

### → Advantages OF Agile .

- 1 We can save time and cost of the project ,
- 2 The requirement changes can be accepted at any level of project .
- 3 The quality can be ensured because each and every sprint will be tested .

### → STLC : SOFTWARE TESTING LIFE CYCLE .

\* STLC is a part of SDLC .

\* STLC Part will start when

- 1 The requirement documents are available
- 2 The complete understanding of the application flow is done .
- 3 Test plan document is ready .

### \* STLC PHASES

- 1 Requirement analysis
- 2 Test planning
- 3 Test case development
- 4 Environment setup
- 5 Test execution
- 6 Test cycle closure

#### 1 REQUIREMENT ANALYSIS

In this phase tester will understand, the requirements of project by referring different types of documents .

#### 2 TEST PLANNING :

Test planning mainly focuses on what to test, How to test and when to test .

→ For this input documents are project planning document and functional requirement document.

→ Activities involved in this phase are

(a) Team formation.

(b) Test estimation

(c) Preparation of test plan.

(d) Reviews on test plan.

→ Main roles in test planning are Team Lead (70%) and test manager (30%).

→ Outcome of this phase is test plan document.

### \* TEST PLAN DOCUMENT

→ It is a document that describes the objectives, scope, approach and focus of a software testing effort.

→ It is developed by test lead or test manager.

→ Contents of test plan documents are.

1 Introduction.

2 Scope of project

3 Features to be testing

4 Features not to be tested

5 Test strategy

6 Test environment

7 Entry criteria

8 Exit criteria

9 Release Deliverables

10 Resource details

11 Training Requirement

12 Risks etc.

### 3. TEST CASE DEVELOPMENT / TEST DESIGN

\* Input documents for this phase are project plan document, FRD, Test plan, design document and use case documents.

→ Activities involved in this phase are

i) Preparation of test scenarios

ii) Preparation of test cases

iii) Reviews on test cases

iv) Traceability matrix.

\* Main role in this phase are test engineer (70%) and test lead (30%).

\* Outcome of this phase is test case document and traceability matrix.

### 4. ENVIRONMENT SETUP

\* It is combination of hardware and software environment on which the test ~~cas~~ will be executed.

\* Practically the QA team can not start actual work without having the right environment to test.

### 5. TEST EXECUTION :

\* Inputs for this phase is FSD, test plan, test cases and build for development team.

\* Activities involved in this phase are,

i) Executing test cases

ii) Preparation of test report

iii) Identifying defects.

### → Defect reporting and tracking

- \* It is a part of test execution
- \* In this phase the defect found will be assigned to developer and after fixing we retest it
- \* Activities involved in this phase are
  - i) Preparation of defect report.
  - ii) Reporting defects to developer
  - iii) Tracking the defect
- \* Outcome of this phase is Defect report.

### 6 TEST CYCLE CLOSURE

- \* Inputs to this phase are test reports and defect reports
- \* Activities Involved in this phase are,
  - i) Analyzing test reports
  - ii) Analyzing the bug reports
  - iii) Evaluating exit criteria : Based on criteria we need to take decision that do we want to continue or stop.
- \* Main roles are Team Lead (90%) and tester (30%)