

## Validation of User Login Algorithm:

1. User accesses the login page (`login.html`):
  - User enters the username and password.
  - User submits the form by clicking the "Login" button.
  - The form data is sent to the `/login` URL.
  
2. `LoginServlet` servlet receives the request:
  - The servlet retrieves the username and password from the request parameters.
  - It checks if the username and password are valid (in this case, hardcoded as "admin" and "password").
  - If the login is valid:
    - The servlet sets a session attribute to indicate a successful login (`loggedIn` = true).
    - The servlet redirects the user to the dashboard page (`/dashboard`).
  - If the login is invalid:
    - The servlet redirects the user to the login error page (`login-error.html`).
  
3. `DashboardServlet` receives the request:
  - The servlet checks if the user is logged in by checking the session attribute (`loggedIn`).
  - If the user is logged in:
    - The servlet displays the dashboard page, welcoming the user and indicating a successful login.
    - The servlet provides a logout link (`/logout`) for the user to log out.
  - If the user is not logged in:
    - The servlet redirects the user back to the login page (`login.html`).
  
4. `LogoutServlet` receives the request:
  - The servlet invalidates the session (clears session data) to log the user out.
  - The servlet redirects the user back to the login page (`login.html`).