Nima Memarzadeh mod_4_csd43

```
nimamemarzadeh@Nimas-MacBook-Pro Memarzadeh_mod_4_csd430 % cd bin
Using CATALINA_BASE:   /Users/nimamemarzadeh/Desktop/believue/serverside Dev/csd-430/module-4/Memarz
adeh_mod_4_csd430
Using CATALINA_HOME:   /Users/nimamemarzadeh/Desktop/believue/serverside Dev/csd-430/module-4/Memarz
adeh_mod_4_csd430
Using CATALINA_TMPDIR: /Users/nimamemarzadeh/Desktop/believue/serverside Dev/csd-430/module-4/Memarz
adeh_mod_4_csd430/temp
Using JRE_HOME:        /Library/Java/JavaVirtualMachines/jdk-24.jdk/Contents/Home
Using CLASSPATH:       /Users/nimamemarzadeh/Desktop/believue/serverside Dev/csd-430/module-4/Memarz
adeh_mod_4_csd430/bin/bootstrap.jar:/Users/nimamemarzadeh/Desktop/believue/serverside Dev/csd-430/mo
dule-4/Memarzadeh_mod_4_csd430/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
nimamemarzadeh@Nimas-MacBook-Pro bin %
```

Inception Scene Overview   ×   +

← → C   ⓘ localhost:8080/JavaBeanJSPApp/

Inception - Key Scenes

This table shows several major scenes from the movie **Inception**, including location, dream level, and emotional impact.

Field Descriptions:

- **Scene #:** Order of the scene
- **Location:** Where the scene occurs
- **Plot Highlight:** Key moment in the scene
- **Dream Level:** Depth of dream
- **Emotional Impact:** Viewer/character feeling

Scene #	Location	Plot Highlight	Dream Level	Emotional Impact
1	Paris	Ariadne folds the city	Level 1	Mind-bending
2	Hotel Dream	Gravity shifts in hallway fight	Level 2	Tense
3	Mountain Fortress	Final kick sequence	Level 3	Adrenaline-filled
4	Limbo	Dom reunites with Mal	Limbo	Emotional
5	Airport	Dom returns to his children	Reality?	Closure

```
webapps / JavaBeanJSPApp
  WEB-INF
    classes / scenes
      J  SceneBean.class
      J  SceneBean.java
    web.xml
  displayScenes.jsp
  styles.css
```

```java
package scenes;

import java.io.Serializable;

// JavaBean for storing individual scene information from the Inception movie
public class SceneBean implements Serializable {
    private static final long serialVersionUID = 1L; // Required for Serializable

    // Scene attributes
    private String sceneNumber;     // Identifier for the scene
    private String location;        // Where the scene takes place
    private String plotHighlight;   // Key moment in the scene
    private String dreamLevel;      // Dream depth level in the movie
    private String emotionalImpact; // Emotional effect of the scene

    // Default constructor required for JavaBeans
    public SceneBean() {}

    // Constructor with all fields
    public SceneBean(String sceneNumber, String location, String plotHighlight, String dreamLevel, String emotionalImpact) {
        this.sceneNumber = sceneNumber;
        this.location = location;
        this.plotHighlight = plotHighlight;
        this.dreamLevel = dreamLevel;
        this.emotionalImpact = emotionalImpact;
    }

    // Getter and setter methods for all properties
    public String getSceneNumber() { return sceneNumber; }
    public void setSceneNumber(String sceneNumber) { this.sceneNumber = sceneNumber; }

    public String getLocation() { return location; }
    public void setLocation(String location) { this.location = location; }

    public String getPlotHighlight() { return plotHighlight; }
    public void setPlotHighlight(String plotHighlight) { this.plotHighlight = plotHighlight; }

    public String getDreamLevel() { return dreamLevel; }
    public void setDreamLevel(String dreamLevel) { this.dreamLevel = dreamLevel; }

    public String getEmotionalImpact() { return emotionalImpact; }
    public void setEmotionalImpact(String emotionalImpact) { this.emotionalImpact = emotionalImpact; }
}
```

```jsp
<%@ page contentType="text/html;charset=UTF-8" language="java" %>

<%@ page import="java.util.*, scenes.SceneBean" %>

<%
    // Step 1: Create and populate the list of SceneBean objects
    List<SceneBean> scenes = new ArrayList<>();
    // Define scene data as a 2D array
    String[][] data = {
        {"1", "Paris", "Ariadne folds the city", "Level 1", "Mind-bending"},
        {"2", "Hotel Dream", "Gravity shifts in hallway fight", "Level 2", "Tense"},
        {"3", "Mountain Fortress", "Final kick sequence", "Level 3", "Adrenaline-filled"},
        {"4", "Limbo", "Dom reunites with Mal", "Limbo", "Emotional"},
        {"5", "Airport", "Dom returns to his children", "Reality?", "Closure"}
    };

    // Convert each data row into a SceneBean object
    for (int i = 0; i < data.length; i++) {
        SceneBean s = new SceneBean();
        s.setSceneNumber(data[i][0]);
        s.setLocation(data[i][1]);
        s.setPlotHighlight(data[i][2]);
        s.setDreamLevel(data[i][3]);
        s.setEmotionalImpact(data[i][4]);
        scenes.add(s);
    }
%>

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>Inception Scene Overview</title>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="styles.css"> <!-- External stylesheet for page formatting -->

</head>
<body>

<h1>Inception - Key Scenes</h1>
<p>This table shows several major scenes from the movie <strong>Inception</strong>, including location, dream level, and emotional impact.</p>
```

```jsp
<!-- Explanatory section for table fields -->
<h3>Field Descriptions:</h3>
<ul>
    <li><strong>Scene #:</strong> Order of the scene</li>
    <li><strong>Location:</strong> Where the scene occurs</li>
    <li><strong>Plot Highlight:</strong> Key moment in the scene</li>
    <li><strong>Dream Level:</strong> Depth of dream</li>
    <li><strong>Emotional Impact:</strong> Viewer/character feeling</li>
</ul>

<!-- Table to display the scene data -->
<table>
    <tr>
        <th>Scene #</th>
        <th>Location</th>
        <th>Plot Highlight</th>
        <th>Dream Level</th>
        <th>Emotional Impact</th>
    </tr>

<%
    // Loop through each scene and display its properties
    for (SceneBean s : scenes) {
        // Set the current bean into request scope so we can use jsp:getProperty
        request.setAttribute("bean", s);
%>
    <jsp:useBean id="bean" class="scenes.SceneBean" scope="request" />
    <tr>
        <td><jsp:getProperty name="bean" property="sceneNumber" /></td>
        <td><jsp:getProperty name="bean" property="location" /></td>
        <td><jsp:getProperty name="bean" property="plotHighlight" /></td>
        <td><jsp:getProperty name="bean" property="dreamLevel" /></td>
        <td><jsp:getProperty name="bean" property="emotionalImpact" /></td>
    </tr>
<%
    }
%>
</table>

</body>
</html>
```