# Internet Applications

Lab 1

#### Introduction

HTML 

Describe the general layout or the way in which content is displayed in a browser—all the static structure, organization, and content

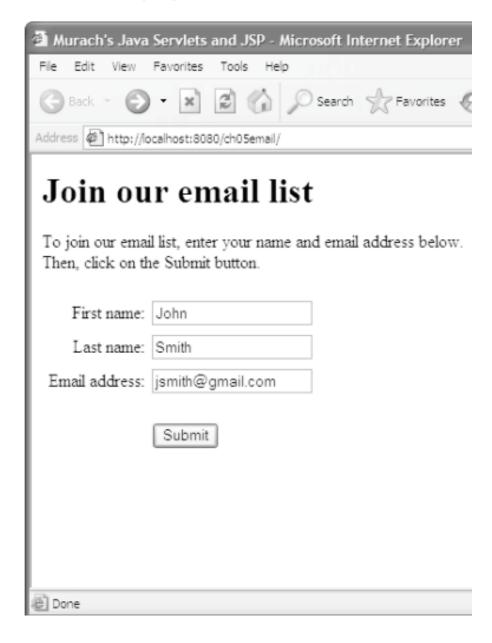
 HTML → Use "tags" to tell a browser how to display each element of the content.

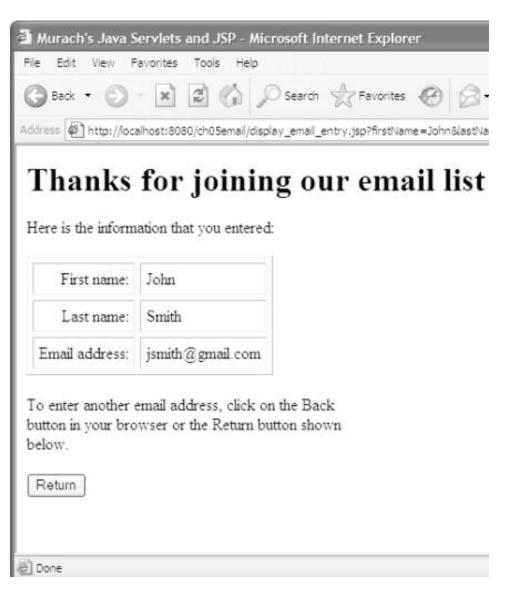
#### Introduction cont.

• Java Server Pages (JSP) → Describe a way in which web page content is **generated** and **displayed** in a browser.

- JSP → Consists of HTML tags and Java code together
  - Java Code: Generate Content
  - HTML tags : Display Content

## Email List Application





#### HTML Code

```
<html>
    <head>
        <title> Email List application</title>
    </head>
    <body>
        <h1>Join our email list</h1>
        To join our email list, enter your name and
                                                           Request
        email address below. <br>
                                                          Method:
        Then, click on the Submit button.
                                                          Get or Post
        <form action="show_email_entry.jsp" method="get">
             First name:
                     <input type="text" name="firstName">
                 Last name:
                     <input type="text" name="lastName">
                 Email address:
                     <input type="text" name="emailAddress">
                 </form>
    </body>
</html>
```

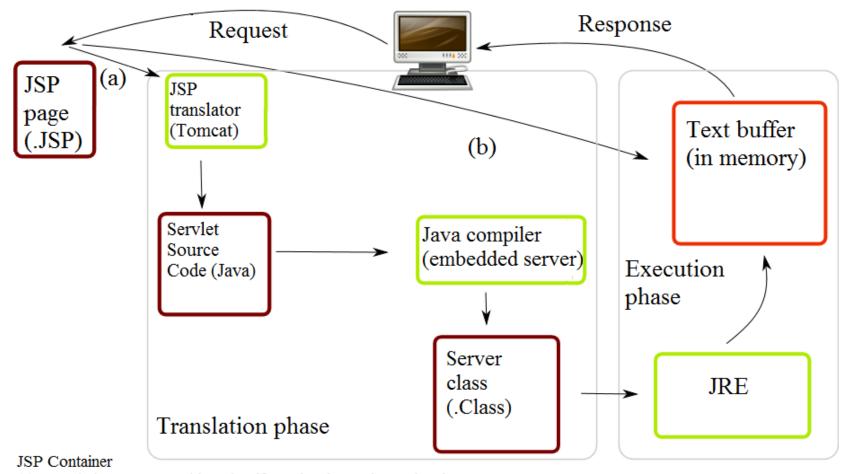
### JSP Code

```
<html>
    <head>
        <title>Email List application</title>
    </head>
                                                                     JSP
    <body>
        <ક
                                                                   Scriptlet
             String firstName = request.getParameter("firstName");
             firstName = firstName.toUpperCase();
             String lString emailAddress = request.getParameter("emailAddress");
             astName = request.getParameter("lastName");
         응>
        <h1>Thanks for joining our email list</h1>
        Here is the information that you entered:
        First name:
                 <\td><\t out.println(firstName); %>
                                                                       JSP
             Expressions
             Last name:
                 <%= lastName %>
             Email address:
                 <%= emailAddress %</td>
             To enter another email address, click on the Back <br>
        button in your browser or the Return button shown <br/> <br/>br>
        below.
         <form action="index.htm" method="post">
             <input type="submit" value="Return">
        </form>
    </body>
</html>
```

# Scriplets vs. Expressions

- JSP Scriptlet
  - Code block (;'s)
  - <% %>
- JSP Expression
  - Evaluates to a value
    - Basic type → cast to String
    - Object → call toString()
  - <%= %>

## JSP Life Cycle: How JSP Understand Java and HTML?



(a) Translation occurs at this point, if JSP has been changed or is new.

(b) If not, translation is skipped.