Test case

Test Case 1: Dropdown Interaction and Quiz Navigation

| Test Type: | Execution Type: |
|------------|-----------------|
| Functional | Manual |

Objective:

To verify that the topic and context dropdown menus function correctly and ensure that the user is redirected to the quiz interface after clicking the 'Send' button.

Setup:

The student has access to the Question Generator page.

Pre-Conditions:

- The student is on the Question Generator page.
- The dropdown menus are visible.

Notes:

Steps:

- Navigate to the Question Generator page.
- Click on the topic dropdown menu and select a topic.
- Click on the context dropdown menu and select a context.
- · Click the send button.
- · Verify that the dropdown menus expand and collapse correctly.
- · Verify that the selected options in the dropdowns are highlighted.
- Verify that clicking the send button redirects the user to the correct quiz interface.

Time constraint:

Minimum: 5 min Maximum: 10 min

Test case 2: Page Load Performance

| | Test Type: | Execution Type: |
|--|---|--|
| | Performance | Manual |
| | Objective: | |
| To ensure that the site loads quickly and the content is accessible without delay. | | the content is accessible without delay. |
| | Setup: Ensure the web application is hosted on a server with adequate resources. | |
| | | |

Pre-Conditions:

The page to be tested has not been cached by the browser.

Notes:

Test on different devices and browsers to account for variability in load times.

Steps:

- · Open the browser.
- · Access the web application and attempt to load any page.
- Measure the time taken from the moment the page begins to load until all content is fully displayed.
- · Repeat the test across different pages.
- Verify that the page content loads within an acceptable time.

Time constraint:

Minimum: 2 seconds Maximum: 5 seconds

Test case 3: Visual Consistency

| Test Type: | Execution Type: |
|------------|-----------------|
| UI | Manual |

Objective:

To verify that the site maintains a consistent visual style.

Setup:

Access design specifications or style guides for reference.

Pre-Conditions:

The page is fully loaded.

Notes:

Test on different devices and screen sizes to ensure responsive design consistency.

Steps:

- Open the web application.
- Navigate to any page.
- Visually inspect the page for consistency in fonts, colours, button styles, and layout.
- Compare the visual elements against the design specifications.
- Repeat the inspection on multiple pages.
- Ensure that there are no visual discrepancies across different pages of the site.

Time constraint:

Minimum: 5 minutes per page Maximum: 10 minutes per page

Test Case 4: Admin Related Functions

| Test Type: | Execution Type: |
|-------------------|-----------------|
| Functional, UI/UX | Manual |
| Objective: | |
| | |

To verify that the admin can view the correctness rates for different topics and the number of exercises completed.

Setup:

The admin has a registered profile in the system.

Pre-Conditions:

The admin profile page is accessible from the main navigation.

Notes:

Steps:

- 1. Log in to the web application as an admin.
- 2. Navigate to the admin profile section.
- 3. Verify that the profile displays the overall correctness rate across different topics.
- 4. Verify that the number of exercises completed for each topic is correct.
- 5. Click on each topic.
- 6. Verify that every student's total attempts, accuracy, time in total displayed under each topic.
- 7. Navigate to the home page.
- 8. Navigate to the admin profile.
- 9. Verify that the admin still remains logged in.

Time constraint:

Minimum: 5 minutes

Maximum: 10 minutes