Project Information – Selenium Tests

* Project Name: Control Risks Assessment - Selenium Tests
* Project Version: 1.0.0
* Test Case Document Version: 1.0.1
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1. Introduction – Selenium Tests

* Purpose: This document provides a comprehensive overview of the test scenarios, test cases, test data, and test execution details for the Control Risks Assessment, both Selenium and Postman.
* Scope: The test cases described in this document cover the functional and non-functional aspects of the Control Risks Assessment, both Selenium and Postman.
* Audience: The intended audience for this document includes testers, developers, and project stakeholders.

2. Test Scenarios – Selenium Tests

* Scenario 1: User redirection back to home page, using the NBA logo
* Test Objective: To verify if the user can redirect to the home page from any of the other links, tabs and sections.
* Preconditions: The webpage the user is currently on, has an NBA logo present and is clickable.
* Steps: Visit the NBA website at [www.NBA.com](http://www.nba.com/), locate NBA logo and click on it to be redirected to the home page.
* Expected Results: Redirection to the home page is successful
* Scenario 2: Searching for a specific basketball player
* Test Objective: To validate that the site is able to be redirected to another page and is able to display a specific player.
* Preconditions: Must be on NBA website, has the players tab available and redirects to players page. Should have the Search Players text box present
* Steps: Visit the NBA website at [www.NBA.com](http://www.nba.com/), select the players tab on the navbar. Within the Search Players text box, search for a players name.
* Expected Results: Displays the searched for players information and picture.
* Scenario 3: Display all present and past games, followed by hiding their scores
* Test Objective: To confirm that the application is able to display all present and past games played followed by hiding all existing scores.
* Preconditions: Must be on NBA website, Games navbar tab works, and slider on Games page works smoothly.
* Steps: Visit the NBA website at [www.NBA.com](http://www.nba.com/), select Games tab on the navbar. Click on hide scores slider to remove scores.
* Expected Results: Navigated to Games tab and hides scores successfully.
* Scenario 4: Display the current schedule and key dates, then redirect to home page
* Test Objective: To verify that the user is able to view the schedule, followed by key dates and is able to return to the home page.
* Preconditions: Must be on NBA website, Schedule tab works followed by nested key navbar tab. NBA logo redirects home.
* Steps: Visit the NBA website at [www.NBA.com](http://www.nba.com/), select the Schedules tab on the navbar, followed by the key dates in the smaller navbar below and redirect home by selecting NBA logo.
* Expected Results: User is able to view the schedule, key dates and is able to redirect to the home page is successful.
* Scenario 5: Signing in with Invalid login details
* Test Objective: To ensure that the application gracefully handles and displays an error message when invalid login details are given.
* Preconditions: Must be on NBA website, should have a valid email and password, able to pass the captcha confirmation.
* Steps: Visit the NBA website at [www.NBA.com](http://www.nba.com/), select the Sign in dropdown followed by Sign in with NBA ID, insert email, password and captcha confirmation and sign in.
* Expected Results: An Invalid login details message would appear after trying to sign in

3. Test Cases – Selenium Tests

* Test Case 1: Redirection home
* Test ID: TC-001
* Test Objective: To verify that the user is able to redirect home with NBA logo
* Test Steps: 1. Open the web application  
   2. Click on NBA logo  
   3. Verify that the user had been redirected home
* Expected Results: Application had loaded successfully, NBA logo was interactable, redirected back to home page
* Actual Results: Application had loaded successfully, NBA logo was interactable, redirected back to home page
* Test Case 2: Search for specific player
* Test ID: TC-002
* Test Objective: To ensure that the user is able to search for a specific player
* Test Steps: 1. Open the web application  
   2. Select Players tab in nav bar  
   3. Within Search Players text box, search for any player  
   4. Successfully displayed any searched player and information
* Expected Results: Application had loaded successfully, Player's tab was interactable, Search box was interactable and searches correctly
* Actual Results: Application had loaded successfully, Player's tab was interactable, Search box was interactable and searches correctly
* Test Case 3: View all games and hide scores
* Test ID: TC-003
* Test Objective: To verify that the user is able to access the Games and their scores
* Test Steps: 1. Open the web application  
   2. Click on Games tab in nav bar  
   3. Verify that the user had been redirected Games tab  
   4. Games are displayed and user is able to hide scores with slider
* Expected Results: Application had loaded successfully, Games tab was interactable, redirected to Games tab, Games are displayed and hide scores slider works
* Actual Results: Application had loaded successfully, Games tab was interactable, redirected to Games tab, Games are displayed and hide scores slider works
* Test Case 4: Display NBA schedule, key dates and redirected back home
* Test ID: TC-004
* Test Objective: To ensure that the user is able to redirect to the schedule tab, followed by key dates tab and returns home
* Test Steps: 1. Open the web application  
   2. Select Schedules tab  
   3. Select Key dates tab   
   4. Click on NBA logo  
   5. Verify that the user had been redirected home
* Expected Results: Application had loaded successfully, Schedules tab is interactable and redirects, Key dates tab is interactable and redirects, NBA logo was interactable, redirected back to home page
* Actual Results: Application had loaded successfully, Schedules tab is interactable and redirects, Key dates tab is interactable and redirects, NBA logo was interactable, redirected back to home page
* Test Case 5: Invalid login/signup
* Test ID: TC-005
* Test Objective: To confirm that the user is able to interact with the login, but return invalid input
* Test Steps: 1. Open the web application  
   2. Sign in dropdown followed by Sign in with NBA ID  
   3. insert email, password and captcha confirmation and sign in  
   3. Verify that the user had input invalid details
* Expected Results: Application had loaded successfully, Sign in drop down works, redirected sign in page, email, password boxes work and captcha confirms, sign in button confirms user input, return invalid user
* Actual Results: NBA website opens, sign in tab interacts but returns non-interactable due to reCaptcha

4. Test Data – Selenium Tests

* Test Data 1: Functionality of redirection
* Input: Interaction with NBA Logo
* Output: Redirects to the Home page
* Preconditions: The NBA logo is interactable
* Test Data 2: Functionality of searching specific player
* Input: Select Players tab, Search “playername”
* Output: Redirects to the players tab and displays player information
* Preconditions: Players tab is displayed, interactable and redirects. Search bar is interactable and can display user input
* Test Data 3: Displays games and hides scores
* Input: Interact with games tab, and interact with hide scores slider
* Output: Games tab is displayed, hide score slider moves and hides scores
* Preconditions: Games and hide score slider are both interactable and displayed
* Test Data 4: Displays schedule, key dates and redirection home
* Input: Selection of Schedules, Key dates tab and NBA Logo
* Output: Displays schedules, keydates and is able to redirect home
* Preconditions: Able to access schedules, key dates and the NBA logo is interactable
* Test Data 5: Invalid login
* Input: Username: [Test@gmail.com](mailto:Test@gmail.com), Password: TestPass
* Output: Invalid username or password
* Preconditions: All fields in sign-in form are functional and accepting input

5. Test Execution – Selenium Tests

* Test Environment:   
   Software:   
   - Operating System: Windows 11 Pro  
   - Browsers: Google Chrome  
   - Development tools: Visual Studio 2022  
   Test Tools:  
   - Selenium WebDriver for automation
* Test Execution Steps: Open the project, select the Test tab followed by Test Explorer (ctrl+E, T) select the NBAWebsiteAutomation test folder and run.
* Test Execution Status: RedirectionHome = PASS, SearchSpecificPlayer = PASS, SeeAllGamesThenHideScores = PASS, NBAScheduleAndRedirectionHome = PASS, InvalidLoginDetails = FAIL
* Defects: Login test does not execute due to reCaptcha not allowing non-humans to execute and test.

6. Test Results – Selenium Tests

* Summary of Test Results: The application performs well, except for login/signup

7. Conclusion – Selenium Tests

* Conclusion: In conclusion the NBA application works well and has very little flaws, although testing of login/signup had issues due to reCaptcha, it works as intended and does not need any further improvement.