

Software Testing - Assignment 1 (Project Phase-1)

Due Date: 30/Sep/2022; Total Marks: 90

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Assignment-1 Overview

Assignment-1 is focused on

- Setting up test environment including
 - Setting up workspace for collaboration and tracking
 - Setting up application for test environment
 - Settings up Test Management Tool
 - Task Allocation
- Test case writing
 - Understanding application features
 - Create test cases for selected user stories

Note, you will be graded based on regular activity. A lot of marks will be deducted on last date submissions even if you complete everything. So use the tools properly to track your regular progress:

- **Make proper use of your task board to depict who worked on the project? When was it started? And when was it completed?**
- **Use of Google docs / Word docs is not allowed for documentation during the tasks. Document using Notion/Slick/Clickup/Confluence. Or create a git repository to document.**
- **Share the link of your document in your slack channel whenever you create one**
- **Commit your changes to your git repository frequently and push to github/gitlab. Create a merge request when done and review it with everyone.**
- **Share the link of your merge request / pull request in slack channel whenever you create one**

Task 1: Setup team and workspace (10 Marks)

- Create a Team of 2-3 people
- Select project
 - One of following Open Source tools
 - Elasticsearch (Java based search engine)
 - <https://github.com/elastic/elasticsearch>
 - Featurehub (Java based feature flag management tool)
 - <https://github.com/featurehub-io/featurehub>
 - Shopizer (Java based headless-e-commerce)
 - <https://github.com/shopizer-e-commerce/shopizer>
 - Reaction Commerce (React and Node based e-commerce)
 - <https://github.com/reactioncommerce/reaction>
 - ReactStorefront (React Based eCommerce Storefront)
 - <https://github.com/storefront-foundation/react-storefront>
 - Metabase (Clojure based BI and analytics tool)
 - <https://github.com/metabase/metabase>
 - Magento (PHP based ecommerce platform)
 - <https://github.com/magento/magento2>
 - ***Discuss and select another based on your career interest***
- Setup Channel, workspaces, and agile board
 - Create a Slack channel in our current workspace. Add me along with other team members
 - Create workspace on (Notion / Slite / Clickup / JIRA + Confluence) for documentation and task management. Also add me (jawad.khalid@nu.edu.pk) and your TA (l181333@lhr.nu.edu.pk) along with other team members
 - Create a group on github/gitlab. Also add me (jawadkc for github / jcheema for gitlab) and your TA (l181333@lhr.nu.edu.pk) along with other team members to the group
- Schedule a weekly meeting
 - Schedule a weekly meeting and invite me (jawad.khalid@nu.edu.pk) and TA(l181333@lhr.nu.edu.pk) along with your team members

Task-2: Create Team Tasks (10 Marks)

Select some sections/features of the application based on your selected project. And then create tasks on your task board for each team member. These tasks should include things that needs to be done including

- Project setup
- Write user stories
- Create Test Cases (everyone needs to write their own set of test cases)

<https://wax-waxflower-357.notion.site/Task-Management-93628b820d4e4075ad003d6e1e98d8e3>

Task Management

Board view

+ Add view

Filter Sort 🔍 ↗️ ⋮

New ▾

Team's Task management board ⋮

Not started 2 ⋮ +

In progress 1

Completed 0

Creates requirements and test cases for feature 2

🕒 Jawad Cheema

Create requirements and Test cases for feature 1

🕒 Jawad Cheema

Create Requirements and test ca for Feature 3

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Task-3: Create Some User Stories for Selected Features (10 Marks)

Write some user stories from the selected section. Here is an example of user stories based on login functionality. **There should be at-least 3 user stories per person.**

<https://wax-waxflower-357.notion.site/Requirement-Document-6119e6a7a8b04707ae17f0767a9e3815>

≡ < > Requirements and Test... / Requirement Document Share

Requirement Document

Table + Add view Filter Sort New

Requirements

User Story	Feature	Type	Related to REquirments...	Created By	Created Time	Last Updated By
As A New Customer, I should be able to create my account so that I can access the application	User Management	Functional		Jawad Cheema	April 1, 2022 9:35 PM	Jawad Cheema
As A customer, I should be able to login using my credentials so that I can access the application	User Management	Functional		Jawad Cheema	April 1, 2022 9:39 PM	Jawad Cheema
As A customer, I should be able to update my password so that I keep my account safe	User Management	Functional	Security	Jawad Cheema	April 1, 2022 9:40 PM	Jawad Cheema
As A server, I should be able to support 1000 concurrent login attempts, so that multiple users can access the application	User Management	Performance		Jawad Cheema	April 1, 2022 9:42 PM	Jawad Cheema

+ New

Each scenario should have following properties

<https://wax-waxflower-357.notion.site/As-A-New-Customer-I-should-be-able-to-create-my-account-so-that-I-can-access-the-application-0331972317e0455cb06fde0eb46aaa2d>

As A New Customer, I should be able to create my account so that I can access the application

Created By	Jawad Cheema
Created Time	April 1, 2022 9:35 PM
Feature	User Management
Last Updated	April 1, 2022 9:42 PM
Last Updated By	Jawad Cheema
Related to REquir...	Empty
Related to Test C...	Empty
Type	Functional

Task-4: Create Some Test Scenarios Using Gherkin Language (30 Marks)

Write some test scenarios for each selected feature using Gherkin language

<https://wax-waxflower-357.notion.site/Test-Cases-Management-4b2ed842a5fb491faa329781c5555def>

Test Cases Management

Table

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Feature: User Management - Test Cases

...

Σ Test Case ID	📄 Test Scenario	🟡 Status	🏷️ Tags	🔴 Priority	🔗 Linked Requirement	🕒 Crea
+ :: User-Management-84bcd2c59	<div>📄 Scenario Outline: User is able to login using valid Credentials</div> <div>🔗 OPEN</div>	In Progress	<div>Login</div> <div>User Management</div> <div>Smoke Functional</div>	High	<div>📄 As A customer, I should be able to login using my credentials so that I can access the application</div>	April 1,
User-Management-06d62ef4d	<div>📄 Scenario Outline: User gets a correct error message on invalid login attempt</div>	Approved	<div>Login</div> <div>User Management</div> <div>Smoke Functional</div>	High	<div>📄 As A customer, I should be able to login using my credentials so that I can access the application</div>	March 1,
+ New						
Calculate						

Each scenario should have following properties

<https://wax-waxflower-357.notion.site/Scenario-Outline-User-is-able-to-Login-using-valid-Credentials-684bcd2c59da4ee697e723642b5f236f>

🏷️ Tags

Login User Management Smoke Functional

👤 Created By

🕒 Jawad Cheema

🕒 Created Time

April 1, 2022 10:13 PM

🕒 Last Updated Time

April 1, 2022 10:32 PM

👤 Last Updated By

🕒 Jawad Cheema

🔗 Linked Requirement

📄 As A customer, I should be able to login using my credentials so that I can acc

🔴 Priority

High

🔗 Related to Test C...

📄 Untitled 📄 Untitled 📄 Untitled

🟡 Status

In Progress

Σ Test Case ID

User-Management-84bcd2c59

+

Add a property

🕒

Add a comment...

Given I have user with <email>, <username> and <password>
When I open the application login page
And I enter valid <username> and <password>
Then I am successfully logged in
And my dashboard is displayed

Example:

email	username	password
abc@test.com	myuser	mypassword
xyz@test.com	someotheruser	someotherpassword

Each scenario should use Scenario or Scenario Outline template as follows

Given I have ...

When I do ..

And ...

Then ...

And ...

+ :: Given I have ... <value 1>

When I do ... using <value 2>

And ...

Then ...

And ...

Example:

value 1	value 2
abc	abc
abc	abc

Task-5: Create Test Plan and execute Tests (20 Marks)

Create a test plan similar to

<https://wax-waxflower-357.notion.site/Test-Execution-ac8ceeb154d647e28001011827ce4c55>

Test Execution

Table

+ Add view

Filter

Sort

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...

New

Test Cycles

...

<div>📄 Name</div>	<div>📍 Status</div>	<div>📍 Application Version</div>	<div>📅 Start Date</div>	<div>📅 End Date</div>
<div>📄 Test Cycle 1 : Complete Regression test for Release v1.0.2</div>	In Progress	V1.0.2	April 1, 2022	April 10, 2022
<div>Test Cycle 2 : Smoke test for Release v1.0.3</div>	ToDo	V1.0.3		

+ New

Calculate

Add test cases to test plan

<https://wax-waxflower-357.notion.site/Test-Cycle-1-Complete-Regression-test-for-Release-v1-0-2-fc26c6ea93524e29b9dfe976ef524e1a>

Test Cycle 1 : Complete Regression test for Release v1.0.2

📄 Application Versi...

V1.0.2

📅 End Date

April 10, 2022

👤 PIC

🕒 Jawad Cheema

📅 Start Date

April 1, 2022

📍 Status

In Progress

+ Add a property

🗨 Add a comment...

Table

Test Cases to be Executed

🔗 Link

📄 Observations

📍 Status

👤 Assigned To

📄 Scenario Outline: User gets a correct error message on invalid login attempt

Blocked

📄 Scenario Outline: User is able to Login using valid Credentials

Passed

📄 Scenario Outline: User is able to Login using valid Credentials

To Be Executed

📄 Scenario Outline: User is able to Login using valid Credentials

Unable to login with valid credentials for a valid old user

Failed

+ New

Execute Test cases

Test Cases to be Executed ...

↗ Link	⌨ Observations	▼ Status
📄 Scenario Outline: User gets a correct error message on invalid login attempt		Blocked
📄 Scenario Outline: User is able to Login using valid Credentials		Passed
📄 Scenario Outline: User is able to Login using valid Credentials		To Be Executed
📄 Scenario Outline: User is able to Login using valid Credentials	Unable to login with valid credentials for a valid old user	Failed
+ New		

Calculate ▾

Task-6: Explore other Test Management Tools (10 Marks)

Explore any of the following test management tools and create notes on the benefits of using advanced test management tool with examples from the tool you explored:

- Zephyr
- PractiTest
- Kualiee
- Tuskr
- Gemini
- Fitnessse