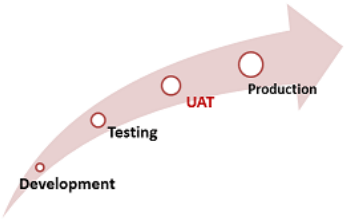
- Name of Skill

User Acceptance Testing

- Classification of Skill

Hard & soft - Technical/non-Technical Skill

- Perquisites



1. Tester should have a good understanding of Business Requirements
2. The code should be developed
3. Unit Testing, Integration Testing & System Testing should be completed
4. No major defects rise in System Integration Test
5. Regression Testing should be completed with no major defects
6. All the reported defects should be fixed and tested before acceptance testing
7. Traceability matrix for all testing should be completed
8. Environment where Acceptance testing will be held should be ready
9. Sign off mail that the system is ready for acceptance testing execution

- Related Software Engineering Area(s)

Software Testing

- Rationale for Skill

The main reason for selecting that skill is because I would like to gain some experience in testing field as I'm about to get graduated and I would like to work in that field.

- Roles for Skill

1. UAT Test Manager
2. UAT Test Lead & Team

- Work Related to Skill (Related Activities and Artifacts)

1. **Analysis of Business Requirements**

One of the most important work related in the user acceptance testing is to identify and write test scenarios.

2. **Creation of User Acceptance Testing Plan**

The test plan summaries the strategy that will be used to make sure that the developed application meets its business requirements. Usually it is created by Test Manager.

3. **Identify Test Scenarios and Test Cases**

Identify the test scenarios and create test cases. Test Cases should cover most of the test scenarios.

4. **Preparation of Test Data**

The best practice is to use live data.

5. **Run and record the results**

Execute test cases and report bugs if any.

6. **Confirm Business Objectives met**

Tester needs to send a sign off mail after the testing. And after, the product is good to go for production.

- Real-World Example/Scenario of Skill (Text, Graphic, Audio, Video)

Acceptance Test Driven Development consists of three steps:

1. Discuss the requirements.
2. Develop these requirements during the iteration.
3. Deliver the application to the stakeholders for acceptance.

This is tests scenarios for Purchasing Product

Pre-condition: User should be logged in to the application.
Test 1: Product Details, verify if a User is able to:

1. View the Product details page.

2. View all the sub-sections in the Product details page (Description, Feature, Brand information, etc.).
3. Select the Quantity of the product, Color, Size, etc. as available in the Product details page.
4. Navigate to the category, sub-category pages from the Product Details page (if available in Product details page).
5. Navigate to the other Product's details page (if provided relevant products section).
6. View comments and ratings on the product.
7. Sort Comments of the Product based on ratings.
8. View overall rating of the Product.
9. Add Comment on the Product.
10. Update his/her comment on the product.
11. Delete his/her comment on the product (if provided).

Test 2: Add to Cart, verify if a User is:

1. Able to add the product to Cart through Product details page.& Product list page.
2. Able to add required quantity to the cart (1 to max limit set).
3. Not able to add the product to the Cart if Out-of-Stock.

Test 3: In the Cart Page, verify if a User is able to:

1. View the Product in the Cart with Price details for added quantity.
2. Update quantity (1 to max limit set).
3. Remove the Product from Cart.
4. Navigate back to shopping.
5. Continue to Checkout.
6. View Empty Cart when no product is added,

Test 4: In the Account Details Page, verify if a User is able to:

1. Continue with the existing Shipping details.
2. Update Shipping address.
3. Add new shipping address.
4. Continue with the existing Phone number.
5. Update Phone number for the order.
6. Add new Phone number for the order.
7. Navigate back to the Cart page.
8. Navigate to the Payment page.

Test 5: On the Payments Page, verify if a User is able to:

1. Verify the correctness of the amount to be billed.
2. Process the order with all the available options (One option for each separate order).
3. Process transaction Successfully. Go to the Order Confirmation page.

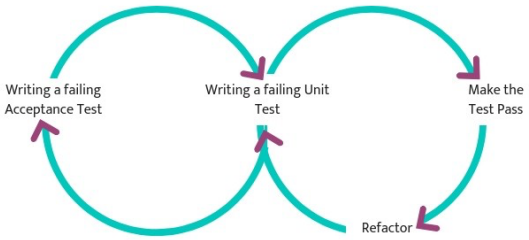
4. Transaction Failure (Even though this is negative testing, it should be considered as a major scenario).
5. Apply coupons:
6. Valid Coupons – Success. Here verifies the change in the amount to be billed.
7. Invalid coupons – Failure
8. Expired coupons – Failure.
9. Navigate back to the Account details page.

- Role of Academia or Industry in Cultivating the Skill

Academia: In academia, the performance of the students involved in the software projects is assessed at the end of the semester by running the application and show it to the professor and/or TA and provide several scenarios to show all the functionality of the application. In this case Professor and/or TA are considered as customer.

Industry: In industry, many companies are following Agile Methodologies and One of the Agile testing method is Acceptance Test Driven Development (ATDD)

ATDD involves the customer, developer, and tester. meetings are held to gather input and use this information to write acceptance tests. The customer focuses on the problem, the developer focus on how to solve this problem, and the tester looks at what could go wrong.



Acceptance tests can be automated, acceptance tests are written first, they initially fail, and then software application is built until all the tests pass.

- Tools Supporting the Skill

FitNesse

1. Fitness tool: It is a java tool used as a testing engine. User can enter the formatted input and tests are created automatically. The tests are then executed, and the output is returned back to the user.

2. Watir: It is toolkit used to automate browser-based tests during User acceptance testing. Ruby is the programming language used for inter-process communication between ruby and Internet Explorer.

- Skill Self-Assessment (My Skill Score (1 – 10) and Reasons for Self-Assigned Score)

Self-Assigned Score: 7.

The reason behind that is Acceptance Testing requires both soft and hard skills. so If I will rate myself separately for both skills. I would give myself 9 in soft skills as I was working in sales field and I was facing customers on a daily basis (Technical and non-Technical people).

On the other hand, I would rate myself 5 in hard skills as I'm still a student and I don't have any technical experience in software industry.

Since Acceptance testing requires both hard and soft skills. So, the average is 7. Taking into consideration the weight for hard and soft skills are equally distributed

- References

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