Software Testing Course

Final Manual Project

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TC#** | **Description** | **precondition** | **STEPS** | **Expected Actual** | **Actual Result** | **State** |
| 1 | Verify the System [Log in to user account](https://www.amazon.com/-/de/ap/signin/ref=cart_empty_sign_in?openid.return_to=https%3A%2F%2Fwww.amazon.com%2Fcart%3Fapp-nav-type%3Dnone%26dc%3Ddf&openid.identity=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.assoc_handle=usflex&openid.mode=checkid_setup&openid.claimed_id=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0) | User should be login with valid credinals | 1- 1. Navigate to https://www.amazon.com/gp/cart/view.html/ref=nav\_cart.  2. Enter the valid email and password.  3. press the login icon. | The system must logim and go to login page. | As Expected | pass |
| 2 | Verify the System Searching items | User should search item with valid credinals | In the search box, enter the desired item | The system must search the desired item . | As Expected | Pass |
| 3 | Verify the System Adding items | System should add item to cart | After choosing the required specifications  Press on add cart icon | The system must add the item to cart ,and the cart icon countiong the items added. | As Expeted | Pass |
| 4 | Verify the Status “ Added to Cart “ shown after added item. | The status must be shown | After choosing the required specifications  Press on add cart icon | The system must add item to cart and open new page shown status “Added to Cart” | As Expected | pass |

Ayat Akef Abu Qaoud

Answer Q1:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **TC#** | **Description** | **precondition** | **STEPS** | **Expected Actual** | **Actual Result** | **State** |
| 5 | Verify the System [can delet](https://www.amazon.com/-/de/ap/signin/ref=cart_empty_sign_in?openid.return_to=https%3A%2F%2Fwww.amazon.com%2Fcart%3Fapp-nav-type%3Dnone%26dc%3Ddf&openid.identity=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.assoc_handle=usflex&openid.mode=checkid_setup&openid.claimed_id=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0%2Fidentifier_select&openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0)e item | system should be delete items | After added the items to cart.  Choose delete filed to delete un wanted item . | The system must delete the item. | As Expected | pass |
| 6 | Verify the System shown the items in the cart | system should show the selected items in cart | After added the items to cart.  Check the selected items is shown . | The system should show the selected items in cart | As Expected | Pass |
| 7 | Verify the item price shown | System Should show item price | The price shown with items | The system must show the price and updated all the time | As Expeted | Pass |
| 8 | Verify the user Can not Paid with invalied card number | The system rejects the purchase process | Enter the card info | The system rejects the purchase process and show re-enter the card number | As Expected | Pass |

Answer Q2:

Bugs/Defects

1. The system does not answer when you click on the link (demo Software ) and open a blank page.
2. The website is not secured .
3. <https://thrifty-jo.com/> Created account with invalid email
4. https://thrifty-jo.com/contact/ Contact: the system send message with invalid info .
5. <https://thrifty-jo.com/my-account-2/downloads/> Download: No downloads available yet.
6. <https://thrifty-jo.com/explore-vehicles/> Browse Product :There has been a critical error on this website.
7. CFI: Registered with invalid info.
8. <https://www.xmarabia.net/ar/> : Registered with invalid info.

Evidance folder attached

# Answer Q3:

# [www.yahoo.com](http://www.yahoo.com)

# Unit Testing:to test modules, applications .

# Ex:

# Regression Testing: tested feature after system change (new function added, bugs/defect fix, requirement change).

# Ex: testing after updated or changed the email

# Performance Testing: evaluating how a system performs under load.

# Ex: Stress ,load testing (measure the number of simultaneous users a website ).

# User Acceptance Testing: The software is tested in the "real world" by the actual users or product owner (client).

Ex: user rating of the website,Application.

# Usability Testing: Easy to use

# EX:observing users as they interact with a product

# Security Testing: focuses on evaluating the security ,risks of a system or application

Ex: User and security information

# Cross browser testing: Ensures that application is correct in different browsers.

Ex:the website is correct in googlechrome,firefox,Edge,….

# Answer Q4:

# Testing Type:

# Functional Testing.

# Non-Functional Testing.

# Black Box Testing.

# White Box Testing.

# Change-Related Testing:

# Confirmation Testing.

# Regression Testing.

# Maintenance Testing.

# Answer Q5:

# Unit Testing:

# First level of testing.

# Functional Testing.

# Component testing(focus on individual component(smallest testable part of an application called units)such as function/s and method/s, class/es).

# Unit test are written and executed by developer using tools such as (test harnesses or unit test frameworks ) .

# Unit testing fixes defects very early in development phase.

# We used Unit test in TestNG when we Tested Function /Classes.

# Gorilla Testing is example of unit testing.

# Regression Testing:

# (It’s one of the types of Change-Related Testing).

# Is the check of already tested feature after system change (new function added, bugs/defect fix, requirement change).

# Regression testing is a strong candidate for automation.

# Regression test helps to make sure that the system still works as expected after any changes (haven’t caused issues).

# It’s used on all test levels.

# Regression Testing like re-testing the same bugs that have been solved, and re-executing the same test cases for the same area.

# Alpha Testing :

# (Most popular types of Acceptance testing ).

# Functional Testing.

# Alpha testing is user acceptance testing(UAT) performed before a software product is released to users or customers.

# Is the first end-to-end testing of product to ensure its meets the business requirement.

# Its uses black box and white box testing technique.

# The main goal of alpha testing is evaluate the quality of product.

# System Testing :

# Functional Testing.

# System testing is a type of software testing that evaluates the functionality and performance of a complete and fully integrated software solution.

# System testing has both functional and non-functional testing.

# System testing is related to the specifications of the system.

# System testing is a black box testing.

# Smoke testing, Santy testing and End-to-End are System testing.

# Usability Testing:

# Non-Functional testing.

# Easy to use(observing users as they interact with a product).

# UI/UX /Exploratory testing.

# evaluates the user's experience when interacting with the website or Application.

# Cross Browser Testing :

# Non-functional testing.

# Compatibility testing.

# Refers to the practice verify the web application(web browser, operating system, devices) Works at expected.

# Ensures that application is correct in different browsers.

# Seleninum and SauceLabs are best frameworks for Cross-browser testing.

Performance Testing:

# Non-functional testing.

# evaluating how a system performs under load.

# Performance tests are typically executed to examine speed, reliability, and application size.

# Load test,stress test,spike test,are types of performance testing.

# We use Apache JMETER tool in performance testing .

# Security Testing:

# Non-functional testing.

# Penetration testing ,Fuzz testing ,access control testing .

# focuses on evaluating the security ,risks of a system or application

# It helps in detecting all possible security risks in the system and helps developers to fix the problems through coding.

# Monkey testing is type of security testing.

# User Acceptance Testing (UAT):

# Application Testing.

# Functional Testing.

# The software is tested in the "real world" by the actual users or product owner (client).

# Final stage of Software Development LifeCycle.

# Foucse on the software user friendliness,functionality,and performance from the user’s view.

Beta Testing:

* Functional Testing.
* Beta testing is the final round of testing before releasing a product to a wide audience
* It is usually used in games software, mobile upgrade (number of changes and updates in it is high).
* Beta testers are “real” users .the developers collect feedback from real users,
* Temporary data.
* Answer Q6 :
* Functional Testing :

# Evaluate the functions that a component or system should perform.

# Type of software testing that evaluate the functionality of software application test against to the requirement

# Functional testing is black-box testing.

# Functional testing can be run on documents(BRD (Business Requirement Document),SRS (System Requirement Specification, PRS (product Requirement Specification)..).

# Example of Functional Testing: Functional testing on the Smart Phone(check if the phone functions is working correctly like Making calls, ending messages, browsing the internet, taking photos,….)

# Type of Functional Testing:

# Unit testing.

# Integration Testing

# System Testing.

# Acceptance Testing (Alpha ,Beta,User AcceptanceTesting).\

# Answer Q7 :

# None-Functional Testing :

# Evaluate the functions that characteristics component or system .

# Non-functional testing sometimes needs a very specific test environment.

# type of software testing that checking non- functional software quality characteristics such as performance, stability, and usability, Compatibility(Cross Browser testing), Reliability, Security ,Maintainability, Portability.

# functional testing tests the functionality of an app while non-functional testing tests the performance of these functions.

# Answer Q8 :

# Acceptance Testing:

# The acceptance testing Final stage of Software Development LifeCycle,

# its important because its evaluate if the system met the client and user requirement .its meet the functional and non-functional requirement .

# The users are the Acceptance testers. The software is tested in the "real world" by the actual users or product owner (client).

# Steps to acceptance testing:

# Plan (Stakeholder) Design (developer) Testing(QA) User Acceptance Testing.

# Answer Q9 :

# Smokey And Sanity Testing:

# Smokey Testing Sanity Testing

# -performed by developer and Tester . -performed by Tester.

# -Usually documented and script. -Not documented and unscripted.

# -quickly checks the basic parts of the software. -looks more closely at the parts of Software.

# -Called subset of Acceptance Testing. -Called subset of Regression Testing.

# -It tests only critical functionalities of the - It tests the entire application or specific

# application areas that are affected by changes.

# 

# Answer Q10 :

# Manual And Automation Testing:

# Manual Testing Automation Testing

# -test cases are executed by the human tester. - test cases are executed by the Software Tools.

# -Manual testing is time-consuming. -Automation is faster than manual testing.

# -Manual testing doesn’t use frameworks. -Automation testing uses frameworks like Data

# Drive, Keyword.

# - Requires skilled and experienced testers. - Requires skilled automation engineers

# or developers.

# - Test cases cannot be easily reused. - Test cases can be easily reused.

# - It could be possible when the test case - The script can be reused across multiple

# only needs to run once or twice. releases.

# Answer Q11:

# White Box Testing And Black Box Testing:

# White Box Testing Black Box Testing

# Is a method used to test software Testing is based on an analysis of

# into consideration its internal functioning. the specified behavior of the test object

# without reference to its internal structure.

Types of White Box Testing: Types of Black Box Testing:

* [Unit Testing](https://www.geeksforgeeks.org/unit-testing-software-testing/) -Functional Testing.
* [Integration Testing](https://www.geeksforgeeks.org/software-engineering-integration-testing/) -Non-Functional Testing.

# Answer Q12:

# Test Cases: A set of preconidions, Actions, Inputs, exepted condition,developed based on test conditions.

# Answer Q13:

# Levels of testcases:

# Low-Level Test Cases :

# focus into the specifics of individual functions, methods, or components.

# Example :Validate that the system displays an error message when the user enters an incorrect password.

# High-Level Test Cases:

# focus on the overall functionality of the system or major components. example: Verify that the user can log in with valid credentials

# The fields testcases template in excel sheet:

# Test cases number.

# Test case title.

# Precondition.

# Test steps.

# Test data.

# Expected result.

# Actual result.

# Status.

# Priority.

# Test environment.

# TRM (Traceability Matrix).

# Notes if founds.

# Answer Q14:

# Testcases GMAIL login:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| TC  # | TC description | Steps | Preconditions | Test Data | Expected result | Actual  Result | Status |
| 1 | Verify The system allows the user to login with a valid email and password | -from <https://mail.google.com/mail>  Fill the email filed in vailed email.  -Fill the password filed in vailed password.  -Press login icon. | The system must login | [ayatabuqaoud@gmail.com](mailto:ayatabuqaoud@gmail.com)  password:aya\*\*\*\*\*\*\*\*\*\*\*\*\* | The system allow the user to login and redriect the user to page "mail” | As Expected | pass |
| 2 | Verify The system allows the user to login with a valid email and invalid password | -from <https://mail.google.com/mail>  Fill the email filed in vailed email.  -Fill the password filed in invalid password.  -Press login icon. | The system must not login | [ayatabuqaoud@gmail.com](mailto:ayatabuqaoud@gmail.com)  password:ayat123 | The system not allow the user to login and show wrongpassword re-enter the password. | AS Expected | pass |
| 3 | Verify The system allows the user to login with a invalid email and valid password | from <https://mail.google.com/mail>  Fill the email filed in invalid email.  -Fill the password filed in valid password.  -Press login icon. | The system must login | wwrexcvbn@gmail.com | The system not allow the user to login and show Gmail account not found. | As Expected | pass |
| 4 | Verify The system allows the user to login with empty email and password | from <https://mail.google.com/mail>  leave the email filed and password filed empty. | The system must not login | - | The system not allow the user to login and show Enter email or phone number | As Expected | pass |
| 5 | Verify The system allow to Remember the user email. | -from <https://mail.google.com/mail>  Fill the email filed in vailed email and password  - | The system login to Gmail | Vailed email and password  [ayatabuqaoud@gmil.com](mailto:ayatabuqaoud@gmil.com)  pass:ay\*\*\*\*\*\*\*\*\* | The system allow to login and redict the user to main gmail page and show message “Save Your Passwsord” | As Expected | pass |

\*\* <https://demo.guru99.com/test/newtours/>

Positive Testcases:

* Register: Verify the user should fill the fields in alphabet letter and numbers.
* Register: Verify the user should fill the fields in valid information.
* Register: Verify the user should register and welcome message has be shown” **Dear ayat qaoud,**

Thank you for registering. You may now [sign-in](https://demo.guru99.com/test/newtours/login.php)using the user name and password you've just entered.

**Note: Your user name is ayat.”**

* Login:Verify the system Sign-in with a valid username and password.(user name:ayat pass:1234),and login successfully message shown.

Negative Testcases:

The link Top of Form

|  |  |
| --- | --- |
| |  | | --- | | * The links [Business Travel @ About.com](http://businesstravel.about.com/mbody.htm?PM=78_101_T&cob=home) can not be reached. * The vacations link “[featured vacation destinations](https://demo.guru99.com/test/newtours/index.php).not worked and back to landing page . * The destination link [your destination](https://demo.guru99.com/test/newtours/index.php). not worked and back to landing page . | |

Bottom of Form

# Answer Q15:

# Software Bugs or Defects:

# Software bugs are errors, flaws, deficiencies, or defects in a computer program or system that cause it to produce an incorrect or unexpected result .

[its found In human works (code,documentation)]

# Answer Q16:

# 1-Functional Defects: Incorrect data processing, incorrect outputs, incorrect user interface.

# Requirement Defects:

# 2- Non-Functional Defects:

# Performance defects:

# Security defects:

# Usability defects:

# Reliability defects.:  slow response time.

# Design Defects:

# Certain Type of coding Defects:

# Deviations from standards

* A button on a website does not work when clicked.
* A text field on a web form does not accept input.
* A software program is slow and unresponsive.
* Password recovery options not available.
* results should not displayed in a user-friendly format with key details.
* the search icon not search .

# Answer Q17:

# Defects can be caused by a variety of factors, such as human errors, environmental issues, technical problems, or communication gaps.

# Answer Q18:

# Defect lifecycle:

A defect/bug life cycle is the sequence of steps a bug or defect goes through from its identification to its resolution in software development.

* begins with a new defect discovered by a tester while testing the application.
* continues until the tester discovers a specific solution and closes the bugs.

# The states differ from one organization to another but usually start new and then assigned to a developer if accepted as a bug by the project manager then fixed and deployed for the QA to test it again.

# Answer Q19:

# Bugs Report:

# A bug report, is an issue, or fault report, is a record documenting a software bug in a software development project. It provides details about a problem identified with the system or software application.

# Answer Q20:

# Yes,I have ,bugs report contains

# Bug name (Title) Environment Steps to Reproduce Expected Result Actual Result Evidence (screenshots, videos, text) Severity/Priority

# TRM (between Bugs Report and TestCases).

# Answer Q21:

Currently I don't work in the future if I get a QA job I will be able to answer this question ,but in general the best strategies for defect management Comprehensive testing: Implement unit, integration, system, regression, and acceptance testing to catch defects at different stages.

# Answer Q22:

# Discover bugs.

# 2-Determine the bug severity .

# 3-Communication with developer to solve and fix the bug , By working together, developers and QA can ensure a smoother, bug-free release for your users. .

# 4-Re-test the affected area to ensure the fix works and hasn't introduced new issues.