**Maintenance Testing**

Once software has been launched, it runs for years. But during its natural life, this software needs to be upgraded or enhanced and sometimes even migrated to other hardware, in order to add more years to its successful run. The testing that is conducted during the enhancement stage or migration cycle of already deployed software is known as Maintenance Testing.

Once the software is deployed in operational environment it needs some maintenance from time to time in order to avoid system breakdown, most of the banking software systems needs to be operational 24\*7\*365. So, it is very necessary to do maintenance testing of software applications.

In maintenance testing, tester should consider 2 parts.

* Any changes made in software should be tested thoroughly.
* The changes made in software does not affect the existing functionality of the software, so regression testing is also done.

**Why is Maintenance Testing required?**

* User may need some more new features in the existing software which requires modifications to be done in the existing software and these modifications need to be tested.
* End user might want to migrate the software to other latest hardware platform or change the environment like OS version, Database version etc. which requires testing the whole application on new platforms and environment

**There are two basic types of Maintenance Testing.**

* Confirmation Maintenance Testing - during this part of Maintenance Testing the modifications and errors are tested and retested until its execution becomes flawless. While retesting the original environment is maintained with the exact data inputs to make sure that no more errors occur and the validity of the modification or migration is confirmed without any doubts.
* Regression Maintenance Testing – once it has been confirmed that no more errors occur in the modification, it is now time to test that unintended defects have not spread elsewhere in the software. The test conducted to find out the spreading of accidental and incidental errors is known as Regression Testing.

Points to be remembered while conducting maintenance testing

* Test Every Modification Completely – no matter how big or small the proposed modification is, it still needs to be checked as thoroughly as possible to prevent any downtime and functionality issues.
* Functionality Of Existing Software Should Not Be Affected – no matter what the proposed modification, it should not hamper the functionality of the existing software. The aim is to ensure that the modification does not bring down the entire software.