Javabean
JavaBean

- JavaBean
  - simply a class wrapping some data
Components

- Three components
  - default constructor
  - Private attributes
  - Getters/setters

- Naming convention
javaBean

package Info;
public class Applicant {
    // private attributes
    private String firstName=null;
    private String citizenship=null;
    ......

    // Setters and getters
    // Automatically generated by Eclipse
    // Menu Source -> Generate Setters/Getters

    public String getCitizenship() {return citizenship;}
    public void setCitizenship(String citizenship) {
        this.citizenship = citizenship;
    }
    ......
}

Welcome to the application webpage

Your Name

<form method="post" action="citi.jsp">
  First Name: <input type="text" name="firstName" />
  Last Name: <input type="text" name="lastName" />
  Middle Initial: <input type="text" name="middleName" />
  <input type="submit" value="Continue" />
</form>
Citi.jsp (→save.jsp)

- `<jsp:useBean id="info" class="info.PersonInfo" scope="session"/>
- `<jsp:setProperty name="info" property="firstName"/>
- `<jsp:setProperty name="info" property="lastName"/>
- `<jsp:setProperty name="info" property="middleName"/>

Or property="*"
Verify.jsp

- First Name: `<%= info.getFirstName()%>`
- Last Name: `<%= info.getLastName()%>`
- Citizenship: `<%= info.getCitizen()%>`
- Residence: `<%= info.getResidence()%>`
- Address: `<%= info.getStreet() + info.getCity() + info.getZip()%>`
Address.jsp: business logic

- If live in US, input state; otherwise, input country code

```<%  
    String residence = info.getResidence(); 
    if (residence.equalsIgnoreCase("US")) { 
      out.print("State < INPUT TYPE = \"TEXT\" NAME = \"state\" />"); 
    } 
    else 
    { 
      out.print(" Country Code <INPUT TYPE = \"TEXT\" NAME = \"countrycode\" />"); 
    } 
%>```
Problem

☐ Combine the logic with displaying
  - Address.jsp is responsible for both business logic and displaying web page
  - Consequence: source code looks messy and is hard to maintain

☐ Alternative
  - Insert an additional JSP/Servlet purely responsible for logic
<%  
    String residence = info.getResidence();  
    if (residence.equalsIgnoreCase("US")) {  
        // forward to address1.jsp  
    }  
    else {  
        // forward to address2.jsp  
    }  
%>
In summary

- \webapps\Example
- All the jsp pages
  - under \Example\n- Bean class
  - Under \Example\WEB-INF\classes