

Levels of Testing:

- > The testing done at various levels and by whom it is done is called Levels of Testing.
- > There are 4 levels of testing. If these 4 levels of testing are completed only, we can say the application is ready for release.

1. Unit Testing
2. Integration Testing
3. System Testing
4. Acceptance Testing

1. Unit Testing:

- > Testing an individual module in an application
- > Done by Developers
- > Test based on White Box Testing Technique.

2. Integration Testing:

- > Combining or merging two modules
- > Done by Testers
- > Test based on Black Box Testing Techniques
- > Big Bang Approach - Combining all combinations of units
- > Top-down Approach - Higher level combinations of units
- > Bottom-up Approach - Lower level combinations of units

3. System Testing:

- > Complete Application Testing
- > Done by Testers
- > Test based on Black Box Testing Technique
- > Types of System Testing:
 - > Functional Testing - To test the functionalities of the application
 - > Usability Testing - To test whether the application is user friendly and it is easily understandable.
 - > Performance Testing - To test whether the application is not getting crashed or down when there is load/stress
 - > Security Testing - To test whether the application is secure or not
- > If these 4 levels of testing are completed only, we can say system testing is completed

4.Acceptance Testing:

- > Getting approval from client
- > Done by client side
- > Testing will be done at Development/Testing Environment
- > Satisfying client requirement.