Test Plan

**Testing Purpose:**

Releasing bug free product into the production by testing the product via breaking the system /finding the defects .

**Scope of testing** :

Environments :Dev,QC,UAT

Functional and Non functional

**Areas to be tested** :

FrontEnd and BackEnd testing (API and DB testing)

**Testing Approach :**

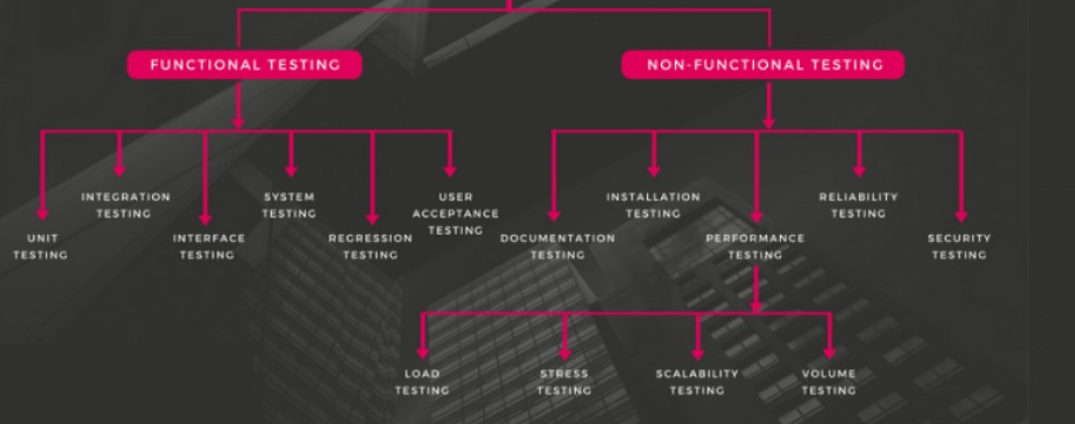
Targeting No defectsin the product

Current Sprint items:

Writing test cases to cover all corners of application and test them thoroughly before promoting the product into higher environment.

Regression items:

Executing all regression test cases till last sprint thoroughly.



**Testing methods** :

Manual testing (Current sprint)

Automation testing(regression cases)

**Automation Tools for covering all types of testing :**

Unit testing & Integration testing :pytest

FrontEnd testing :Python Framework/ Javascript Cypress

API Testing :Pytest +Requests package combination

Database testing :Pytest/Rest-Assured java

E2E testing :Python Robot framework /Cypress

Load testing :Jmeter

**High risk Areas of Application**

Must to be covered Security areas:

**Login Functionality**:

Verify that there is a limit on the total number of unsuccessful login attempts. So that a user cannot use a brute-force mechanism to try all possible combinations of username-password.

Verify that in case of incorrect credentials, a message like “incorrect username or password” should get displayed instead of an exact message pointing to the incorrect field. This is because a message like “incorrect password” will help a hacker in knowing that the username is correct and he just needs to try a different combination on the password field only.

Verify the login session timeout duration. So, that once logged-in a user cannot be authenticated for a life-time.

Verify that once logged in, clicking the back button doesn’t logout the user.

**User profile Functionality**:

1. After changing password either through super user or normal user ,that

should properly reflected i.e user can login with new password only.

**Must to be covered functional areas**:

**Login Functionality**:

Verify that the user is not able to login with an invalid username and password.

Verify that the validation message gets displayed in case the user leaves the username or password field as blank.

Verify that the validation message is displayed in the case the user exceeds the character limit of the user name and password fields.

Verify that reset button functionality on the login page. Clicking on it should clear the textbox’s content.

**Test Deliverable:**

Test Plan

Test cases and test data

RTM-Features of product 🡺testcases

Test summary report

Defect report

**E2E Tests Coverage considered for automation**

1.Create New User and validate details

2.Change password for new user and validate by logging in using the new password.

**Product Overview** :

TQQA application works with 2 types of users i.e Active users and Super users.

Super user capabilities:

Can create new active user with super user capabilities

Can modify and manage any user details i.e use rid ,email and password

Active user capabilities

Can manage details like i.e profile, edit profile and change password

Constraints:

super user can create only 100 users through UI currently .

Super user not able to deactivate active user through UI

Super User can not delete any active user

**Sample Signoff details :**

**High level status : Green**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TQQA product quality(ENV:QC) | # of test cases executed | # passed cases | # failed test cases | # defects open |
| Current sprint status | 75 | 75 | 0 | 0 |
| Regression status till previous sprint | 2500 | 2500 | 0 | 0 |

**Detailed status :**

|  |  |
| --- | --- |
| **Product** | TQQA |
| **Env** | QC |
| **Release** | REL01 |
| **Total # of test cases executed manually** | 50 |
| **Total # of test cases executed automation** | 2525 |
| **# of defects found** | 25 |
| **# of defects got fix** | 20 |
| **# of defects rejected** | 2 |
| **# of defects deffered** | 3 |

**Observations** :

**Functional :**

1. Super user is not able to create more than 100 users-**Defect ID-JTQQA001** -conditional sign off for this release as it is deferred for REL-02
2. Super user is not able to deactivate user - **Defect ID-JTQQA002** -conditional sign off for this release as it is deferred for REL-03

**Non-Functional:**

**Testcase :**

* Pushing 100 users , sending in batch of 10 users (parallel hits) per 10 seconds

**Test Observations:**

* All 100 users got created successfully in DB in expected status. No errors observed
* DB CPU was around less than 10% during the test, max CPU utilization spiked till 28%
* All SP responded within 1 second

**Automation Development status of current sprint items :**

Total test case development done :35

Can’t be automated :15