Trello Test Plan

Purpose

The purpose of this test plan is to thoroughly validate the board and card functionalities of Trello, ensuring that they meet the specified requirements and function as expected.

Scope

This test plan covers the testing of the following functionalities:
- Board creation, editing, and closing
- Adding members to boards
- Changing board backgrounds
- Card creation, editing, and archiving
- Assigning members to cards
- Adding labels to cards

Test Environment

- Trello web application
- Supported browsers: Chrome, Firefox, Safari

UI Test Scenarios

Board Functionality Test Cases

1. **Creating a Board**
   - Positive
     - Test Steps:
       1. Log in to Trello.
       2. Click on the "Create" button.
       3. Enter a valid name for the new board.
       4. Click on the "Create" button.
     - Expected Result: A new board is successfully created with the provided name.

   - Negative
     - Test Steps:
       1. Log in to Trello.
       2. Click on the "Create" button.
       3. Leave the board name field empty.
       4. Click on the "Create" button.
     - Expected Result: An error message is displayed indicating that a name is required.

2. **Board Name Editing**
   - Positive
     - Test Steps:
       1. Log in to Trello.
       2. Open an existing board.
       3. Click on the board name to edit it.
       4. Modify the name to a new valid name.
       5. Press Enter or click outside the edit field.
     - Expected Result: The board's name is successfully updated with the new name.

   - Negative
     - Test Steps:
       1. Log in to Trello.
       2. Open an existing board.
       3. Click on the board name to edit it.
       4. Clear the name and press Enter or click outside.
     - Expected Result: An error occurs, and the board name remains unchanged.

3. **Adding Members**
   - Positive
     - Test Steps:
       1. Log in to Trello.
       2. Open an existing board.
       3. Click on the "Share" button.
       4. Enter a valid email address of a Trello member.
       5. Click on the "Send" button.
     - Expected Result: The member is successfully added to the board.

   - Negative
     - Test Steps:
       1. Log in to Trello.
       2. Open an existing board.
       3. Click on the "Share" button.
       4. Enter an invalid email address format.
       5. Click on the "Send" button.
     - Expected Result: An error message is displayed indicating an invalid email format.

4. **Changing Background**
   - Positive
     - Test Steps:
       1. Log in to Trello.
       2. Open an existing board.
       3. Click on the "More" (three dots) menu.
       4. Click on the "Change Background" option

5. Select a valid image URL for the background.

6. Confirm the change.

- Expected Result: The board's background image is updated successfully.

- Negative
  - Test Steps:
    1. Log in to Trello.
    2. Open an existing board.
    3. Click on the "More" (three dots) menu.
    4. Click on the "Change Background" option
    5. Attempt to confirm the change.
  - Expected Result: An error occurs, and the background remains unchanged.

5. **Closing a Board**
  - Positive:
    - Test Steps:
      1. Log in to Trello.
      2. Open an existing board.
      3. Click on the "More" (three dots) menu.
      4. Select "Close Board."
    - Expected Result: The board is successfully closed.

Card Functionality Test Cases

1. **Creating a Card**
  - Positive:
    - Test Steps:
      1. Log in to Trello.
      2. Open a board.
      3. Click on the "Add a card..." input in a list.
      4. Enter a valid title for the card.
      5. Press Enter to create the card.
    - Expected Result: A new card is successfully created with the provided title.

  - Negative:
    - Test Steps:
      1. Log in to Trello.
      2. Open a board.
      3. Click on the "Add a card..." input in a list.
      4. Leave the card title field empty.
      5. Press Enter to create the card.
    - Expected Result: An error message is displayed indicating that a title is required.

2. **Card Description**
   - Positive:
     - Test Steps:
       1. Log in to Trello.
       2. Open a card.
       3. Click on the "Description" area.
       4. Enter a valid description for the card.
       5. Click outside the description area to save.
     - Expected Result: The card's description is successfully added or updated.

   - Negative:
     - Test Steps:
       1. Log in to Trello.
       2. Open a card.
       3. Click on the "Description" area.
       4. Enter an excessively long description.
       5. Click outside the description area to save.
     - Expected Result: The description is truncated to a character limit, and no error is shown.

3. **Assigning Members**
   - Positive:
     - Test Steps:
       1. Log in to Trello.
       2. Open a card.
       3. Click on the "Members" area.
       4. Select a valid member from the list.
     - Expected Result: The selected member is successfully assigned to the card.

   - Negative:
     - Test Steps:
       1. Log in to Trello.
       2. Open a card.
       3. Click on the "Members" area.
       4. Attempt to select a member who is not part of the board.
     - Expected Result: An error is displayed indicating that the member cannot be assigned.

4. **Adding Labels**
   - Positive:
     - Test Steps:
       1. Log in to Trello.
       2. Open a card.
       3. Click on the "Labels" area.
       4. Select

Backend Test Scenarios

Board Functionality Test Cases

1. **Creating a Board**
   - Positive
     - Test Steps:
     1. Send a POST request to the board creation endpoint with valid board name and user authentication token.
     2. Retrieve the response status code and board ID.
     3. Query the database to ensure the new board has been created.

   - Negative
     - Test Steps:
     1. Send a POST request to the board creation endpoint without a name and with a user authentication token.
     2. Verify that the response status code indicates a validation error.
     3. Ensure that no new board is created in the database.

2. **Updating a Board**
   - Positive
     - Test Steps:
     1. Send a PUT request to the board update endpoint with a valid board ID, updated name, and user authentication token.
     2. Verify the response status code for a successful update.
     3. Query the database to confirm the board's name has been updated.

   - Negative
     - Test Steps:
     1. Send a PUT request to the board update endpoint with an invalid board ID, updated name, and user authentication token.
     2. Verify that the response status code indicates board not found.
     3. Ensure that the database board's name remains unchanged.

3. **Deleting a Board**
   - Positive
     - Test Steps:
     1. Send a DELETE request to the board deletion endpoint with a valid board ID and user authentication token.
     2. Verify the response status code for successful deletion.
     3. Query the database to ensure the board has been deleted.

- Negative
  - Test Steps:
    1. Send a DELETE request to the board deletion endpoint with an invalid board ID and user authentication token.
    2. Verify that the response status code indicates board not found.
    3. Ensure that the database board records remain unchanged.

These backend tests assume the presence of appropriate API endpoints and authentication mechanisms. Ensuring that the backend endpoints are set up and can handle the expected data and authentication tokens. Additionally, these tests focus on a few critical backend scenarios for board functionalities.

Test Execution

1. Execute each test case step by step as outlined in the respective scenarios.
2. Record the actual results, including any observed behavior, system responses, and error messages.
3. Compare the actual results with the expected results for each test case.
4. If the actual results match the expected results, mark the test case as "Pass." If not, mark it as "Fail."
5. In case of failures, log detailed defects, including steps to reproduce, observed behavior, and screenshots if applicable.

Conclusion

Upon completion of testing, the Trello board and card functionalities will be assessed for their accuracy, functionality, and compliance with requirements. Any discrepancies or defects identified during testing will be documented and addressed for resolution.