**Restful Booker Demo Project Test Scenarios (For manual Testing)**

**(1) Test Scenarios for the "Admin Login" user story:**

**Positive Scenarios:**

1. **Valid Login and Dashboard Access:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Enter a valid username in the "Username" field.**
     3. **Enter the corresponding valid password in the "Password" field.**
     4. **Click the "Login" button.**
   * **Expected Result: The admin is successfully logged in and redirected to the admin dashboard.**
2. **Valid Login and Booking List Visibility:**
   * **Test Steps:** 
     1. **Perform the steps in the "Valid Login and Dashboard Access" scenario.**
     2. **On the admin dashboard, navigate to the "Bookings" section (or similar).**
   * **Expected Result: The admin can see a list of all hotel bookings.**

**Negative Scenarios:**

1. **Invalid Username:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Enter an invalid username in the "Username" field.**
     3. **Enter a valid password in the "Password" field.**
     4. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed to the admin, indicating that the login failed due to incorrect credentials. The admin remains on the login page.**
2. **Invalid Password:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Enter a valid username in the "Username" field.**
     3. **Enter an invalid password in the "Password" field.**
     4. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed to the admin, indicating that the login failed due to incorrect credentials. The admin remains on the login page.**
3. **Invalid Username and Password:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Enter an invalid username in the "Username" field.**
     3. **Enter an invalid password in the "Password" field.**
     4. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed to the admin, indicating that the login failed due to incorrect credentials. The admin remains on the login page.**
4. **Empty Username Field:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Leave the "Username" field empty.**
     3. **Enter a valid password in the "Password" field.**
     4. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed, prompting the admin to enter a username. The admin remains on the login page.**
5. **Empty Password Field:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Enter a valid username in the "Username" field.**
     3. **Leave the "Password" field empty.**
     4. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed, prompting the admin to enter a password. The admin remains on the login page.**
6. **Empty Username and Password Fields:**
   * **Test Steps:** 
     1. **Click on Admin to Navigate login page .**
     2. **Leave both the "Username" and "Password" fields empty.**
     3. **Click the "Login" button.**
   * **Expected Result: An appropriate error message is displayed, prompting the admin to enter both a username and a password. The admin remains on the login page.**

**(2) test scenarios for the "Booking Form" user story :**

**Positive Scenarios:**

1. **Valid Data Submission:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a valid first name (alphabetic, <= 50 characters) in the "First Name" field.**
     3. **Enter a valid last name (alphabetic, <= 50 characters) in the "Last Name" field.**
     4. **Enter a valid email address (e.g., test@example.com) in the "Email" field.**
     5. **Enter a valid phone number (numeric, 10-15 digits) in the "Phone" field.**
     6. **Enter an optional subject (alphanumeric) in the "Subject" field.**
     7. **Enter an optional message (up to 250 characters) in the "Message" field.**
     8. **Click the "Submit" button.**
   * **Expected Result: The booking form is submitted successfully, and the user receives confirmation (e.g., a success message or redirection to a confirmation page).**
2. **Submission with Optional Fields Empty:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter valid data in the "First Name," "Last Name," "Email," and "Phone" fields.**
     3. **Leave the "Subject" and "Message" fields empty.**
     4. **Click the "Submit" button.**
   * **Expected Result: The booking form is submitted successfully, and the user receives confirmation.**
3. **Maximum Character Lengths:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a first name with exactly 50 alphabetic characters.**
     3. **Enter a last name with exactly 50 alphabetic characters.**
     4. **Enter a valid email address.**
     5. **Enter a valid phone number (10 digits).**
     6. **Enter a subject with alphanumeric characters.**
     7. **Enter a message with exactly 250 characters.**
     8. **Click the "Submit" button.**
   * **Expected Result: The booking form is submitted successfully, and the user receives confirmation.**

**Negative Scenarios:**

1. **Missing Required Fields:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Leave the "First Name" field empty and fill in the other required fields with valid data.**
     3. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "First Name" field is required. The form is not submitted.**
   * **(Repeat this step leaving each of the "Last Name," "Email," and "Phone" fields empty individually).**
2. **Invalid First Name (Non-Alphabetic):**
   * **Test Steps:** 
     1. **Navigate to the booking form.**
     2. **Enter a first name containing numeric or special characters (e.g., "John123", "John!").**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "First Name" must contain only alphabetic characters. The form is not submitted.**
3. **Invalid First Name (Exceeding Max Length):**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a first name with more than 50 alphabetic characters.**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "First Name" cannot exceed 50 characters. The form is not submitted.**
   * **(Repeat scenarios 5 and 6 for the "Last Name" field).**
4. **Invalid Email Format:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter an email address with an invalid format (e.g., "test", "test@", "@example.com", "test@example").**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "Email" must be in a valid format. The form is not submitted.**
5. **Invalid Phone Number (Non-Numeric):**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a phone number containing alphabetic or special characters (e.g., "123-456-789a").**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "Phone" number must be numeric. The form is not submitted.**
6. **Invalid Phone Number (Too Short):**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a phone number with fewer than 10 digits (e.g., "123456789").**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "Phone" number must be between 10 and 15 digits. The form is not submitted.**
7. **Invalid Phone Number (Too Long):**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Enter a phone number with more than 15 digits (e.g., "1234567890123456").**
     3. **Fill in the other required fields with valid data.**
     4. **Click the "Submit" button.**
   * **Expected Result: An error message is displayed indicating that the "Phone" number must be between 10 and 15 digits. The form is not submitted.**
8. **Message Exceeding Max Length:**
   * **Test Steps:** 
     1. **Go down to Navigate the booking form.**
     2. **Fill in all required fields with valid data.**
     3. **Enter a message with more than 250 characters in the "Message" field.**
     4. **Click the "Submit" button.**
   * **Expected Result: The form should either prevent the user from entering more than 250 characters or display an error message indicating that the "Message" cannot exceed 250 characters. The form is not submitted (if an error is shown).**

**(3) Test Scenarios for the "Booking Room" user story :**

**Positive Scenarios:**

1. **Valid Booking - Single Room:**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select "Single" as the room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a valid first name (alphabetic, <= 50 characters) in the "First Name" field.**
     7. **Enter a valid last name (alphabetic, <= 50 characters) in the "Last Name" field.**
     8. **Enter a valid email address (e.g., test@example.com) in the "Email" field.**
     9. **Enter a valid phone number (numeric, 10-15 digits) in the "Phone" field.**
     10. **Click the "Reserve Now" button.**
   * **Expected Result: A success message is displayed to the user confirming the booking. If logged in as an admin, the new booking appears in the booking list.**
2. **Valid Booking - Double Room:**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select "Double" as the room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter valid data in the "First Name," "Last Name," "Email," and "Phone" fields (following constraints).**
     7. **Click the "Reserve Now" button.**
   * **Expected Result: A success message is displayed to the user. If logged in as an admin, the new booking appears in the booking list.**
3. **Valid Booking - Suite:**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select "Suite" as the room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter valid data in the "First Name," "Last Name," "Email," and "Phone" fields (following constraints).**
     7. **Click the "Reserve Now" button.**
   * **Expected Result: A success message is displayed to the user. If logged in as an admin, the new booking appears in the booking list.**

**Negative Scenarios:**

1. **Missing Required Fields:**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type (Single, Double, or Suite) by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Leave the "First Name" field empty and fill in the other required fields with valid data.**
     7. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "First Name" field is required. The booking is not submitted.**
   * **(Repeat this step leaving each of the "Last Name," "Email," "Phone," and "Date Range" fields empty individually).**
   * **(Also test leaving the "Room Type" unselected before proceeding to the form, if the UI allows for this).**
2. **Invalid First Name (Non-Alphabetic):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage .**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a first name containing numeric or special characters (e.g., "John123", "John!").**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "First Name" must contain only alphabetic characters. The booking is not submitted.**
3. **Invalid First Name (Exceeding Max Length):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a first name with more than 50 alphabetic characters.**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "First Name" cannot exceed 50 characters. The booking is not submitted.**
   * **(Repeat scenarios 5 and 6 for the "Last Name" field).**
4. **Invalid Email Format:**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter an email address with an invalid format (e.g., "test", "test@", "@example.com", "test@example").**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "Email" must be in a valid format. The booking is not submitted.**
5. **Invalid Phone Number (Non-Numeric):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage .**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a phone number containing alphabetic or special characters (e.g., "123-456-789a").**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "Phone" number must be numeric. The booking is not submitted.**
6. **Invalid Phone Number (Too Short):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a phone number with fewer than 10 digits (e.g., "123456789").**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "Phone" number must be between 10 and 15 digits. The booking is not submitted.**
7. **Invalid Phone Number (Too Long):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a valid date range for the booking.**
     5. **Click the "Reserve Now" button.**
     6. **Enter a phone number with more than 15 digits (e.g., "1234567890123456").**
     7. **Fill in the other required fields with valid data.**
     8. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the "Phone" number must be between 10 and 15 digits. The booking is not submitted.**
8. **Invalid Date Range (e.g., Past Date):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage.**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a date range that has already passed.**
     5. **Click the "Reserve Now" button.**
     6. **Enter valid data in the "First Name," "Last Name," "Email," and "Phone" fields.**
     7. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the selected date range is invalid (e.g., "Cannot book for past dates"). The booking is not submitted.**
9. **Invalid Date Range (End Date Before Start Date):**
   * **Test Steps:** 
     1. **Navigate to the hotel's homepage .**
     2. **Click the "Book Now" button.**
     3. **Select a room type by Click it’s "Book Now" button .**
     4. **Select a date range that has already passed.**
     5. **Click the "Reserve Now" button.**
     6. **Enter valid data in the "First Name," "Last Name," "Email," and "Phone" fields.**
     7. **Click the "Reserve Now" button.**
   * **Expected Result: A clear error message is displayed indicating that the end date must be after the start date. The booking is not submitted.**