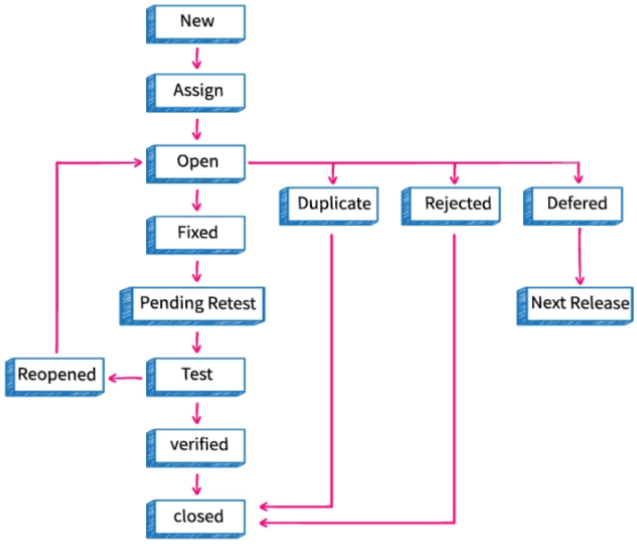
**Bug life cycle for project Masik**

For convenience, I have shown the life cycle of a bug on this diagram, where the arrows show the exact order in which our bug will move in its life cycle.




Our bug life cycle includes following steps or statuses:

**New:** When a defect is logged and posted for the first time. It's state is given as new.

**Assign:** The bug has been assigned to the developer for further investigation and resolution.

**Open:** At this state the developer has started analyzing and working on the defect fix.

**Fixed:** When developer makes necessary code changes and verifies the changes then he/she can make bug status as 'Fixed' and the bug is passed to testing team.

**Pending retest:** After fixing the defect the developer has given that particular code for retesting to the tester. Here the testing is pending on the testers end. Hence its status is pending retest.

**Test:** At this stage the tester do the retesting of the changed code which developer has given to him to check whether the defect got fixed or not.

**Verified:** The tester tests the bug again after it got fixed by the developer. If the bug is not present in the software, he approves that the bug is fixed and changes the status to "verified".

**Reopen:** If the bug still exists even after the bug is fixed by the developer, the tester changes the status to "reopened". The bug goes through the life cycle once again.

**Closed:** Once the bug is fixed, and tested by the tester and tester feels that the bug no longer exists in the software, he changes the status of the bug to "closed".
This state means that the bug is fixed, tested and approved.

There are also such cases of development of events, after the bug is opened:

**Duplicate:** If the bug is repeated twice or the two bugs mention the same concept of the bug, then one bug status is changed to "duplicate".

**Rejected:** If the developer feels that the bug is not genuine, he rejects the bug. Then the state of the bug is changed to "rejected".

**Deferred:** The bug, changed to deferred state means the bug is expected to be fixed in next releases. The reasons for changing the bug to this state have many factors.
Some of them are priority of the bug may be low, lack of time for the release or the bug may not have major effect on the software.

I chose these statuses, because they reflect different phases in the life cycle of a bug, starting from detection and ending with closure after correction.
Each status provides information about the current status and handling of the bug by the development team.