

TITLE:

Security Features of Semester Project

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Registration No:

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Subject:

Internet Application Development

Submitted to:

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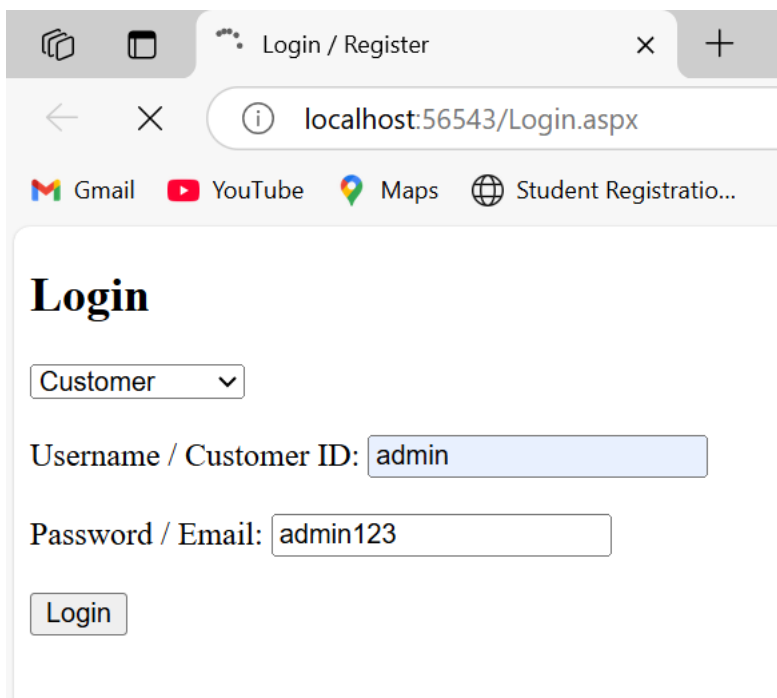
Problem 3

Develop test cases for all security features and prepare a report about testing of security features?

Solution:

Test Case 1: Role-Based Access Control

- **Test:** A Customer tries to access the Admin Dashboard URL.
- **Expected Result:** Access denied or redirected to login.
- **Outcome:** Access was blocked/stucked.

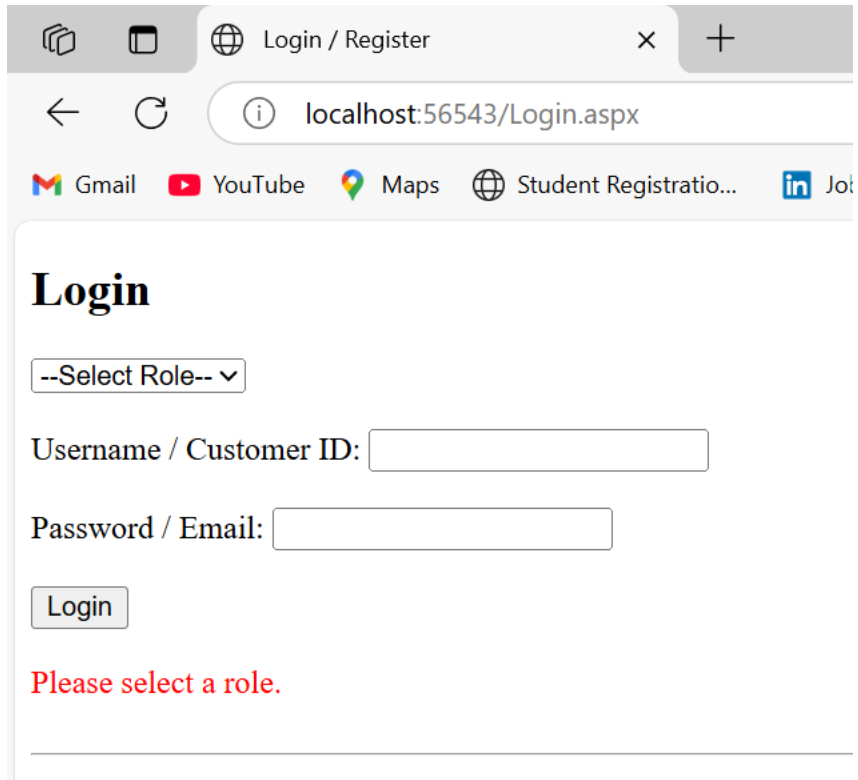


The screenshot shows a web browser window with the following details:

- Browser Tab:** Login / Register
- Address Bar:** localhost:56543/Login.aspx
- Page Title:** Login
- Form Fields:**
 - A dropdown menu with the selected value "Customer".
 - A text input field labeled "Username / Customer ID:" containing the text "admin".
 - A text input field labeled "Password / Email:" containing the text "admin123".
- Buttons:** A "Login" button is located below the password field.

Test Case 2: Input Validation

- **Test:** Try submitting empty or invalid data in forms.
- **Expected Result:** Error shown and form not submitted.
- **Outcome:** Inputs were blocked correctly.



Login

--Select Role-- ▾

Username / Customer ID:

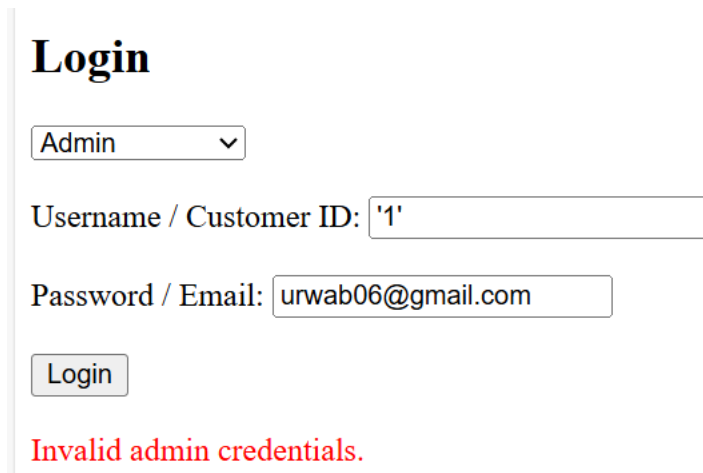
Password / Email:

Login

Please select a role.

Test Case 3: SQL Injection Attempt

- **Test:** Use ' OR '1'='1 in login form.
- **Expected Result:** Login fails.
- **Outcome:** Application prevented injection.



Login

Admin ▾

Username / Customer ID:

Password / Email:

Login

Invalid admin credentials.

Test Case 4: Session Expiry

- **Test:** Manually expire session, then try accessing protected pages.
- **Expected Result:** Redirected to login.
- **Outcome:** Proper redirection handled.

Test Case 5: Form-Based Authentication

- **Test:** Enter incorrect login credentials.
- **Expected Result:** Access denied with custom error message.
- **Outcome:** Message shown, login blocked.

Login ▼Username / Customer ID: Password / Email:

Invalid admin credentials.

Test Case 6: Error Handling

- **Test:** Deliberately trigger an internal error.
- **Expected Result:** User-friendly message shown.
- **Outcome:** Application handled it gracefully.

Test Case 7 : HTTPS Deployment (Pending)

- **Test:** Deploy the site on HTTPS-enabled server.
- **Expected Result:** All data transfers encrypted.
- **Outcome:** Pending deployment.

Conclusion:

I have implemented all the essential security features discussed in Problem 1 and verified their effectiveness using practical test cases. The system behaves securely and provides a reliable experience for both admins and customers.