

Assignment-2

Q. ① What do you mean by Integration testing.
Explain in details?

Ans → Integration testing is defined as a type of testing where software modules are integrated logically and tested as a group. A typical software project consists of multiple software module coded by different programmers.
→ The purpose of this level of testing is to expose defects in the interaction b/w these software modules when they are integrated.
Integration testing focuses on checking data communication amongst these modules.
→ It is also termed as 'I&T', 'String Testing' and also 'Thread testing'.

Example of Integration testing →

Let us assume that we have a Gmail application where we perform the integration testing.
First, we will do functional testing on the login page, which includes the various components such as username, password, submit and cancel button.

Scenarios

→ First, we login as P user and click on the Compose mail and performing the functional

Compose Mail

Inbox	To	
Compose Mail	From	
Sent Items	Subject	
Trash		
Spam		
Contact		
Folder		
Logout		

☐ Save to draft
☐ Add to Contact

SendCancel

Fig: Scenarios-1

testing for the specific components.

- Now, we click on the send and also check for saved drafts.
- After that, we send a mail to Q and verify in the send items folder of P to check if the send mail is there.
- Now, we will log out as P and login as Q and move to the inbox and verify that if the mail has reached.

Scenarios - 2:

We also perform the integration testing on spam folders. If the particular contact has been marked as spam; then any mail sent by that user should go to the spam folder and not in ^{the} inbox.

Q. ② Explain system and acceptance testing?n defects?

Ans:

System testing →

- It is a type of testing software testing that is performed on a complete integration system to evaluate the compliance of system with the corresponding requirements.
- System testing is carried out on the whole system in the context of either system requirements specifications or functional requirement specification or in the context of both.
- System testing test the design and behaviour of the system and also the expectations of the customers.

Types of system testing →

① Performance testing →

- It is carried out to test test speed, scalability, stability and reliability of the software product or application.

② Load testing →

- It is carried out to determine the behaviour of a system or software product under extreme load.

③ Stress testing → It is performed to check the robustness of the system under the varying load.

④ Scalability Testing → It is carried out to check the performance of a software application or system in terms of its capabilities to scale up or scale down the number of user request load.

→ Acceptance Testing →

→ This performed to determine whether or not the software system has met the requirement specifications.

→ The main purpose of this test is to evaluate the system's compliance with the business requirement and verify if it is met the requirement criteria for delivery to end user.

Various forms of Acceptance testing →

→ User AT

→ Business acceptance testing

→ Alpha testing

→ Beta testing

Acceptance criteria →

- functioned correctness and completeness.
- Data Integrity
- Data Conversion
- usability
- performance
- Timeliness
- Confidentiality and Availability.
- Scalability.
- Documentation.