

# Web Apps and Spring Core MVC

## Lesson 3: Spring MVC Labs



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## Lesson 3: Spring MVC Lab

### Overview

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Each of the assignments below calls for you to create a simple Spring MVC web application version of the described program. Each application should consist of a landing page (i.e. index.jsp), a Controller to which data is submitted, and a response.jsp. All logic must reside in the Controller. The index.jsp must display the instructions to the user and a form for entering data. The response.jsp must show the result of running the application and have a link back to index.jsp. If there are input errors from index.jsp, the Controller must create an error message and return the error message to index.jsp.

### Lucky 7s Web Lab

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Convert your Lucky 7s Console Application to a Spring MVC Web Application.

### Factorizor Web Lab

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Convert your Factorizor Console Application to a Spring MVC Web Application.

### Interest Calculator Web Lab

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Convert your Interest Calculator Console Application to a Spring MVC Web Application.

### Flooring Calculator Web Lab

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Create a Spring MVC Web Application that does the following:

Ask the user to enter in a width, length, and the cost per 1 square foot unit of flooring. Have the program calculate how much it would cost to cover the area specified with the flooring. Also have the program calculate how much labor costs would be, given that the average flooring team can only put in 20 square feet of flooring per hour at a cost of \$86.00/hr with a 15-minute billing increment.

## Tip Calculator Web Lab

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Create a program which asks the user to enter in a dollar value and the tip percentage. Then print out the subtotal along with the total plus tip (grand total).

This is a simple program where you collect the value from the user, have the user enter in a tip value, add the tip to the total and print out the result. If the value the user enters is \$10.00 and the tip is 15%, then the total is \$10.15.

Output:

Amount: \$10.00

Tip %: 15

Tip: \$1.50

Total: \$11.50

## Unit Converter Web Lab

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Develop a simple program which asks the user to first pick a conversion type (temperature, currency, volume, mass, or some other unit type) and then asks the user for the source unit of measure (to convert from) and which unit of measure to convert it to. Lastly, ask the user to enter in a value which the program will convert to the target unit. For instance: the user specifies temperature and then specifies Celsius to Kelvins. They then enter in a value for Celsius and the program converts it to Kelvins and prints the result.

Conversion types and units of measure must be in drop down select controls.