**Module 4**

**What is priority?**

* **Priority** is Relative and Business-Focused. It 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.
* If high priority is mentioned then the developer has to fix it at the earliest.
* The priority status is set based on the customer requirements.

For example: If the company name is misspelled in the home page of the website, then the priority is high and severity is low to fix it.

Priority can be of following types:

Low: The defect is an irritant which should be repaired, but repair can be deferred until after more serious defect has been fixed.

Medium: The defect should be resolved in the normal course of development activities. It can wait until a new build or version is created.

High: The defect must be resolved as soon as possible because the defect is affecting the application or the product severely. The system cannot be used until the repair has been done.

Critical: Extremely urgent, resolve immediately

**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.

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 (High): 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 (Medium): 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 (Low): 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.

**Bug categories are…**

**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”.

**Advantage of Bugzila .**

* Open source, free bug tracking tool.
* Automatic Duplicate Bug Detection.
* Search option with advanced features.
* File/Modify Bugs By Email.
* Move Bugs Between Installs.
* Multiple Authentication Methods (LDAP, Apache server).
* Time Tracking.
* Automated bug reporting; has an API to interact with system.

**Difference between priority and severity**

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| **Parameters** | **Severity in Testing** | **Priority in Testing** |
| Definition | Severity is a term that denotes how severely a defect can affect the functionality of the software. | Priority is a term that defines how fast we need to fix a defect. |
| Parameter | Severity is basically a parameter that denotes the total impact of a given defect on any software. | Priority is basically a parameter that decides the order in which we should fix the defects. |
| Relation | Severity relates to the standards of quality. | Priority relates to the scheduling of defects to resolve them in software. |
| Value | The value of severity is objective. | The value of priority is subjective. |
| Change of Value | The value of Severity changes continually from time to time. | The value of Priority changes from time to time. |
| Who Decides the Defect | The testing engineer basically decides a defect’s severity level. | The product manager basically decides a defect’s priority level. |
| Types | There are 5 types of Severities: Cosmetic, Minor, Moderate, Major, and Critical. | There are 3 types of Priorities: High, Medium, and Low. |