Q1)

README File:

This application will allow a user to register, login, and see some select research
previously done by the authors of the application.

A non-authorized user trying to access a .jsp or .do endpoint will be redirected to
the login page where they can either register or present their credentials.

In the event of an error, an error page will be displayed that will inform the user
that an error occurred and present a link to the login page. An easy way to invoke an
error is to attempt to access a random URL and get a 404 Not Found.

The application uses log4j2 to log some informational and debugging statements to the
console. All logging is appended to a file located at C:\temp\hw3q1.log. This can be
modified in the log4j2.xml file located in resources. This will likely error on a
Unix based computer as it logs to C:\

SETUP:
There is a sql script in the db folder that needs to be run to initialize the
database. This creates the database and creates the users table and inserts some
initial users.

The web.xml file needs to be edited to include the credentials used to access the
locally hosted database.

Tested on Tomcat7 & Tomcat8, MySQL 5.7.10, mysql-connector 5.1.38 (included), log4j2
2.5 (included), Windows 10, Windows 8, Java8, Google Chrome 49.0.2623.87, Firefox
45.0.1

Screenshots of it working:
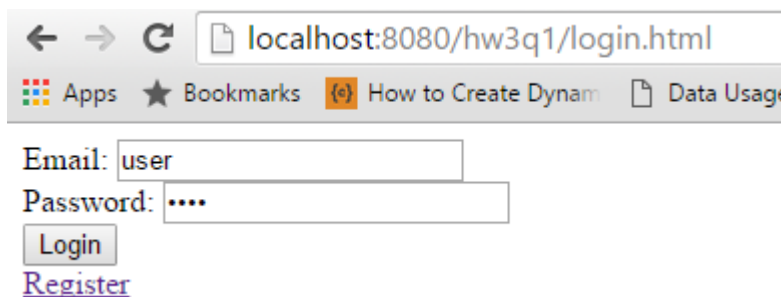
Registration requires javascript.

← → C 🗋 localhost:8080/hw3q1/register.html

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Email: [ ]
Password: [ ]
Name: [ ]
Street address: [ ]
State: [ ]
Zip Code: [ ]
[Submit]

← → C 🗋 localhost:8080/hw3q1/register.htm

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Missing Information
Email: [ ]
Password: [ ]
Name: [ ]
Street address: [ ]
State: [ ]
Zip Code: [ ]
[Submit]

← → C 🗋 localhost:8080/hw3q1/register.html

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User already exists!
Email: [user1]
Password: [•••••]
Name: [User]
Street address: [User House]
State: [US]
Zip Code: [1111]
[Submit]
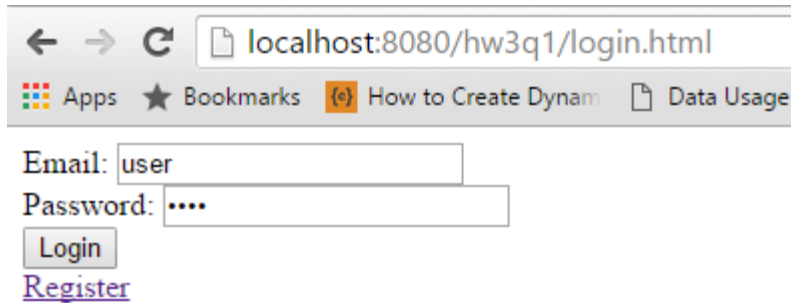
On success a user is redirected to the login page where they can log in to the application.

The user is presented with a home screen that prints out all the information about their account and the session id.

If a user clicks on See Projects they will see the research efforts of the software's authors.
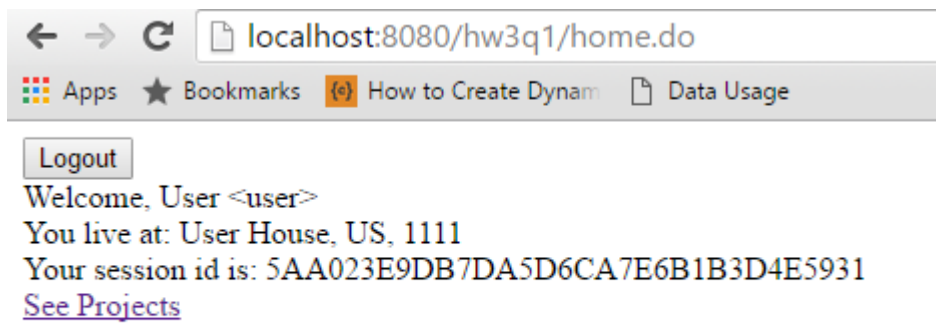
localhost:8080/hw3q1/seeProjects.do

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Logout
Student: Daniela, Jennifer, Peter
Project: Semantic Web
Abstract: In this paper we will summarize three current, 2010+, research papers on how ontologies can be used to navigate and combine social netw
concept a user wants to see. A common problem amongst this domain is linking concepts between ontologies if those ontologies use different sema
concepts, techniques are evolving to solve this problem. We will also cover a summary of various ontology description languages and how they inte
ontology languages can be used when querying social networks to find relations to narrow the search down to those that are relevant to the current u

Student: Daniela, Jennifer, Peter
Project: CSE551 Homework 3
Abstract: This assignment covering the usage of servlets and a simple web application with some user niceties.

Student: Mohammed Alquwaisem, Peter Miele
Project: Comparing Open Source Static Security Analysis Tools Using Open Source Software
Abstract: Vulnerabilities in software provide significant risk to the operation of user's of software. Software has been developed over time to assist i
software by doing static analysis of the source code of software. We present a comparison of a set of such of static analysis tools. The results will ai
their needs in detecting software vulnerabilities.

Student: Daniela Martignani, Aarathi Shibu
Project: Situation-Driven Software Development: An approach using a test case and testing techniques
Abstract: Situation-driven software development is an alternative approach that suggests taking into account the external factors of a system and the
development methodologies mainly focus on the internal factors of a system and consider them to be the only ones that can have an impact on such
present some work done in the area of situation-driven development and enhance the key points of situation and scenarios, applying them through a
external factors into the main system requirements. The case study presented goes through the development of use cases based on specific attributes

The user can click logout to invalidate their session and return to the login page

localhost:8080/hw3q1/login.html

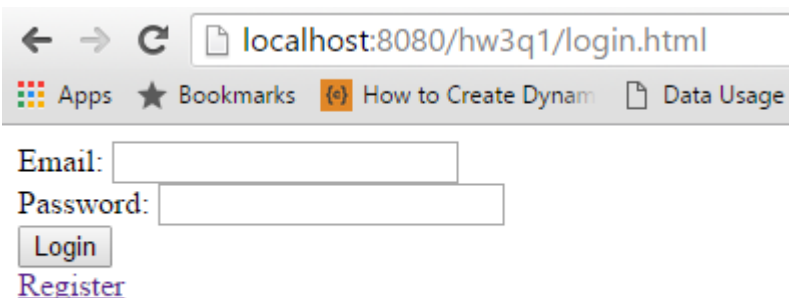Apps ★ Bookmarks ⟨◌⟩ How to Create Dynam ▯ Data Usage
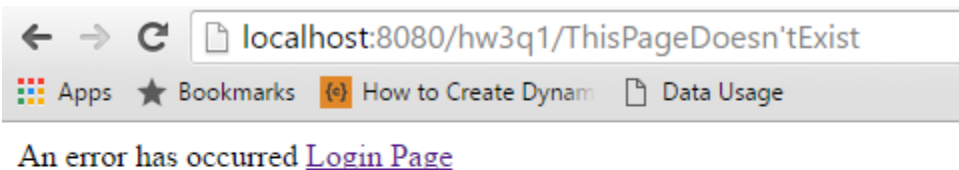
Email: [   ]
Password: [   ]
Login
Register

If an error occurs the user gets an error page with a useful link to the login page.

localhost:8080/hw3q1/ThisPageDoesn'tExist

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An error has occurred Login Page

Q2)

The session in this application is used to store the selected items of the user even between multiple requests. This is similar to an online shopping cart experience in which the user can add items to the cart and then go find additional items to add to the cart.

- With two tabs of Chrome with cookies enabled
    - The session was shared between both tabs. Having tab 1 select the first book and tab two select the second book ended up with both tabs having both books selected
- With two tabs of Chrome with cookies disabled
    - The session was not shared between tabs, each tab could make selections independently of the other. When clicking the link the session information was stored in the URI. Session was lost if manual URI entering occurred that modified or removed the Session ID.
- One tab Chrome one tab Microsoft Edge
    - The session regardless of cookie state was not shared between browsers. Each one could work independently.

On a side note, with the introduction of Windows 10 Internet Explorer is no longer offered by Microsoft in lieu of their new Web Presenter Microsoft Edge™.