**Test Case Document for Barber Appointment System**

**1. Test Case ID:** TC001 **Test Case Name:** Verify GUI Design **Description:** Verify that the GUI has a blue background, boxed-shaped green buttons, and the logo "Created And Tested By Zafran Haider" is displayed at the bottom of the first page.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Check the background color of the application.
3. Verify that all buttons have a boxed shape and a green color.
4. Scroll down to the bottom of the first page and check for the presence of the logo.

**Expected Result:** The background color is blue, buttons are boxed-shaped and green, and the logo "Created And Tested By Zafran Haider" is displayed at the bottom.

**2. Test Case ID:** TC002 **Test Case Name:** Verify User Registration **Description:** Verify that the user can enter their name and click "Submit" to proceed to the main page.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name in the name input field.
3. Click on the "Submit" button.

**Expected Result:** The user is redirected to the main page, and a greeting message with the user's name is displayed at the top.

**3. Test Case ID:** TC003 **Test Case Name:** Verify Main Page Options **Description:** Verify that the main page displays the correct options for haircut selection and an exit button.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Check for the presence of the following elements: a. Text "Hello [Username]" at the top. b. Options for haircut selection (Fade Cut, Buzz Cut, UnderCut, Crew Cut, Temple Cut). c. An exit button.

**Expected Result:** The main page displays the greeting message, haircut options, and an exit button.

**4. Test Case ID:** TC004 **Test Case Name:** Verify Appointment Booking **Description:** Verify that the user can successfully book an appointment for a selected haircut option.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Click on any of the haircut options (e.g., Fade Cut).
4. On the new page, enter a valid day and time for the appointment.
5. Click "Submit."

**Expected Result:** The system displays a success message confirming the appointment booking with the selected haircut option, day, and time.

**5. Test Case ID:** TC005 **Test Case Name:** Verify Invalid Day and Time Entries **Description:** Verify that the system handles invalid day and time entries during appointment booking.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Click on any haircut option (e.g., Fade Cut).
4. On the new page, enter an invalid day (e.g., "xyz") and time (e.g., "25:70") for the appointment.
5. Click "Submit."

**Expected Result:** The system displays appropriate error messages for invalid day and time entries.

**6. Test Case ID:** TC006 **Test Case Name:** Verify Appointment Confirmation **Description:** Verify that the user receives a confirmation message after successfully booking an appointment.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Click on any of the haircut options (e.g., Buzz Cut).
4. On the new page, enter a valid day and time for the appointment.
5. Click "Submit."

**Expected Result:** The system displays a confirmation message: "Barber Appointed Successfully Please Visit Nearest Usman Barber Shop on [Day] at [Time]. Thank You."

**7. Test Case ID:** TC007 **Test Case Name:** Verify Exit Button Functionality **Description:** Verify that the Exit button works as expected and closes the application.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Click the Exit button.

**Expected Result:** The application closes successfully without any errors.

**8. Test Case ID:** TC008 **Test Case Name:** Verify Navigation from Appointment Booking Page to Main Page **Description:** Verify that the user can navigate back to the main page from the appointment booking page.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Enter a valid name and click "Submit" to reach the main page.
3. Click on any haircut option (e.g., Crew Cut).
4. On the new page, click the "Back" or "Main Page" button.

**Expected Result:** The user is redirected back to the main page without any issues.

**9. Test Case ID:** TC009 **Test Case Name:** Verify Compatibility with Different Browsers **Description:** Verify that the application works as expected on different web browsers.

**Test Steps:**

1. Open the Barber Appointment System application.
2. Perform the following steps on different browsers: a. Google Chrome b. Mozilla Firefox c. Apple Safari

**Expected Result:** The application functions correctly and maintains a consistent appearance across all tested browsers.

**10. Test Case ID:** TC010 **Test Case Name:** Verify Security and Data Privacy **Description:** Verify that the application ensures data privacy and protection against security vulnerabilities.

**Test Steps:**

1. Attempt unauthorized access to user data by modifying URLs or bypassing the login.
2. Perform SQL injection or other common security attacks to attempt unauthorized data access.

**Expected Result:** The application should prevent unauthorized access and data breaches.

**11. Test Case ID:** TC011 **Test Case Name:** Verify Performance and Responsiveness **Description:** Verify that the application performs well and responds quickly under different usage scenarios.

**Test Steps:**

1. Simulate multiple users accessing the application concurrently.
2. Test the application's responsiveness by performing actions rapidly.

**Expected Result:** The application should handle multiple users and provide a smooth user experience without significant delays.

**12. Test Case ID:** TC012 **Test Case Name:** Verify User Acceptance Testing (UAT) **Description:** Real users will be involved in UAT to provide feedback on usability and user experience.

**Test Steps:**

1. Involve real users to navigate the application.
2. Collect feedback on user-friendliness, navigation, and overall experience.

**Expected Result:** User feedback is collected and used to improve the application's usability.

**13. Test Case ID:** TC013 **Test Case Name:** Verify Regression Testing **Description:** After fixing defects, verify that the new changes do not impact existing functionalities.

**Test Steps:**

1. Execute the test cases related to previously reported defects.
2. Verify that the fixes do not cause any new issues.

**Expected Result:** All previously reported defects are resolved, and no new issues are introduced.

**14. Test Case ID:** TC014 **Test Case Name:** Verify Continuous Improvement **Description:** Use feedback from testing and UAT to continuously improve the application.

**Test Steps:**

1. Collect feedback from testers and users.
2. Analyze feedback to identify areas for improvement.
3. Implement necessary changes and updates based on feedback.

**Expected Result:** The application is continuously improved based on user feedback and requirements.

**15. Test Case ID:** TC015 **Test Case Name:** Verify Documentation **Description:** Verify that all testing activities, test cases, test results, and defect reports are documented for future reference.

**Test Steps:**

1. Review all testing documentation, including test cases, test plans, and test results.

**Expected Result:** All testing activities are well-documented for future reference and auditing.

This Test Case Document provides detailed test cases to verify the functionality, usability, and security aspects of the Barber Appointment System. Each test case should be executed systematically to ensure the application's quality and reliability.