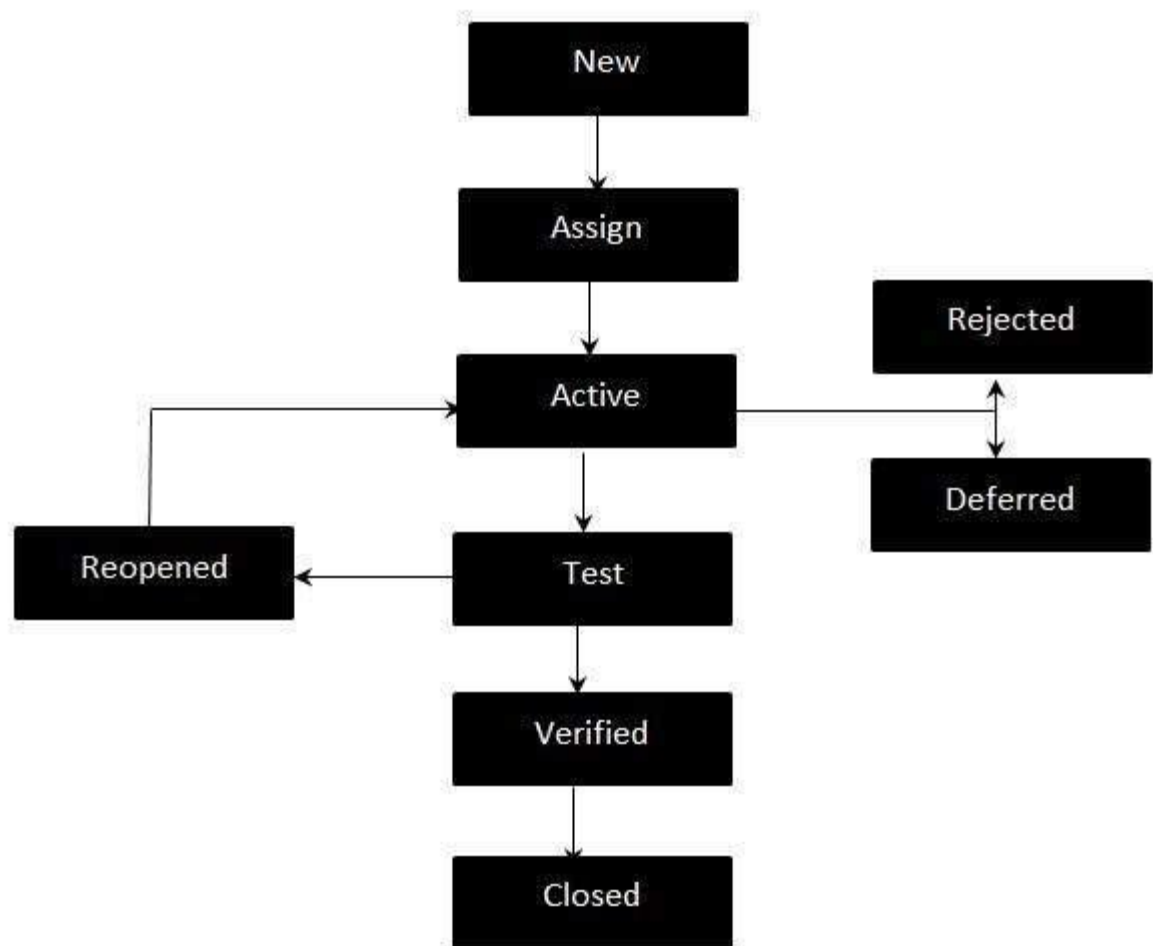


What is a Bug?

In Software testing, when the expected and actual behavior is not matching, an incident needs to be raised. An incident may be a Bug. It is a programmer's fault where a programmer intended to implement a certain behavior, but the code fails to correctly conform to this behavior because of incorrect implementation in coding. It is also known as Defect.

Following is the workflow of Bug Life Cycle:

Life Cycle of a Bug:



Parameters of a Bug:

The Following details should be part of a Bug:

- Date of issue, author, approvals and status.
- Severity and priority of the incident.

- The associated test case that revealed the problem
- Expected and actual results.
- Identification of the test item and environment.
- Description of the incident with steps to Reproduce
- Status of the incident
- Conclusions, recommendations and approvals.

Severity:

It is the extent to which the defect can affect the software. In other words it defines the impact that a given defect has on the system. For example: If an application or web page crashes when a remote link is clicked, in this case clicking the remote link by an user is rare but the impact of application crashing is severe. So the severity is high but priority is low.

Severity can be of following types:

Critical: The defect that results in the termination of the complete system or one or more component of the system and causes extensive corruption of the data. The failed function is unusable and there is no acceptable alternative method to achieve the required results then the severity will be stated as critical.

Major: The defect that results in the termination of the complete system or one or more component of the system and causes extensive corruption of the data. The failed function is unusable but there exists an acceptable alternative method to achieve the required results then the severity will be stated as major.

Moderate: The defect that does not result in the termination, but causes the system to produce incorrect, incomplete or inconsistent results then the severity will be stated as moderate.

Minor: The defect that does not result in the termination and does not damage the usability of the system and the desired results can be easily obtained by working around the defects then the severity is stated as minor.

Cosmetic: The defect that is related to the enhancement of the system where the changes are related to the look and field of the application then the severity is stated as cosmetic.

Severity is technical focused it is absolute for a bug. It defines “how important is it to business that we fix this bug.” It is a dimension of seriousness of an issue. Severity cannot be changed.

- What will be impact of bug
- Probability of occurrence
- Reproducibility.

S1- System crash, data loss

S2- Application crash, major functionality not working

S3- Minor functionality not working

S4- Low visibility, cosmetic

Priority

Priority is defined as the order in which the defects should be resolved. The priority status is usually set by the management team while raising the defect against the dev team mentioning the timeframe to fix the defect. The Priority status is set based on end users requirement.

Priority is business focused, based on scheduling of project. It is a relative value, and can be changed depends on business need.

For example: If the company logo is incorrectly placed in the company's web page then the priority is high but it is of low severity.

Priority List:

Priority can be marked as either of the following states:

- **Low** - This defect can be fixed after the critical ones are fixed.
- **Medium** - The defect should be resolved in the subsequent builds.
- **High** - The defect must be resolved immediately because the defect is affecting the application to a considerable extent and the relevant modules cannot be used until it's fixed.
- **Urgent** - The defect must be resolved immediately because the defect is affecting the application or the product severely and the product cannot be used until it has been fixed.

- P1: Fix right now
- P2: fix before next build
- P3: Fix before final release
- P4: fix if you have time.