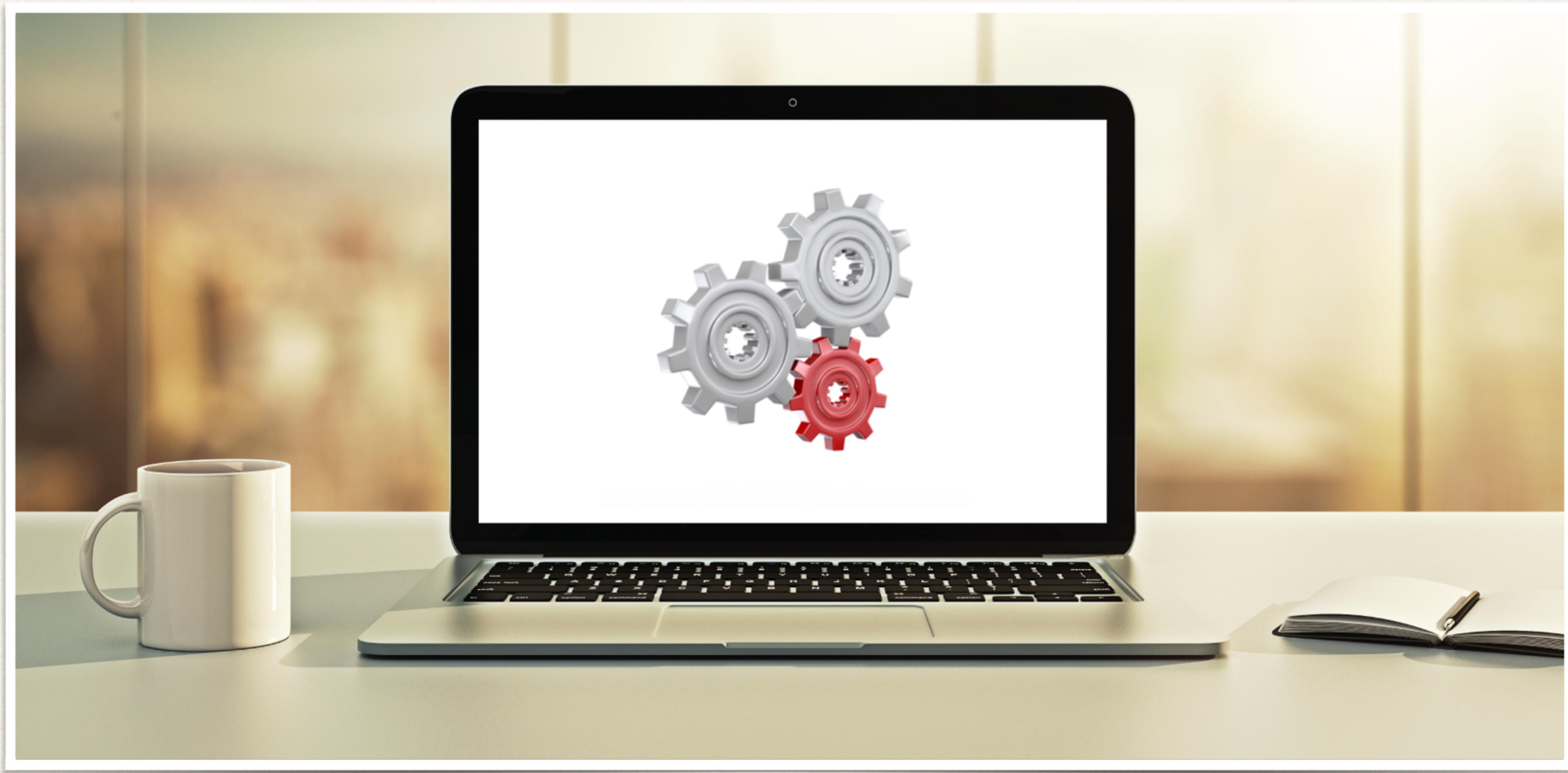


MVC with Servlets and JSP

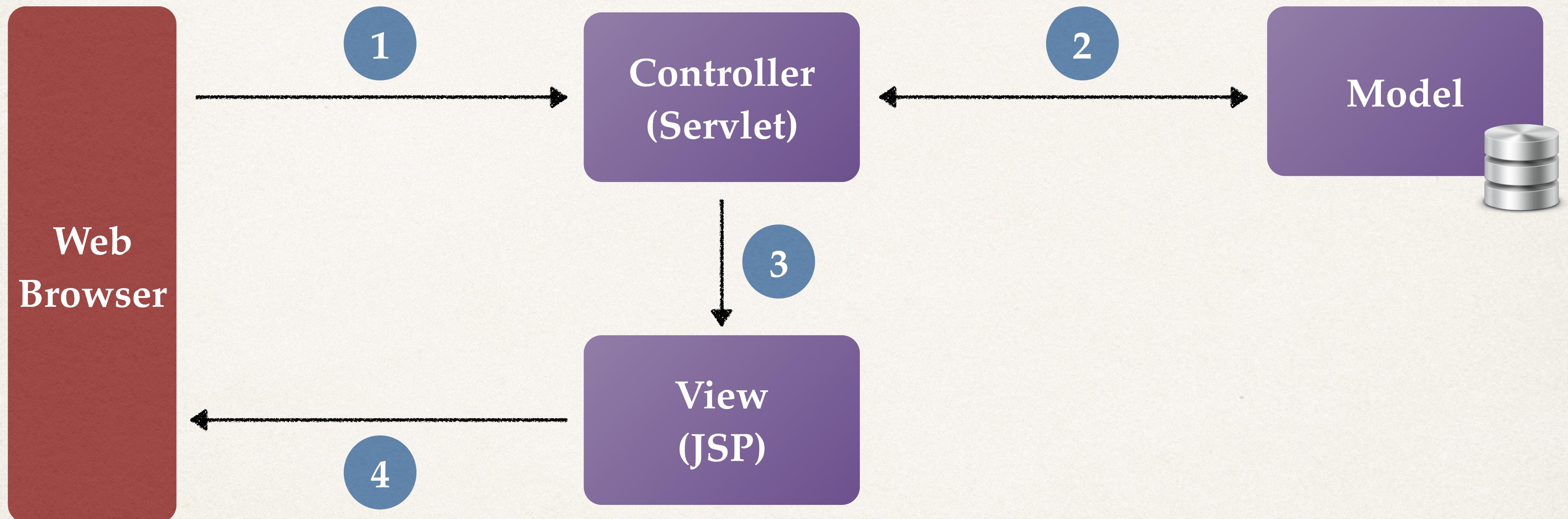


Best Practice



- Integrate Servlets and JSP together!
 - Servlet does the business logic
 - JSP handles the presentation view
- Model-View-Controller (MVC) Design Pattern

Model-View-Controller (MVC)



Benefits of MVC

- Minimizes HTML code in Servlet
 - no more: `out.println(...)` in Servlet code
- Minimize Java business logic in JSPs
 - no more large scriptlets in JSP code

Servlet Can Call a JSP

- Servlet can call JSP using a *request dispatcher*

```
// Step 1: get request dispatcher  
RequestDispatcher dispatcher =  
    request.getRequestDispatcher("/view_students.jsp");
```

```
// Step 2: forward to the JSP  
dispatcher.forward(request, response);
```

Sending Data to JSP

- Servlet can add data to request object

```
// Step 0: Add data
String[] students = {"Susan", "Anil", "Mohamed", "Trupti"};
request.setAttribute("student_list", students);
```

```
// Step 1: get request dispatcher
RequestDispatcher dispatcher =
    request.getRequestDispatcher("/view_students.jsp");
```

```
// Step 2: forward to the JSP
dispatcher.forward(request, response);
```

JSP page to view data

- JSP use JSTL to access data

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

<html><body>

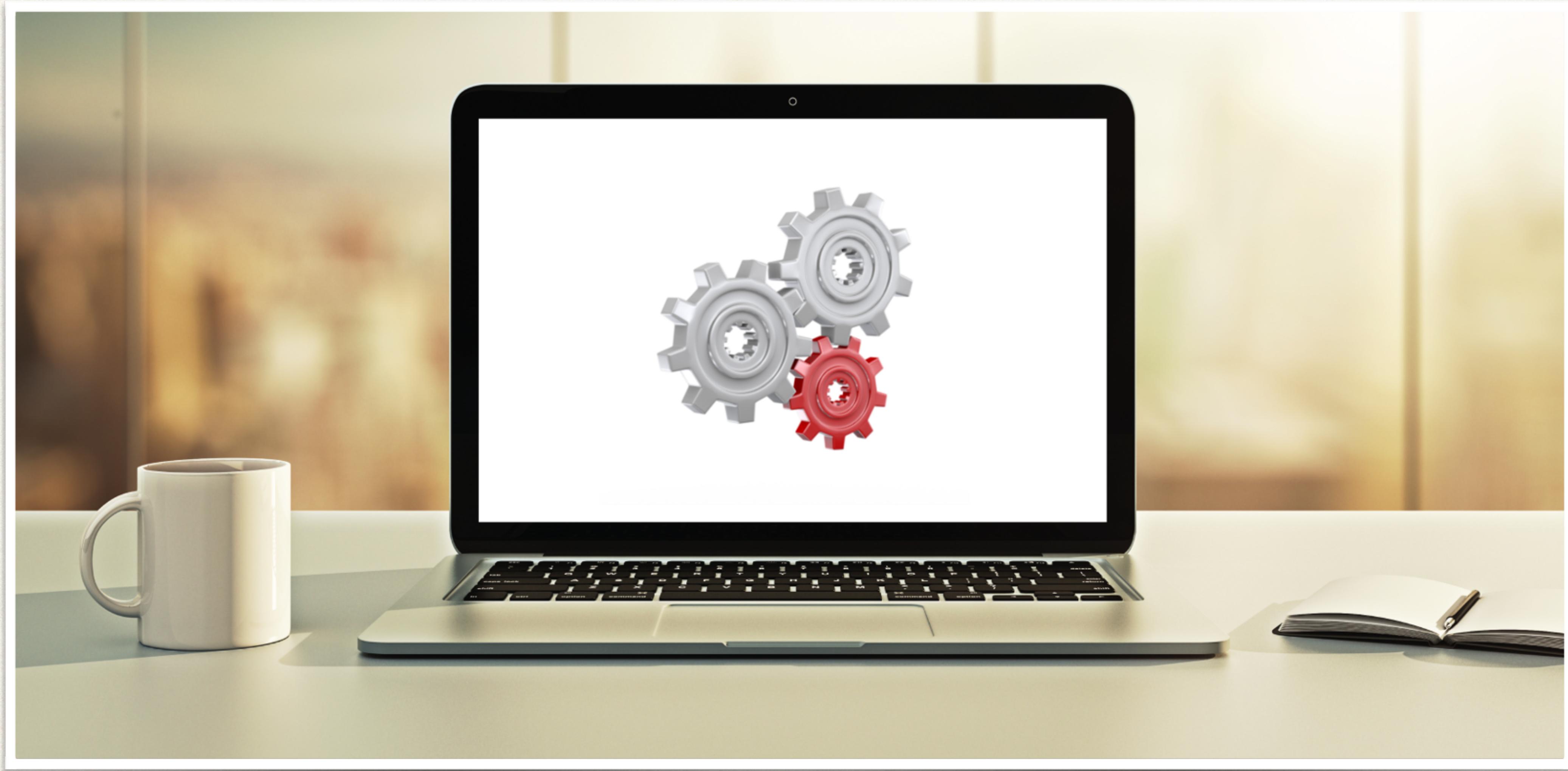
<c:forEach var="tempStudent" items="${student_list}">

${tempStudent} <br/>

</c:forEach>

</body></html>
```

MVC with Servlets and JSP



Model-View-Controller (MVC)

