

Servlet-based Login and Logout Web Application

This writeup describes a simple web application that allows users to log in and log out using Java Servlets. The application consists of four files: `LoginServlet.java`, `LogoutServlet.java`, `index.html`, `link.html`, and `login.html`. These files work together to provide a basic login functionality.

`LoginServlet.java`: This servlet handles the login process. When a user submits the login form, the `doPost` method is invoked. It retrieves the username and password entered by the user and checks if they match the hardcoded values ("admin" for the username and "root" for the password). If the login is successful, the servlet includes the `link.html` page, displays a welcome message, and creates a session with the user's name stored as an attribute. If the login fails, an error message is displayed, and the user is redirected back to the `login.html` page.

`LogoutServlet.java`: This servlet handles the logout process. When a user clicks on the "Logout" link in the `link.html` page, the `doGet` method of this servlet is invoked. It invalidates the session, displays a logout message, and redirects the user back to the `login.html` page.

`index.html`: This is the homepage of the web application. It displays a heading and a link to the `login.html` page, allowing users to navigate to the login page.

`link.html`: This page is displayed after successful login. It provides a link to log out by invoking the `LogoutServlet`. The user can click on the "Logout" link to end the session and log out.

`login.html`: This page presents a login form to the user. It contains fields for entering a username and password, and a submit button to trigger the login process. When the form is submitted, it sends a POST request to the `LoginServlet` for authentication.

The application follows a simple flow: users start at the `index.html` page, navigate to the `login.html` page to enter their credentials, and upon successful login, are redirected to the `link.html` page. From there, they can log out by clicking the "Logout" link, which takes them back to the `login.html` page.

This web application serves as a basic template for implementing user authentication and session management using Java Servlets. It can be further enhanced by adding database integration, user registration, error handling, and other security features based on specific requirements.