1. Quality Assurance (QA) Intern Assessment Test

Assessment Task: Quality Assurance Testing for a Web Application(To-Do List)

Objective: --- Develop a comprehensive testing plan and execute tests for a simple web application.

Requirements:

A. Understanding the Application:

B. Test Case Development For To-Do List

Test Case Template ------

Test Case ID	Test Description	preconditions	Steps to Execute	Expected Result	Actual Result	Status

Functional Testing Examples

Test Case 1: Add a New Task

Test Case ID	TC001
Test Description	Verify that a new task can be added to the list.
Preconditions	Application is loaded and the "Add Task" input box is visible.
Steps to Execute:	

1. Enter "Buy groceries" in the task input box.
2. Click the "Add Task" button.
   Expected Result - The task "Buy groceries" is added to the list.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail.

Test Case 2: Mark Task as Completed

Test Case ID	TC002
Test Description	Verify that a task can be marked as completed.
Preconditions	At least one task exists in the list.
Steps to Execute:	

1. Click on the task text.
   Expected Result - The task is struck through to indicate completion.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Test Case 3: Delete a Task

Test Case ID	TC003
Test Description	Verify that a task can be deleted from the list.
Preconditions	At least one task exists in the list.
Steps to Execute:	

1. Click the "Delete" button next to the task.
   Expected Result - The task is removed from the list.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Usability Testing Examples

Test Case 4: Add Task with Empty Input

Test Case ID	TC004
Test Description	Verify that the user cannot add a task with an empty input.
Preconditions	The input box is empty.
Steps to Execute:	

1. Click the "Add Task" button without entering any text.
   Expected Result - An alert is displayed: "Please enter a task!" and no task is added to the list.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Test Case ID	TC005
Test Description	Verify that completed tasks are cleared when "Clear Completed" is clicked.
Preconditions	At least one task is marked as completed.
Steps to Execute:	

1. Click the "Clear Completed" button.
   Expected Result - All completed tasks are removed from the list.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Compatibility Testing Examples

Test Case 6: Test Across Browsers

Test Case ID	TC006
Test Description	Verify that the application works on different browsers.
Preconditions	Access the application in Chrome, Firefox, and Edge.
Steps to Execute:	

1. Open the application in each browser.

2. Add, complete, and delete tasks.
   Expected Result - Application behaves consistently across all browsers.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Test Case 7: Test on Mobile Devices

Test Case ID	TC007
Test Description	Verify that the application works on mobile devices
Preconditions	Access the application on a smartphone or tablet.
Steps to Execute:	

1. Open the application on a mobile browser.
2. Test adding, completing, and deleting tasks.
   Expected Result - Application is fully functional and responsive on mobile devices.

Actual Result - Leave blank until testing is performed.
Status - Pass/Fail

Edge Case Testing Examples

Test Case 8: Add Task with Special Characters

Test Case ID	TC008
Test Description	Verify that tasks with special characters can be added.
Preconditions	Application is loaded and ready.
Steps to Execute:	

1. Enter "@#$%^&*()" in the input box.

2. Click the "Add Task" button.
 Expected Result - Task "@#$%^&*()" is added to the list without errors.
 Actual Result - Leave blank until testing is performed.
 Status - Pass/Fail

Test Case 9: Add Extremely Long Task

Test Case ID	TC009
Test Description	Verify that a very long task can be added to the list.
Preconditions	Application is loaded and ready.
Steps to Execute:	

1. Enter a long string in the input box.
2. Click the "Add Task" button.
   Expected Result - Task is added without breaking the UI.
   Actual Result - Leave blank until testing is performed.
   Status - Pass/Fail

Test Case 10: Add Duplicate Tasks

Test Case ID	TC010
Test Description	Verify the behaviour when adding duplicate tasks.
Preconditions	Application is loaded and ready.
Steps to Execute:	

1. Add "Test Task" to the list.

2. Add "Test Task" again.
   Expected Result - Both tasks are added successfully, or the application prevents duplicate tasks with an alert.
   Actual Result - Leave blank until testing is performed.)
   Status - Pass/Fail

C. Manual Testing:

Defect Report------

Attribute	Details
Bug ID	BUG001
Summary	Task not added when clicking "Add Task" button
Description	Clicking the "Add Task" button does not add the task to the list if the input box contains only spaces.
Steps to Reproduce	

1. Open the application in a browser .
2. Enter spaces in the input field.
3. Click the "Add Task" button.
4. Check the task list for the new task.
   Expected Result - The application should display an alert message like "Please enter a valid task!" and not add the task to the list. |
   Actual Result - No alert message is displayed, and an empty task is added to the list.
   Severity - Medium
   Priority - High
   Environment - Windows 11

Reporting ----

Bug Report Template ---

Attribute	Details
Bug ID	BUG001
Summary	Task not added when clicking "Add Task" button

Description	Clicking the "Add Task" button with input containing only spaces results in an invalid task being added to the list instead of showing an alert or preventing the action.
Steps to Reproduce	

<div align="center">Fig.1</div>

1. Open the To-Do List application in a browser .
2. Enter spaces in the task input field.
3. Click the "Add Task" button.
4. Check the task list to confirm if the task was added.

   Expected Result - The application should display an alert saying, "Please enter a valid task!" and not add the invalid task to the list.

   Actual Result - The application adds a blank task to the list without any warning.

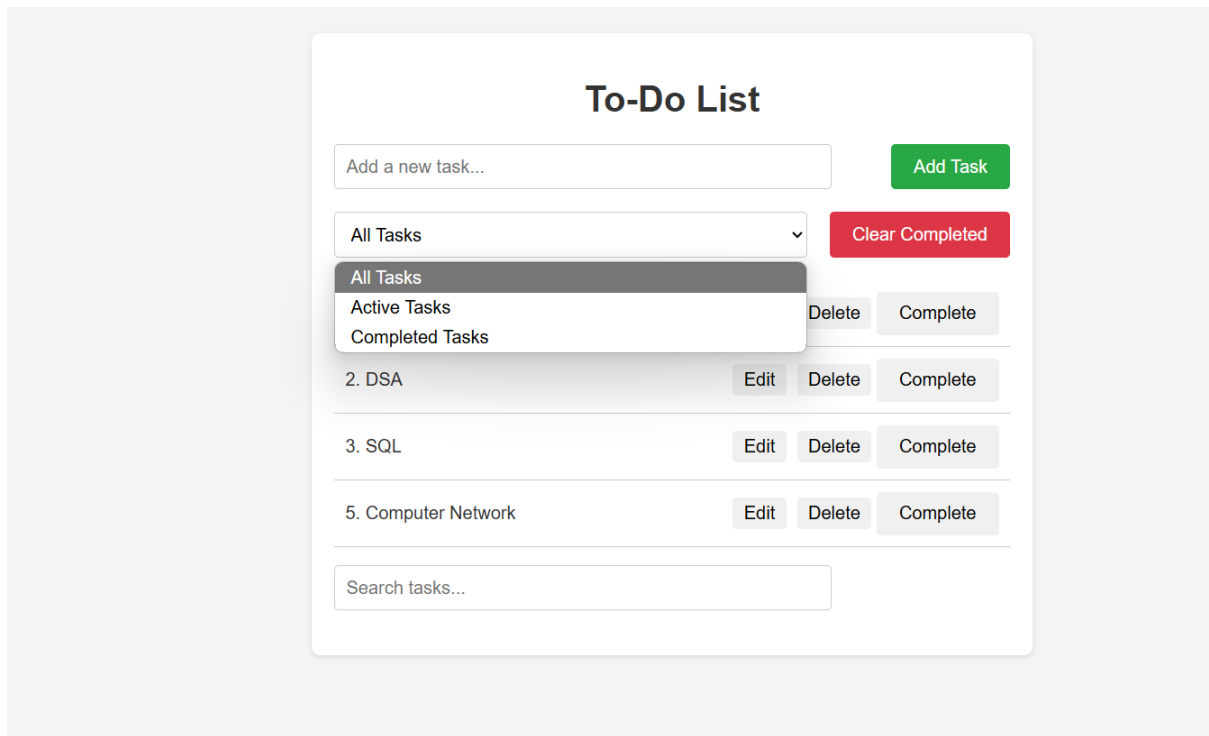| Attribute	Details
Bug ID	BUG002
Summary	Delete button removes the wrong task in certain scenarios
Description	Clicking the "Delete" button for one task sometimes removes the wrong task from the list. This happens when tasks are added and completed in quick succession.
Steps to Reproduce	

<div align="center">Fig.2</div>

1. Open the To-Do List application.
2. Add three tasks in quick succession .
3. Mark one of the tasks as completed.
4. Click the "Delete" button for a different task.
5. Observe which task is removed from the list.

   Expected Result - Clicking the "Delete" button should remove the correct task from the list.

   Actual Result - The wrong task is removed from the list instead of the intended one. |

   Environment - Windows 11

SCREENSHOT----

Documentation---

To-Do List Testing Report:--

1. Introduction

This document outlines the testing process, test cases, bug reports, and challenges encountered during the testing of the To-Do List application. The testing was conducted to ensure the functionality, usability, compatibility, and robustness of the application.

2. Summary of Testing

- Total Test Cases Executed: 10
- Test Cases Passed: 8
- Test Cases Failed: 2
- Defects Identified: 2

Testing Process:

1. Manual testing was performed to validate all features, including basic operations like adding, deleting, and completing tasks, as well as advanced operations like filtering and clearing tasks.

2. Compatibility testing was conducted across multiple browsers and devices to ensure responsiveness.

3. Edge cases were tested to identify any limitations or unexpected behaviors.

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3.Challenges and Resolutions

Challenge: Tasks with spaces were being added to the list without validation.

- **Resolution**: Proposed a validation check to trim spaces and alert users for empty inputs.

Challenge: The delete functionality occasionally removed the wrong task in quick succession.

- **Resolution**: Suggested debugging of task indexing during rapid updates.

4. Test Cases

The following table lists the test cases executed:

Test Case ID	Test Description	Preconditions	Steps to Execute	Expected Result	Actual Result	Status
TC001	Add a new task to the list	Application is running	Enter "Buy groceries" and click "Add Task."	Task is added to the list.	Task is added successfully.	Pass
TC002	Mark a task as completed	Task exists in the list	Click on the task text.	Task is marked as completed.	Task is marked successfully.	Pass
TC003	Delete a task from the list	Task exists in the list	Click the "Delete" button next to the task.	Task is removed from the list.	Task is removed successfully	Pass
TC004	Prevent empty task addition	Input field is empty	Click the "Add Task" button without typing anything.	Alert is displayed; no task is added.	Task with spaces was added.	Fail
TC005	Clear completed tasks	At least one task is completed	Click the "Clear Completed" button.	All completed tasks are removed.	Completed tasks were cleared.	Pass

5. Bug Reports

The following table summarizes the identified defects:

Bug ID	Summary	Descript-ion	Steps to Reproduce	Environment	Expected Result	Actual Result
BUG001	Task not validated for spaces	Clicking "Add Task" with only spaces adds an invalid task.	1. Enter spaces in input. 2. Click "Add Task."	Chrome v96, Windows 11	Alert shown; no task added.	Blank task was added.
BUG002	Incorrect task deleted	Clicking "Delete" sometimes removes the wrong task.	1. Add tasks quickly. 2. Complete one. 3. Delete	Chrome v96, Windows 11	Correct task is removed	Wrong task was removed

6.

Screenshot 1:

Screenshot 2:

7. Recommendations

1. Add input validation to prevent blank or whitespace-only tasks.

2. Debug the indexing of tasks to ensure accurate deletion in rapid scenarios.

3. Enhance testing with automated tools to identify performance-related issues.