Detailed note on software testing

Executing a programme to look for errors is known as testing. Our software must be error-free in order to function properly. If testing is completed successfully, all defects in the software will be fixed.

A unit test

It is concentrated on the tiniest component of software design. Here, we test a single unit or a collection of related units. The programmer frequently does this task by examining the results of sample inputs and outputs.

Integration Testing

The goal is to create a programme structure that has been determined by design using unit-tested components. Integration testing involves combining a number of components to produce an output.

Regression Testing

The programme is altered each time a new module is added. This kind of testing ensures that the entire component functions correctly even after other components are added to the entire application.

 Smoke Testing

This test is used to determine whether the programme being tested is prepared or stable for more testing.

It is known as a smoke test because it is tested after an initial switch-on to ensure that there was no fire or smoke.

Alpha testing

This kind of validation testing is used. It is a kind of acceptability testing that is carried out prior to the product being made available to customers. QA personnel often carry it out.

Beta Testing

The software's end-user conducts the beta test at one or more customer locations. This version is being made available to a select group of users for testing in a live setting.

system testing

This software has been thoroughly tested to ensure that it runs well on all platforms. It is included in the black box testing methodology. In this, we only pay attention to the necessary input and output, ignoring internal functioning.

Stress testing

Here, we subject the system to unfavourable circumstances and evaluate how it responds to them.

Object-Oriented Testing

This testing combines a number of testing methodologies that aid in the verification and validation of object-oriented software.

Acceptance Testing

Customers do acceptance testing to determine whether the provided products fulfil the requirements and perform the expected duties.