Session 8

**Test Plan**

* It’s a doc. that describes test scope, test strategy, objectives, schedule, deliverables and resources required to perform testing.

**Use Case**

* It describes the requirements.
* Prepared by BA
* 3 main items:
  + Actor
  + Action
  + Goal/Outcome

**Test Scenario**

* Are derived based on Use Case
* A possible area to be tested **(What to be Tested)**

**Test Case**

* Step by step actions to be performed to validate functionality **(i.e. How to be Tested)**
* Prepared by Test Engineers.
* Contains:
  + Steps
  + Expected Result
  + Actual Result

Example:

**Test Scenario**

* Checking functionality of a login button.

**Test Cases**

* TC1 Click the button without entering username and password.
* TC2 Click the button after adding invalid credentials.

**Test Suite**

* It’s a group of test cases which belongs to same category.
* E.x. all test cases of regression testing are placed together

**Test Case Template**

* Main components:
  + Test Case ID (which Is unique)
  + Test Case title
  + Description
  + Pre-Condition
  + Priority (P0, P1, P2, P3 order)
  + Requirement ID
  + Test Data
  + Steps
  + Actual and Expected Results
* Firstly, we write Test Cases in template and after having review we upload them to the test management tool like Jira etc.

**Requirement Traceability Matrix**

* RTM describes **mapping of requirements with test cases**.
* It is used to verify whether testing has been done in such a way that it covers all the functionalities.
* It includes:
  + Req No.
  + Req ID
  + Req Descrpn
  + Test Case ID
  + Status

**Test Environment**

* Also called as **Test Bed**
* Env is a platform specifically build for test case execution on the software.
* Here certain sw and hw are integrated along with network confg.
* It **simulates the real env.**

**Test Execution**

* In this phase test team will carry out Tests based on **test cases, test plans and test data.**
* After execution we’ve Defect report and Test case execution report as the result.

**Defects/Bugs**

* Any **mismatched** **found in App is** called as Defect/Bug
* We report these bugs to the developer team.
* Defect reporting tools:
  + Bug tracking tools
    - Clear Quest
    - DevTrack
  + Test management tools
    - Jira
    - Quality Center

**Contents of Defect Report**

* **Defect\_ID**
* **Defect\_Description**
* Version
* Steps
* Detected By
* Fixed By
* **Status**
* **Severity**
* Reference
* **Priority**

**Defects Categories:**

1. **Severity**

* It describes the seriousness of the bug and its impact.
* 4 Types:
  + 1. Blocker (Show Stopper)
* When nothing can proceed further
* e.x. app crashed, Login not working
  + 1. Critical
* The main/basic functionality not working
* e.x. Fund Transfer isn’t working in Net Banking
  + 1. Major
* Some undesirable behavior in the functionality.
* e.x. After booking cab there is no confirmation
  + 1. Minor
* It won’t cause a major breakdown of the system
* e.x. Grammatical mistake etc.

1. **Priority**

* It describes the importance of defect.
* How soon the developer should fix it.
  1. P1 (High)
     1. Immediate action required.
  2. P2 (Med.)
     1. It can wait until a new version
  3. P3 (Low)
     1. Developer can fix it in later cases.
* It’s the responsibility of the Tester to provide Severity and Priority to the dev team
* Severity can be decided only by Tester whereas Priority could be changed.

**Defect Resolution**

* It is carried out by dev team after receiving the defects.
* Types:
  + Accept
  + Reject
  + Duplicate
  + Enhancement
  + Fixed
  + As Designed (when bug is considered as feature and vice-versa)