**USER ACCEPTANCE TESTING**

It is an end to end testing done by the customers where they use software for real time business for some particular period of time and check whether software can handle all the real time business scenarios and situations. This is called User Acceptance Testing.

This Testing can also be called as Final Acceptance Testing or Red Box Testing because it is done in the last stage of testing. This Testing will be done by IT Engineers, agents or any technical team present in the customer’s place by applying real time business scenarios. Test Engineers based on customer’s request can conduct Acceptance Testing by looking into business scenarios.

**Why does the customer do Acceptance Testing?**

● To get confidence on the software.

● To ensure that the software meets the business requirements.

● To make sure that software company is not developing wrong features. ● To make sure software is bug free and is capable of running the business.

**Acceptance Testing is of 2 types: Alpha Testing and Beta Testing.**

**Alpha Testing** also called Internal user Acceptance is the testing done by the Internal team of Testing organization to check if software meets all the business requirements.

**Beta Testing** also called External user Acceptance testing is the testing done by the External teams or Client teams at customer organization to check if software meets all the business requirements.

**Change Request(CR)** - When a customer is not satisfied with the requirements they have given. They might reach out to the company and ask that they want to change the requirement. This request is called as Change Request.

**Request for Enhancement(RFE)** - Once software is released to the customer and if the customer feels this particular feature needs to be enhanced and developed in different ways. Then customer will again reach out to the company to enhance the feature/change the feature. This requirement is called as Request for Enhancement.

**Regression Testing**

Testing the unchanged/old feature of an application to make sure that changes like adding a feature, modifying a feature, deleting a feature or fixing a defect is not introducing any defects in the changes or old feature is called Regression Testing.

**Regression Testing** is also called as **Release Candidate Testing**

Note:

1. First always test for newly added feature or any other changes made 2. Then test old module(nothing but regression testing)

**Types of Regression Testing**

1. Unit Regression Testing

2. Regional Regression Testing

3. Full Regression Testing

**Unit Regression Testing** – Testing only the changes or modifications done by the developer is called Unit Regression Testing.

Example : First name, Last name, In sign up country dropdown, FAQ section

**Regional Regression Testing** – Testing the changes and impacted areas of an application is called Regional Regression Testing.

Example : 1) Gmail - Assume an attachment file is being added in the compose module of gmail application, this will impact other modules such as Inbox, sent items etc.

2) Facebook – Assume features of FB – sign up, login, photo, like, share, logout. Now, if you add an additional feature upload gift in the photo module, this will have an impact on others such as share. So, we need to do Regional Regression Testing in this case.

**Q) How do we know which all areas got impacted?**

A) By doing an Impact Analysis meeting – Here we interact with Sr TE, Developers, BA, customers who have very good product knowledge, gather the information about the impacted areas and consolidate and document the impacted areas, this process is called an “Impact Analysis meeting”.

**Full Regression Testing** – Testing the changes and all the remaining features of an application is called Full Regression Testing.

Example: Let’s say there is an issue in one of the cell of MS Excel, since the cell is the root of the product here, we will have to make changes to the entire application page.

**Q) When we go for Full Regression Testing?**

● When changes are more, do not spend time doing impact analysis meeting, test the software by doing Full Regression Testing.

● When changes are made to the Root of the Product, then we need to test the entire product by doing Full Regression Testing.

**Q) Drawbacks of Regression Testing?**

● Time taken is more

● Manpower is more

● No consistency in Testing

To overcome the drawbacks of Regression Testing, companies go for Automation.

Regression Testing acts like a bridge between manual and Automation testing, when there are more number of Regression test cases, then we convert those manual test cases into automation script by using tools like Selenium/QTP.

**Q) What is Retesting?**

A) When TE finds a bug, he asks the Developer to fix the bug. The developer fixes the bug and gives it back to us, again as TE we need to retest if the bug is fixed or not. This is called Retesting. It is mandatory testing and high priority when compared to Regression Testing.

**Importance of Regression Testing:**

● Regression testing helps to detect bugs introduced by new code changes. ● Regression Testing ensures that existing features or functionalities work as expected. ● It ensures that bug fixes or modifications made does not impact other functionalities ● By conducting Regression Testing we can ensure that overall integrity of the software is achieved.

● In an Agile environment, where changes are frequent, regression testing helps team to adapt to continuous modifications.