**Defect Management**

**Q.1 What is priority?**

**Ans.** priority is Relative and Business Focused. Priority defines the order in which we should resolve a defect. Should we fix it now, or can wait it? 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 following types:**
  + **Low:** The defect is an irritant which should be repaired, but repair can be deferred until after more serious defects has been fixed.
  + **Medium:** The defect can be resolved in the normal course of development activities. It can wait until a new build or version 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.

**Q.2 What is severity?**

**Ans.** 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 a user is rare but the impact of an application crashing is server. So, the severity is high but priority is low.
* **Severity can be 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 result 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 inconsistence results then the severity will be stated as moderate.
  + **Minor (low):** The defect that does not results in the termination and does not damage the usability of the system and the desired result 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.

**Q.3 Bug categories are…**

**Ans.** Bug categories can very depend on the context, but generally, bugs in software development are categorized based on their impact, severity and the area of the system where they occur. Here are some common bug categories:

* **Critical Bugs:** These bugs cause the system to crash, result in data loss, or make the software unusable. They often require immediate attention.
* **Major Bugs:** These bugs significantly impair the functionality of the software or cause major inconvenience to users. They need to be fixed urgently but might not be as severe as critical bugs.
* **Minor Bugs:** These bugs have minimal impact on the functionality of the software and may cause minor inconveniences or cosmetic issues. They are usually fixed in routine maintenance.
* **Cosmetic Bugs:** These bugs don’t affect the functionality of the software but impact its appearance or user experience. They are often low priority.
* **UI/UX Bugs:** These bugs affect the user interface or user experience, such as layout issues, inconsistent design elements, or confusing user interactions.
* **Performance Bugs:** These bugs degrade the performance of the software, causing it to run slowly or consume excessive resources.
* **Security Bugs:** These bugs create vulnerabilities in the software that can be exploited by attackers to gain unauthorized access, manipulate data, or disrupt operations.
* **Compatibility Bugs:** These bugs occur when the software behaves differently on different platforms or fails to work with other software components as excepted.
* **Regression Bugs:** These bugs appear after a new version of the software is released and cause features that previously worked correctly to malfunction.
* **Documentation Bugs:** These bugs involve errors or inconsistences in the software documentation, such as missing or outdated instructions, misleading information, or grammatical errors.

**Q.4 Advantage of Bugzilla?**

**Ans.** Bugzilla is a defect tracking tool; however, it can be used as a test management tool.

* Bugzilla is an open source issue/bug tracking system that allows developers effectively to keep track of outstanding problems with their product.
* **Advantages are as mentioned below;**
  + It is easy in usage and its user interface is understandable for people without technical knowledge.
  + It reports in a verity of formats and types.
  + It can track the time that is taken to fix the bug.
  + Bugzilla comes with both basic and advanced searching mechanism. Using this you can search the details of bugs as you wish.
  + It can report in multiple type and format like charts, graph or HTML, CSV, XML.
  + Bugzilla have duplicate bug detection features as it automatically tracks the bugs similar to the one you are searching for.

**Q.5 Difference between priority and severity?**

**Ans.**

|  |  |  |
| --- | --- | --- |
| **Parameters** | **Severity** | **Priority** |
| 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 defects | The testing engineer basically decides a defects severity level. | The product manager basically decides a defects 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. |