Defect

A software defect is an error, flaw, failure, or fault in a computer program that causes it to produce an incorrect or unexpected result, or to behave in unintended ways

BUG

A software bug occurs when the actual results don’t match with the expected results.

Types of defect

**Usability defects**

Usability bugs are defects that impact the user experience of the software that makes it difficult to use.

Eg. If a website is complicated to access or get around or the signup process is complicated to go through.

#### ****Performance defects****

Performance bugs are defects that impact the performance of the software.

This can include things like the speed of the software, how much memory it uses, or how many resources it consumes.

#### ****Security defects****

Security bugs are a type of software defect that can have major consequences if left unaddressed.

These defects can allow malicious users to gain access to sensitive data or systems, or even allow them to take control of the affected software.

#### ****Compatibility defects****

Compatibility defects are those bugs which occur when an application is not compatible with the hardware it is running on, or with other software it needs to interact with. Incompatibility between software and hardware can result in crashes, data loss, and other unpredictable behavior.

#### ****Critical Defects****

A critical defect is a software bug that has a severe or catastrophic consequence on the operation of the application. Critical defects can cause the application to crash, freeze, or perform incorrectly.

#### ****Low Priority Defects****

Low priority defects are generally the ones which do not have any serious impact on the functioning of the software and can be deferred to be fixed in the next version or release.

#### ****Medium Priority Defects****

Medium priority defects are the errors that may be fixed after an upcoming release or in the subsequent release.

An application returning the expected result, which, however, formats incorrectly in a particular browser, is an example of a medium-priority defect.

#### ****High Priority Defects****

high priority defects are those which have a high impact on the functioning of the software. In most cases, these defects need to be fixed immediately, as they can cause major disruptions in the normal workflow.

#### ****Regression Defects****

A regression defect occurs when a code change causes an unintended effect on an independent part of the software.

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#### ****Wrong Defects****

Wrong defects are those defects which satisfies the requirement but not in a proper way. It means that though the functionality is achieved as required but it is not up to the user’s expectations.

**LEVELS OF DEFECT**

#### High Severity and High Priority

**Example :**   ATM vending currency feature wherein after entering the correct username and the password, the machine does not dispense money but deducts the money from your account.

#### High Priority and Low Severity

**Example :**

In the bank logo, instead of ICICI, it is written as ICCCI.

In terms of functionality, it is not affecting anything so we can mark as Low Severity, but it has an impact on user experience.

**High Severity and Low Priority**

**For Example,**

Web page not found when user clicks on a link

#### Low Severity and Low Priority

**For Example,**

Any spelling mistakes /font casing/ misalignment in the paragraph of the 3rd or 4th page of the application and not in the main or front page/ title.

**Defect report format**

A typical defect report contains the information in an xls Sheet as follows.

1. **Defect ID :**

Nothing but a serial number of defects in the report.

**2. Defect Description :**

A short and clear description of the defect detected.

**3.Action Steps :**

What the client or QA did in an application that results in the defect. Step by step actions they took.

**4.Expected Result :**

What results are expected as per the requirements when performing the action steps mentioned.

**5. Actual Result :**

What results are actually showing up when performing the action steps.

**6. Severity :**

Trivial (A small bug that doesn’t affect the software product usage).

1. **Low –**  
   A small bug that needs to be fixed and again it’s not going to affect the performance of the software.
2. **Medium –**   
   This bug does affect the performance.
3. **High –**   
   It highly impacts the software
4. **Critical –**   
   These bugs heavily impacts the performance of the application. Like crashing the system, freezes the system or requires the system to restart for working properly.

**7. Attachments :**

A sequence of screenshots of performing the step by step actions and getting the unexpected result.

**8. Additional information :**

The platform you used, operating system and version. And other information which describes the defects in detail for assisting the developer understand the problem and fixing the code for getting desired results.