**Defect Categoreis**

**1)Arithmetic Defects:**  
It include the defects made by the developer in some arithmetic expression or mistake in finding solution of such arithmetic expression. This type of defects are basically made by the programmer due to access work or less knowledge. Code congestion may also lead to the arithmetic defects as programmer is unable to properly watch the written code.

**2)Logical Defects:**  
Logical defects are mistakes done regarding the implementation of the code. When the programmer doesn’t understand the problem clearly or thinks in a wrong way then such types of defects happen. Also while implementing the code if the programmer doesn’t take care of the corner cases then logical defects happen. It is basically related to the core of the software.

3)**Syntax Defects:**  
Syntax defects means mistake in the writing style of the code. It also focuses on the small mistake made by developer while writing the code. Often the developers do the syntax defects as there might be some small symbols escaped. For example, while writing a code in C++ there is possibility that a semicolon(;) is escaped.

4) **Multithreading Defects:**  
Multithreading means running or executing the multiple tasks at the same time. Hence in multithreading process there is possibility of the complex debugging. In multithreading processes sometimes there is condition of the deadlock and the starvation is created that may lead to system’s failure.

5) **Interface Defects:**  
Interface defects means the defects in the interaction of the software and the users. The system may suffer different kinds of the interface testing in the forms of the complicated interface, unclear interface or the platform based interface.

6)**Performance Defects:**  
Performance defects are the defects when the system or the software application is unable to meet the desired and the expected results. When the system or the software application doesn’t fulfill the users’s requirements then that is the performance defects. It also includes the response of the system with the varying load on the

**7)Design Defects:**

The algorithms, login and data elements, module interface, the external software and hardware UI descriptions should be correctly designed. The incompatible or incorrectly designed modules lead to defects in the system.

**8)Command Defects:**

An error in the sequences and logic is known as control flow error or command error. The reasons for such defects are missing command, wrong algorithm, incorrect data and code errors.

**9)Boundary Value Defects:**

In case the login page is logging in by giving the passport length to 16 characters in the place of 15 characters, then the defect is the boundary value defect.

**10)Error Handling Defects:**

The error that is raised while the users interacting with the software need to be handled in the correct flow. The flow should indicate the instruction in the popup message for the mandatory fields to alert the users for incorrect information.

**11)Multithreading Defects:**

Executing or running multiple tasks at the time. Complex debugging is possible in the multiple threading process. It may also lead to a system crash/failure due to the condition in deadlock.

**12)Security Defect:**

The defects will be different by their nature of the risks. These defects are weaknesses allowing for a potential security attack.

**13)Interface Defects:**

The defects in the interactions of the software and the users. Some of the interfaces in the different kinds of forms are complicated interfaces, unclear interfaces and platform based interfaces.

**14)Priority of Defects:**

* The impact of the bug of an application should be described.
* It is the order of priority which the developer will resolve the defects.
* The Priority can be changed based on the comparison with other defects.
* At the time of UAT, defects are fixed according to the priority.

**15)Software Defect -** is some kind of error, flaw or some kind of mistake from the development team which prevent the software from the smooth working. It directly affect software quality, software quality is some thing how smooth and reliable your software is. Smoothness and reliability is how less defects your software have.