

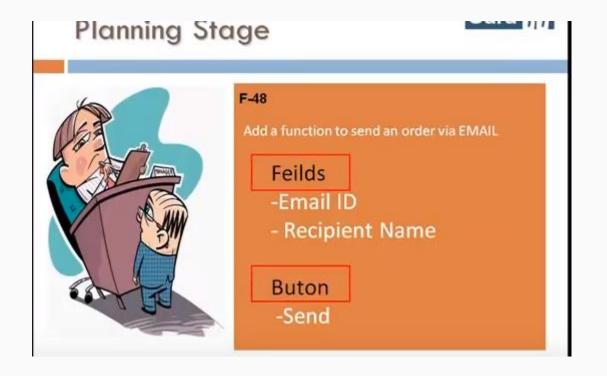
Recap



Static Testing	Dynamic Testing
This type of testing is done without the execution of code.	This type of execution is done with the execution of code.
It is done before code deployment	It is done after code deployment
In Static Testing techniques a checklist is prepared for testing process	In Dynamic Testing technique the test cases are executed.



## Static Testing of a Requirement





#### Functional Testing vs Non Functional Testing



#### **Functional**

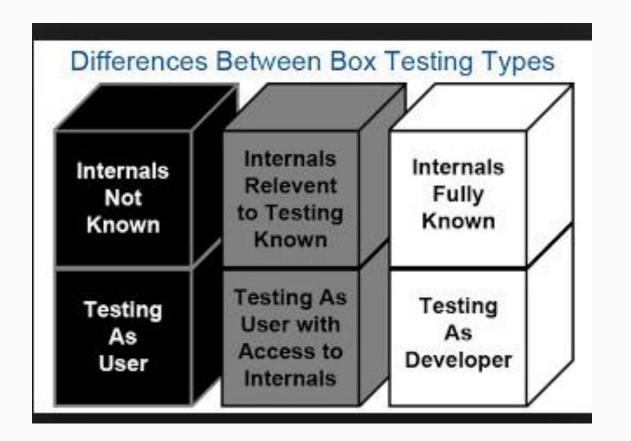
It involves the complete integration system to evaluate the system's compliance with its specified requirements. Based on the functional specification document this type of testing is to be carried out. In actual testing, testers need to verify a specific action or function of the code

The testing of software attributes which are not related to any specific function or user action like performance, scalability, security or behavior of application under

certain constraints

Compatibility testing, Installation Testing, Load testing, Localization testing and Internationalization testing, Performance testing, Recovery testing, Security testing, Scalability testing, Stress testing.....





Ad-hoc Testing	Exploratory Testing
Adhoc testing begins with learning application first and then work with actual testing process.	Exploratory Testing begins with the exploring the application while learning.
No formal test preparation takes place, no recognized test design technique is used, there are no expectations for results and arbitrariness guides the test execution activity	Documentation is mandatory in Exploratory Testing. To assure the quality it's necessary to documents the detail of the testing.
It works on negative testing mostly.	This testing works on positive testing niche.



Regression Testing	Retesting
Regression testing is a type of software testing that intends to ensure that changes like defect fixes or enhancements to the module or application have not affecting unchanged part	Retesting is done to make sure that the tests cases which failed in last execution are passing after the defects against those failures are fixed.
In Regression testing, you can include the test cases which passed earlier. We can say that check the functionality which was working earlier.	In Retesting, you can include the test cases which failed earlier. We can say that check the functionality which was failed in earlier build.
Regression test cases we use are derived from the functional specification, the user manuals, user tutorials, and defect reports in relation to corrected problems.	Test cases for Retesting cannot be prepared before start testing. In Retesting only re-execute the test cases failed in the prior execution.





## Verification & Validation



L

Are we building the product right?





Are we building the right product?

#### Verification

- Verify the intermediary products like requirement documents, design documents, ER diagrams, test plan and traceability matrix
- Developer point of view
- Verified without executing the software code
- Techniques used: Informal Review, Inspection, Walkthrough, Technical and Peer review



#### Validation

- Validate the final end product like developed software or service or system
- Customer point of view
- Validated by executing the software code
- Techniques used: Functional testing, System testing, Smoke testing, Regression testing and Many more



# Verification is Carried out before the Valloation



## **Testing Process**

Requirements Analysis

Test Planning

Test Analysis and Design

Test Execution

**Test Reporting** 

Test Closure

