

### **Part 1. Reading Assignment (Expression Language)**

JSP 2.0 introduced a shorthand language for evaluating and outputting the values of Java objects that are stored in standard locations. This expression language (EL) is one of the two important new features of JSP 2; the other is the ability to define custom tags with JSP syntax.

<https://web.archive.org/web/20190709230504/http://pdf.coreservlets.com/JSP-EL.pdf>

### **Part 2. Reading Assignment - ATTACHED**

The JavaServer Pages Standard Tag Library (JSTL) encapsulates core functionality common to many JSP applications. Instead of mixing tags from numerous vendors in your JSP applications, JSTL allows you to employ a single, standard set of tags. This standardization allows you to deploy your applications on any JSP container supporting JSTL and makes it more likely that the implementation of the tags is optimized. JSTL has tags such as iterators and conditionals for handling flow control, tags for manipulating XML documents, internationalization tags, tags for accessing databases using SQL, and commonly used functions.

### **Part 3. Programming Assignment**

Create a JSP page that uses at least 3 JSTL tags from each tag library group, i.e., 3 tags from Core Tag Lib, 3 tags from Formatting Tag Lib, etc. You could use random content on the JSP page.

<https://www.javatpoint.com/jstl>

### **Part 4. Reading Assignment (The JSP Page Directive)**

Chapter 12: Controlling the Structure of Generated Servlets: the JSP page Directive

<https://web.archive.org/web/20190406085410/http://pdf.coreservlets.com/JSP-page-Directive.pdf>

### **Part 5. Reading Assignment (JDBC) - ATTACHED**

JDBC provides a standard library for accessing relational databases. By using the JDBC API, you can access a wide variety of SQL databases with exactly the same Java syntax. It is important to note that although the JDBC API standardizes the approach for connecting to databases, the syntax for sending queries and committing transactions, and the data structure representing the result, JDBC does not attempt to standardize the SQL syntax. So, you can use any SQL extensions your database vendor supports. However, since most queries follow standard SQL syntax, using JDBC lets you change database hosts, ports, and even database vendors with minimal changes to your code.

### **Part 6. Programming Assignment**

Create an MVC application to browse movies and add new movies to the DB. (You may change/improve/simplify the views). For those of you who don't know how to create a database, we could create one on the server, and send you the Connection information. [Refer to the screenshots below]

### **Part 7. Programming Assignment**

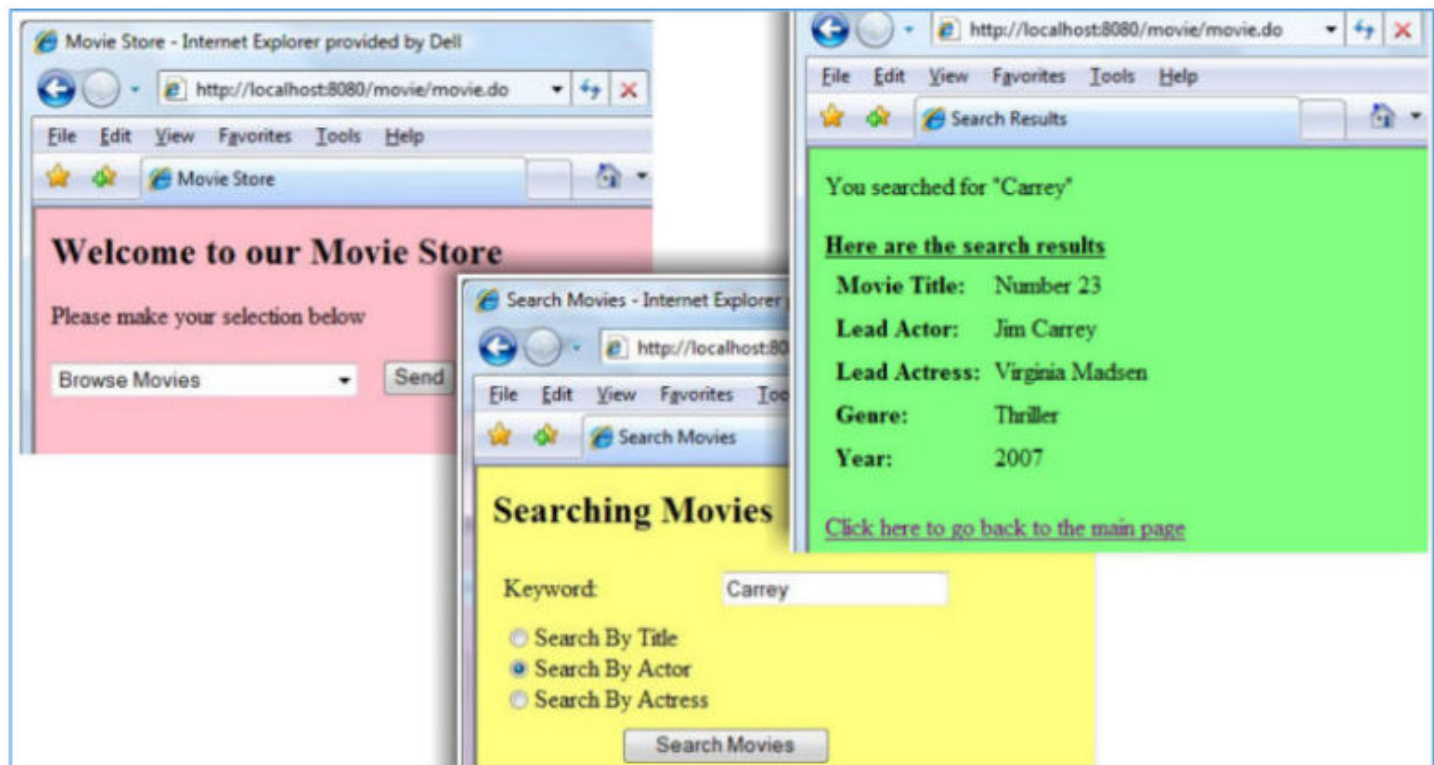
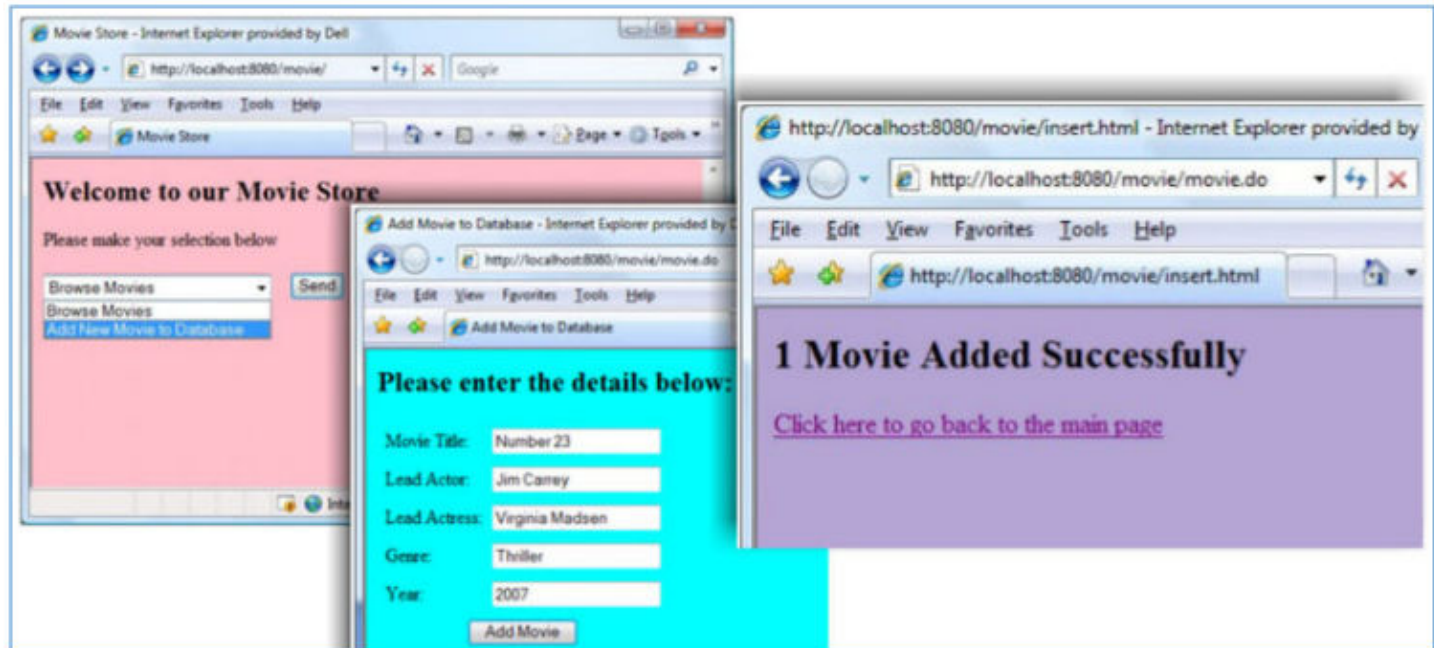
Create an MVC application and use PreparedStatement to enter the books to the database. [Refer to the screenshots below]

### **Part 8. Programming Assignment**

Create an MVC application. You will be using a session object to store and retrieve selected items from a simple shopping cart application. Shopping cart applications typically allow users to select items from a catalog and place them in a virtual shopping cart. When the user selects some items and presses the Add to Cart" button, the servlet will add the selected items to the session object and then retrieve all of the items currently in the session object and then display them in the browser. Removing an item from the shopping cart will be from the same servlet. Use URL-rewriting or hidden fields as necessary to use the same servlet for adding and removing items. [Refer to the screenshots below].

Database Name: moviedb  
Table Name: movies

Field Name	Data Type
title	varchar(80)
actor	varchar(30)
actress	varchar(30)
genre	varchar(20)
year	integer

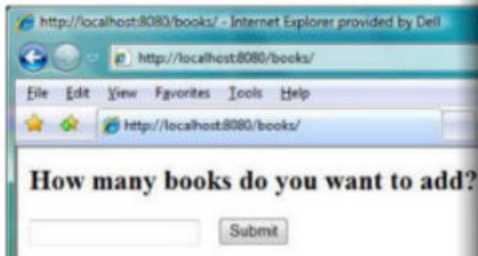


## SCREENSHOTS FOR PART 7

Database Name: booksdb  
Table Name: books

FieldName	DataType
isbn	varchar(12)
title	varchar(60)
authors	varchar(60)
price	float

1. Ask the user to enter number of books to be added to the booksdb



http://localhost:8080/books/ - Internet Explorer provided by Dell

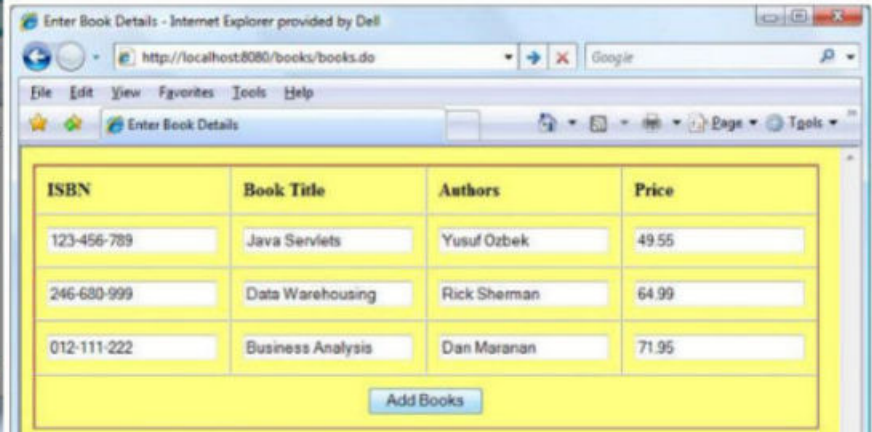
http://localhost:8080/books/

File Edit View Favorites Tools Help

http://localhost:8080/books/

**How many books do you want to add?**

2. Based on the number user entered in step 1, create the following form to allow multiple entries.



Enter Book Details - Internet Explorer provided by Dell


http://localhost:8080/books/books.do Google

File Edit View Favorites Tools Help

Enter Book Details

ISBN	Book Title	Authors	Price
<input type="text" value="123-456-789"/>	<input type="text" value="Java Servlets"/>	<input type="text" value="Yusuf Ozbek"/>	<input type="text" value="49.55"/>
<input type="text" value="246-680-999"/>	<input type="text" value="Data Warehousing"/>	<input type="text" value="Rick Sherman"/>	<input type="text" value="64.99"/>
<input type="text" value="012-111-222"/>	<input type="text" value="Business Analysis"/>	<input type="text" value="Dan Maranan"/>	<input type="text" value="71.95"/>

3. Now, insert the books to the booksdb using PreparedStatement



Books Added - Internet Explorer provided by Dell

http://localhost:8080/books/books.do Google

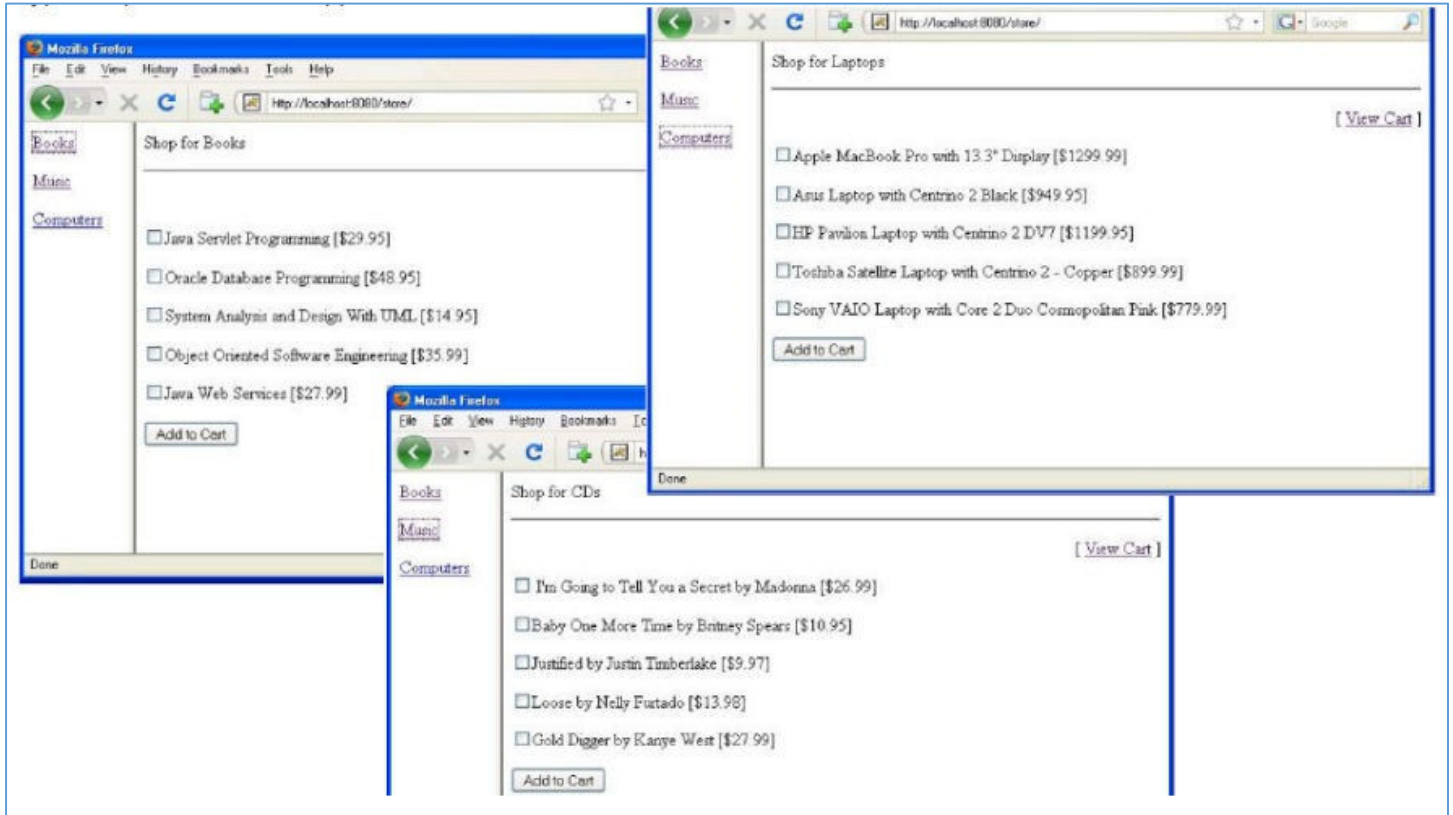
File Edit View Favorites Tools Help

Books Added

3 books added successfully

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## SCREENSHOTS FOR PART 8



If you select an item, then click on "Add to Cart", your servlet will retrieve the products selected, and then add to the session object.

