MODULE-4(DEFECT TRACKING TOOLS OR BUG TRACKING TOOLS)

1) What is priority?

- Priority is Relative and Business-Focused**.** Priority defines the order in which we should resolve a defect. Should we fix it now, or can it wait? This priority status is set by the tester to the developer mentioning the time frame to fix the defect.

2) What is severity?

- Severity is absolute and Customer-Focused**.** 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.

3) Bug categories are

- Below are Bug categories :

1. **Data Quality/Database Bugs:** Deals with improper handling of data in the database.
   - Example :-
     - Values not deleted/inserted into the database properly
     - Improper/wrong/null values inserted in place of the actual values

2. **Critical Functionality Bugs:** The occurrence of these bugs hampers the crucial Functionality of the application.
   - Example :- Exceptions

3. **Functionality Bugs:** These Bugs affect the functionality of the application.
   - Examples :-
     - All JavaScript errors
     - Buttons like Save, Delete, Cancel not performing their intended functions
     - A missing functionality (or) a feature not functioning the way it is intended to
     - Continuous execution of loops

4. **Security Bugs:** Application security Bugs generally involve improper handling of data sent from the user to the application. These Bugs are the most severe and given highest priority for a fix.
   - Examples :-
     - Authentication: Accepting an invalid username/password
     - Authorization: Accessibility to pages though permission not given

5. **User Interface Bugs:** As the name suggests, the bugs deal with problems related to UI are usually considered less severe.
   - Examples:
     - Improper error/warning/UI messages
     - Spelling mistakes
     - Alignment problems

4) Advantage of Bugzilla .

- Bugzilla is an open-source issue/bug tracking system that allows developers effectively to keep track of outstanding problems with their product. It is written in Perl and uses MYSQL database.

- Below are advantages of Bugzilla :
    1. Key features of Bugzilla includes
    2. Advanced search capabilities
    3. E-mail Notifications
    4. Modify/file Bugs by e-mail
    5. Time tracking
    6. Strong security
    7. Customization
    8. Localization

5) Difference between priority and severity

- Below are the difference between priority & severity

Features	Priority	Severity
Definition	Priority is a parameter to decide the order in which defects should be fixed.	Severity is a parameter to denote the impact of a particular defect on the software.
Purpose	Priority means how fast the defect has to be fixed.	Severity means how severe the defect is affecting the functionality.
Categories	Priority is divided into 3 categories: • Low • Medium • High	Severity is divided into 5 categories: • Critical • Major • Medium • Cosmetic • Minor
Relation	Priority is related to scheduling to resolve the problem.	Severity is related to the quality standard.
Value	Its value is subjective.	Its value is objective.

6) Difference between authorization and authentication in web testing? what are the common problems faced in web testing?

- Below are the difference between authorization & authentication.

S/N	Authorization	Authentication
1	In the authentication process, the identity of users are checked for providing the access to the system.	In authorization process, the person's or user's authorities are checked for accessing the resources.
2	In the authentication process, users or persons are verified.	In this process, users or persons are validated.
3	It needs usually the user's login details.	It needs the user's privilege or security levels.
4	The user authentication is visible at user end.	The user authorization is not visible at the user end.
5	It is done before the authorization process.	This process is done after the authentication process.
6	**Example**: Employees in a company are required to authenticate through the network before accessing their company email.	**Example:** After an employee successfully authenticates, the system determines what information the employees are allowed to access.

- The common problem faced in web testing are cross browser compatibility, dealing with dynamic content, while performing performance, scalability and security testing, managing test data , and problem with communication and collaboration.

7) Mention what are the categories of defects

- Below are Defect categories :

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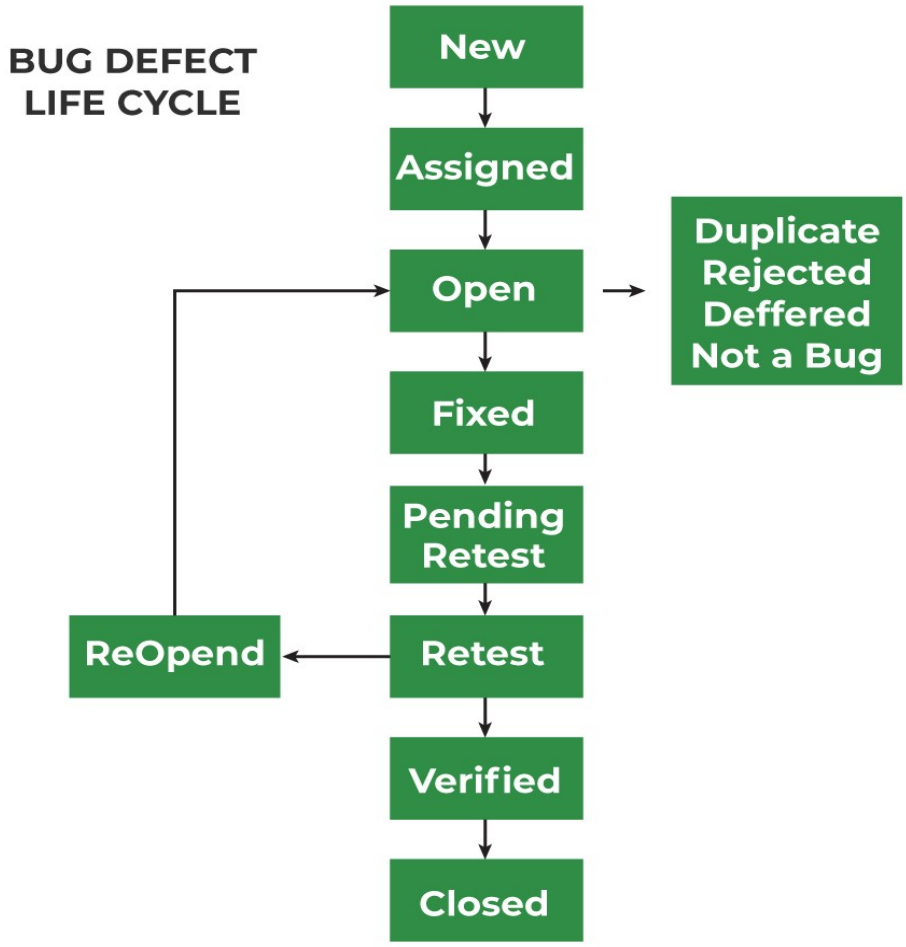
8) What is Bug Life Cycle?

- The duration or time span between the first time defects is found and the time that it is closed successfully, rejected, postponed or deferred is called as 'Defect Life Cycle'.



- **Defect Stages :**

➢ **New :** When new defect is logged and posted for the first time. It is assigned a status a "New".

➢ **Assigned:** Once a bug is posted by the tester, the lead of tester approves bug and assign the bug to the developer team.

➢ **Open :** The developer starts analyzing and works on the defect fix.

➢ **Fixed :** When developer makes necessary 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 tester end, the status assignment is "Pending Retest".

➢ **Verified :** Tester retest 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".

➢ **Reopened :** If the bug persist even after developer has fixed the bug, the tester changes status to "Reopened", Once again the bug goes through the life cycle.

➢ **Closed:** If the bug is no longer exist then the tester assigned the status "Closed".

➢ **Duplicate :** If the defect is repeat twice or the defect corresponds to the same concept of the bug, the status is changed to "Duplicate".

➢ **Rejected :** If the developers feels if the defect is not a genuine defect then it changes the effect to "Rejected".

➢ **Deferred** : If the present bug is not prime category and if it expected to got fix 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 the bug is "Not a bug".