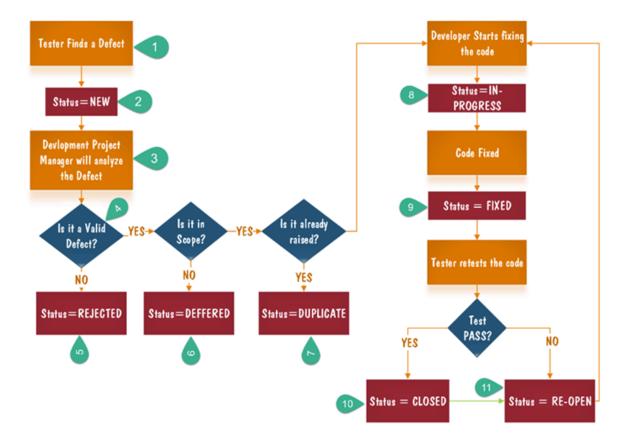
## **Defect/Bug Life Cycle:**

## **States**

- New: When a new defect is logged and posted for the first time. It is assigned a status as NEW.
- **Assigned:** Once the bug is posted by the tester, the lead of the tester approves the bug and assigns the bug to the developer team
- Open: The developer starts analyzing and works on the defect fix
- **Fixed**: When a developer makes a necessary code change and verifies the change, he or she can make bug status as "Fixed."
- **Pending retest**: Once the defect is fixed the developer gives a particular code for retesting the code to the tester. Since the software testing remains pending from the testers end, the status assigned is "pending retest."
- **Retest**: Tester does the retesting of the code at this stage to check whether the defect is fixed by the developer or not and changes the status to "Re-test."
- **Verified**: The tester re-tests the bug after it got fixed by the developer. If there is no bug detected in the software, then the bug is fixed and the status assigned is "verified."
- **Reopen**: If the bug persists even after the developer has fixed the bug, the tester changes the status to "reopened". Once again the bug goes through the life cycle.
- Closed: If the bug is no longer exists then tester assigns the status "Closed."
- **Duplicate**: If the defect is repeated twice or the defect corresponds to the same concept of the bug, the status is changed to "duplicate."
- **Rejected**: If the developer feels the defect is not a genuine defect then it changes the defect to "rejected."
- **Deferred**: If the present bug is not of a prime priority and if it is expected to get fixed in the next release, then status "Deferred" is assigned to such bugs
- **Not a bug**: If it does not affect the functionality of the application then the status assigned to a bug is "Not a bug".



- 1. Tester finds the defect
- 2. Status assigned to defect- New
- 3. A defect is forwarded to Project Manager for analyze
- 4. Project Manager decides whether a defect is valid
- 5. Here the defect is not valid- a status is given "Rejected."
- 6. So, project manager assigns a status **rejected**. If the defect is not rejected then the next step is to check whether it is in scope. Suppose we have another function- email functionality for the same application, and you find a problem with that. But it is not a part of the current release when such defects are assigned as a **postponed or deferred** status.
- 7. Next, the manager verifies whether a similar defect was raised earlier. If yes defect is assigned a status **duplicate**.
- 8. If no the defect is assigned to the developer who starts fixing the code. During this stage, the defect is assigned a status **in-progress.**
- 9. Once the code is fixed. A defect is assigned a status fixed
- 10. Next, the tester will re-test the code. In case, the <u>Test Case</u> passes the defect is **closed.** If the test cases fail again, the defect is **re-opened** and assigned to the developer.
- 11. Consider a situation where during the 1st release of Flight Reservation a defect was found in Fax order that was fixed and assigned a status closed. During the second upgrade release the same defect again re-surfaced. In such cases, a closed defect will be **re-opened.**