SNS COLLEGE OF TECHNOLOGY

Coimbatore-37.
An Autonomous Institution

COURSE NAME : 19CST201-Agile Software Engineering

II YEAR/ III SEMESTER

Topic: System & Acceptance Testing

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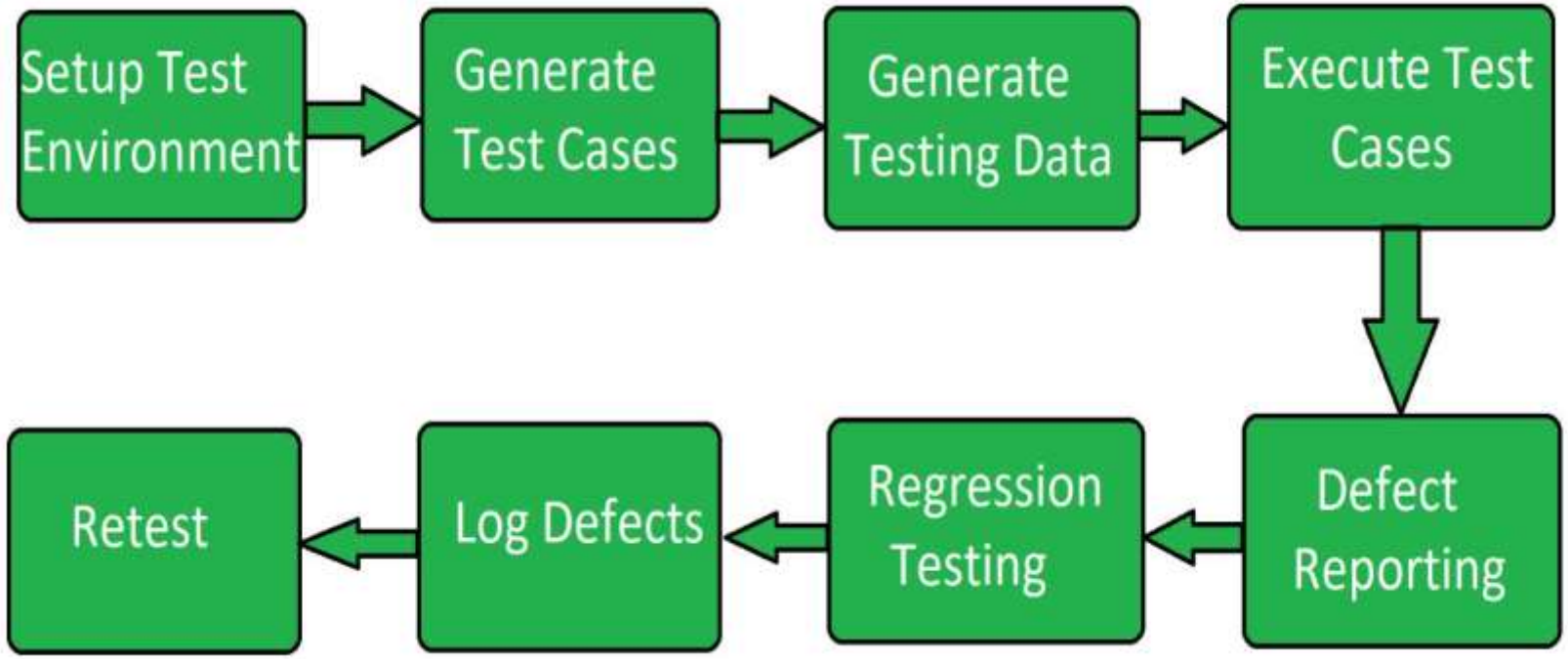
Introduction

- System Testing is a type of software testing that is performed on a complete integrated system to evaluate the compliance of the system with the corresponding requirements.
- In system testing, integration testing passed components are taken as input.
- The goal of integration testing is to detect any irregularity between the units that are integrated together.
- System testing detects defects within both the integrated units and the whole system.
- The result of system testing is the observed behavior of a component or a system when it is tested.
- System Testing is carried out on the whole system in the context of either system requirement specifications or functional requirement specifications or in the context of both.

Steps

- **Test Environment Setup:** Create testing environment for the better quality testing.
- **Create Test Case:** Generate test case for the testing process.
- **Create Test Data:** Generate the data that is to be tested.
- **Execute Test Case:** After the generation of the test case and the test data, test cases are executed.
- **Defect Reporting:** Defects in the system are detected.
- **Regression Testing:** It is carried out to test the side effects of the testing process.
- **Log Defects:** Defects are fixed in this step
- **Retest:** If the test is not successful then again test is Performed


Setup Test Environment
Generate Test Cases
Generate Testing Data
Execute Test Cases
Defect Reporting
Regression Testing
Log Defects
Retest

Advantage

- The testers do not require more knowledge of programming to carry out this testing.
- It will test the entire product or software so that we will easily detect the errors or defects which cannot be identified during the unit testing and integration testing.
- The testing environment is similar to that of the real time production or business environment.
- It checks the entire functionality of the system with different test scripts and also it covers the technical and business requirements of clients.
- After this testing, the product will almost cover all the possible bugs or errors and hence the development team will confidently go ahead with acceptance testing.

Disadvantage

- This testing is time consuming process than another testing techniques since it checks the entire product or software.
- The cost for the testing will be high since it covers the testing of entire software.
- It needs good debugging tool otherwise the hidden errors will not be found

Acceptance Testing

- Acceptance Testing is a method of software testing where a system is tested for acceptability.
- The major aim of this test is to evaluate the compliance of the system with the business requirements and assess whether it is acceptable for delivery or not.
- It is a formal testing according to user needs, requirements and business processes conducted to determine whether a system satisfies the acceptance criteria or not and to enable the users, customers or other authorized entities to determine whether to accept the system or not

References

- Lisa Crispin, Janet Gregory, “Agile Testing; A Practical Guide for Testers and Agile Teams”, Addison Wesley, 3rd Edition, 2015. 1
- Robert C.Martin, “ Agile Software Development, Principles, Patterns and Practices”, Prentice Hall, 2nd Edition, 2014.
- Alistair Cockburn, “Agile Software Development: The Cooperative Game”, Addison Wesley, 2nd Edition,2015.
- Mike Cohn, “User Stories Applied: for Agile Software”, Addison Wesley, 2nd Edition,2015.


Thank
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