Different types of testing in IT industry

- Testing starts from the 1st step of SDLC

- Each step of SDLC requires perform testing

- Everyone who involved SDLC process performs some sort of testing

- Static testing vs Dynamic testing

- Verification process vs Validation process

- software testing levels:

- level 1 - Unit Testing

- level 2 - Integration Testing

- level 4 - User Acceptance Testing (UAT)

- level 3 - System Testing

What is software testing?

Process to check a software items (code, feature-function, performance, security, documents, etc)
 Expected result vs Actual Result

Expected result vs Actual Result
 Evaluate the quality of the application
 Improves and enhances the product quality

Why software testing is required? or What is the benefit of software testing?

To deliver / develop a high-quality, bug free application, software testing is a significant part in IT.

By testing a software's all the aspects on time, we could get the blow benefits:

1. Cost-effectiveness - To reduce the cost of fixing bugs, find them earlier in the SDLC.

2. Customer Satisfaction - To Improves the user experience of an application and gives satisfaction to the customers. Happy customers mean more revenue for a business.3. Security - To remove vulnerability and prevent hackers.

4. Product Quality - To strength the market reputation, provide trust-able software.



1. Requirement Gathering 2. Design 3. Coding 5. Production 6. Maintenance

Test objects

What to test?











Who perform the testing?

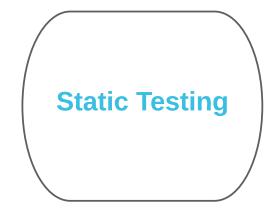








Static testing vs Dynamic Testing?





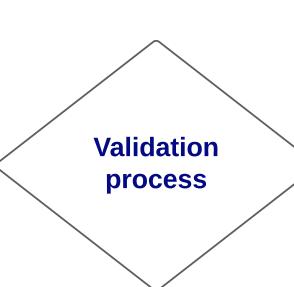


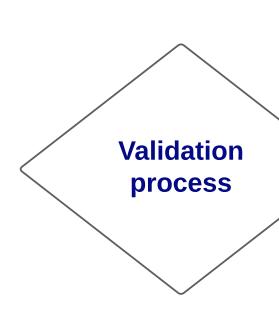


Verification process vs Validation process









Software testing levels

Level 1 - Unit testing

Level 2 - Integration testing

Level 3 - System testing

Level 4 - User Acceptance Testing (UAT)

| Verification Process | validation Process |
|---|--|
| | Process of verifying the software and its features |
| Human based checking / testing of documents | Actual code and software execution |
| Does NOT involve code or project | Computer-based testing the application (Automation) |
| | Also involve human based testing the application(Manual) |

| Static testing | Dynamic testing |
|--|---|
| It gets performed at an early stage of SDLC | Testing gets performed from Coding step od SDLC |
| Gets done in the verification stage | Completes in the validation stage |
| No code execution happens | requires the code execution |
| Produces the analysis of the code along with the documentation | Dynamic testing involves the execution of an actual application with valid inputs and checking the expected output. |

