**Module: 4**

1. **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:

1. **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.
2. **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.
3. **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.
4. **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.
5. **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.
6. **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. 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:

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

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

**3. 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.

**4. Critical**: Extremely urgent, resolve immediately

1. **Bug categories are…**

**1. Data Quality/Database Defects**: Deals with improper handling of data in the database. Examples: (1) Values not deleted/inserted into the database properly (2) Improper/wrong/null values inserted in place of the actual values

**2.Critical Functionality Defects**: The occurrence of these bugs hampers the crucial functionality of the application. Examples: - Exceptions

**3.Functionality Defects**: These defects affect the functionality of the application.

* Examples: (1)All JavaScript errors (2) Buttons like Save, Delete, Cancel not performing their intended functions (3) A missing functionality (or) a feature not functioning the way it is intended to (4) Continuous execution of loops

**4.security defect:** Application security defects generally involve improper handling of data sent from the user to the application. Examples: (1).Authentication: Accepting an invalid username/password (2) Authorization: Accessibility to pages though permission not given

**5. User Interface Defects**: As the name suggests, the bugs deal with problems related to UI are usually considered less severe. Examples: (1)Improper error/warning/UI messages (2) Spelling mistakes (3) Alignment problems.

**4. Difference between priority and severity.**

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| **priority** | **severity.** |
| Defect Priority has defined the order in which the developer should resolve a defect | Defect Severity is defined as the degree of impact that a defect has on the operation of the product |
| Priority is categorized into three types: low, high, meduim | Severity is categorized into five types:  Critical, Major, Moderate, Minor, Cosmetic |
| Priority is associated with scheduling | Severity is associated with functionality or standards |
| Priority indicates how soon the bug should be fixed | Severity indicates the seriousness of the defect on the product functionality |
| Priority of defects is decided in consultation with the manager/client | QA engineer determines the severity level of the defect |
| Priority is driven by business value | Severity is driven by functionality |
| Priority status is based on customer requirements | Severity status is based on the technical aspect of the product |
| During UAT the development team fix defects based on priority | During SIT, the development team will fix defects based on the severity and then priority |

**5.advantages of bugzila**

* It is an open source higyly use in bugs tracker
* It is easy in usage and its user interface is understable for people without technical knowledge
* It easily integrates with test management instrument
* It integrates with an e-mailing system
* It automates documentation.