PRATIXA MISTRY

ASSIGNMENT: DEFECT MANAGEMENT

1. Mention what are the categories of defects?

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

Critical Functionality Defects: The occurrence of these bugs hampers the crucial functionality of the application.

Functionality Defects: These defects that affect the functionality of the application.
Examples:
Buttons like Save, Delete, cancel are not performing their intended functions, A missing functionality, Continuous execution of loops

Security Defects: Application security defects generally involve improper handling of data sent from the user to the application. These defects 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

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

2. Difference between Smoke and Sanity?

Smoke Testing	**Sanity Testing**
Smoke Testing is performed to ascertain that the critical functionalities of the program is working fine	Sanity Testing is done to check the new functionality / bugs have been fixed
The objective of this testing is to verify the "stability" of the system in order to proceed with more rigorous testing	The objective of the testing is to verify the "rationality" of the system in order to proceed with more rigorous testing
This testing is performed by the developers or testers	Sanity testing is usually performed by testers
Smoke testing is usually documented or scripted	Sanity testing is usually not documented and is unscripted
Smoke testing is a subset of Regression testing	Sanity testing is a subset of Acceptance testing
Smoke testing exercises the entire system from end to end	Sanity testing exercises only the particular component of the entire system

3. Difference between Priority and Severity

severity	**Priority**
Defect Severity is specified as the degree of impact that a defect has on the operation of the product.	Defect Priority specifies the order in which the bugs should be fixed.
Severity means the seriousness of the defect in the product functionality.	Priority means how soon the bug should be fixed.
The test engineer determines the severity level of the defect.	Priority of defects is decided in discussion with the manager/client.
It is driven by functionality.	It is driven by business value.
Severity status is established on the technical aspect of the product.	Priority status is established on customer requirements.

4. What is Bug Life Cycle?

Bugs arise from mistakes and errors, made by people, in either a program's source code or its design."

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

When a bug is discovered, it goes through several states and eventually reaches to one of the terminal states, where it becomes inactive and closed.

5. Explain what Test Plan is? What is the information that should be covered.

All projects require a set of plans and strategies which define how the testing will be conducted.
A document describing the scope, approach, resources and schedule of intended test activities is called test plan

This includes defining test objectives, test approach, test tools, test environment, test schedules and team responsibilities and composition and entry exit criteria.

Integrating and coordinating the testing activities into the software life cycle activities like development, operation and maintenance.

Scheduling test implementation, execution and evaluation.

6. What is priority?

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.

7. 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.

8. Bug categories are…

Bug Category: Security, Database, Functionality (Critical/General), UI

9. Advantage of Bugzila .

Advanced search capabilities
E-mail Notifications
Modify/file Bugs by e-mail
Time tracking
Strong security
Customization
Localization

10. What are the different Methodologies in Agile Development Model?

- Kanban. ...
- Scrum. ...
- Feature-driven development (FDD) ...
- Behavior-driven development (BDD) ...
- Lean development. ...
- Adaptive software development (ASD) ...
- Crystal. ...
- Extreme programming (XP)

11. Explain the difference between Authorization and Authentication in Web testing.

Authentication	Authorization
In the authentication process, the identity of user is checked for providing the access to the system.	While in authorization process, the user's authorities are checked for accessing the resources.
In the authentication process, users are verified.	While in this process, users are validated.
It is done before the authorization process.	While this process is done after the authentication process.
Authentication determines whether the person is user or not.	While it determines What permission does the user have?
The user authentication is visible at user end.	The user authorization is not visible at the user end.
The user authentication is identified with username, password, face recognition, retina scan, fingerprints, etc.	The user authorization is carried out through the access rights to resources by using roles that have been pre-defined.
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.

12. What are the common problems faced in Web testing?

1) **Cross-browser compatibility**

One of the main challenges of web application testing is ensuring that your web app works well across different browsers, devices, and operating systems.

2) **Performance and scalability**

Another challenge of web application testing is ensuring that your web app can handle high traffic, load, and stress without compromising its speed, functionality, and reliability.

3) **Security and privacy**

A third challenge of web application testing is ensuring that your web app is secure and compliant with the relevant regulations and standards

4) **User interface and user experience**

A fourth challenge of web application testing is ensuring that your web app has a user-friendly interface and user experience.

5) **Automation and integration**

you need to use automation and integration testing tools that can help you create, execute, and manage your web app testing scripts and workflows

6) **Debugging and reporting**

A sixth challenge of web application testing is ensuring that your web app testing results are accurate, actionable, and traceable.