Defect

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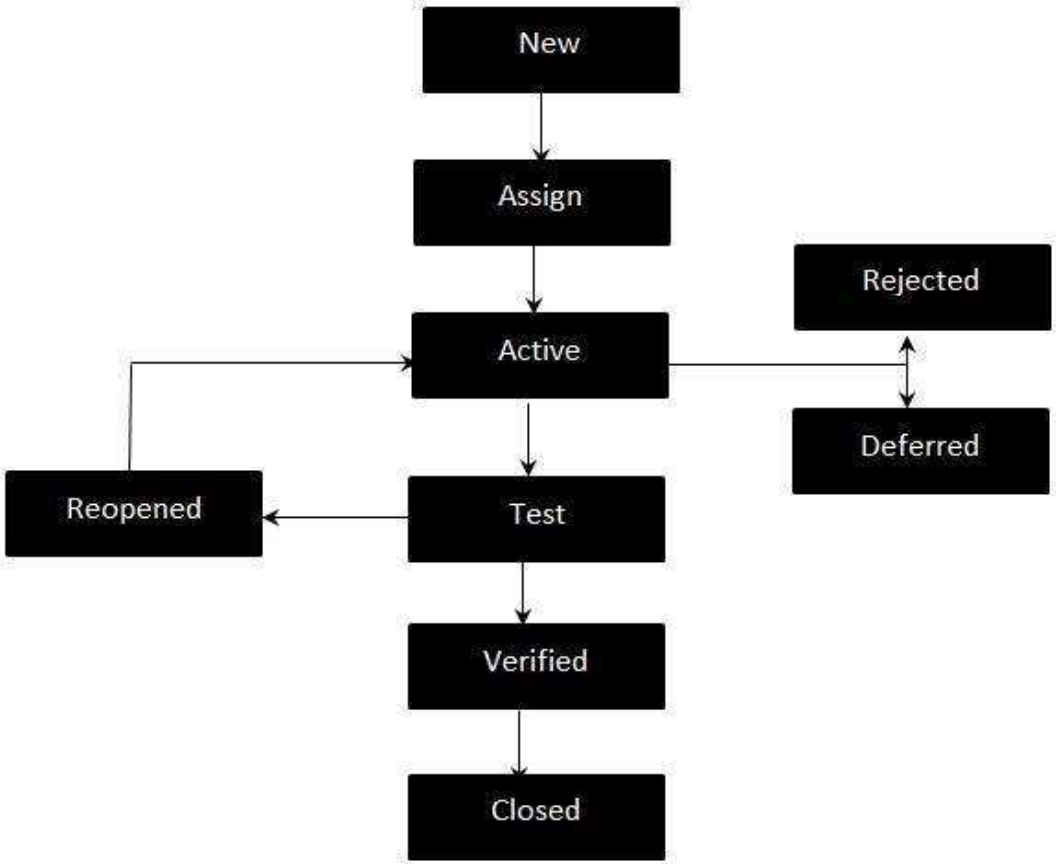
Defect

- A defect is an error or a bug, in the application which is created.
- Tests show the presence not the absence of defects.
- When the result of the software application or product does not meet with the end user expectations or the software requirements then it results into a Bug or Defect.

Common Types of Defects

- **Functional defects:** If the application is not behaving in the way as the requirements suggests then it is considered as a Functional defect.
- **Non-Functional defects :** once you have entered the value and you proceed further but on login button spells wrong
- **Wrong:** here functionality is working but it gives wrong result.
  - Example: 2+3=5 .....(right result)
    2+3=6 .....(wrong result)
- **Missing:** here the functionality of software is missing
  - Example: 2+3=5 .....(right result)
    2+3=no result .....(missing result)

Defect Life Cycle - Workflow



Defect Life Cycle States:

- **New -** Potential defect that is raised and yet to be validated.
- **Assigned -** Assigned against a development team to address it but not yet resolved.
- **Active -** The Defect is being addressed by the developer and investigation is under progress. At this stage there are two possible outcomes; viz - Deferred or Rejected.
- **Test -** The Defect is fixed and ready for testing.
- **Verified -** The Defect that is retested and the test has been verified by QA.

- **Closed -** The final state of the defect that can be closed after the QA retesting or can be closed if the defect is duplicate or considered as NOT a defect.
- **Reopened -** When the defect is NOT fixed, QA reopens/reactivates the defect.
- **Deferred -** When a defect cannot be addressed in that particular cycle it is deferred to future release.
- **Rejected -** A defect can be rejected for any of the 3 reasons; viz - duplicate defect, NOT a Defect, Non Reproducible.

Defect severity / Bug severity

- **Bug Severity** or Defect Severity in testing is a degree of impact a bug or a Defect has on the software application under test.
- A higher effect of bug/defect on system functionality will lead to a higher severity level.
- A Quality Assurance engineer usually determines the severity level of a bug/defect.

Types of Severity

- **Critical**: This defect indicates complete shut-down of the process, nothing can proceed further
- **Major**: It is a highly severe defect and collapses the system. However, certain parts of the system remain functional
- **Medium**: It causes some undesirable behavior, but the system is still functional
- **Low**: It won't cause any major break-down of the system