

EXPERIMENT NO. 06

Title: Date Validation using Struts Framework.

Outcome: Students will be able to perform Date Validation using Struts Framework

Theory:

Step-by-step Struts 2 example you can run in Eclipse + Tomcat (Java 8)

Software Requirements

- Eclipse IDE (Enterprise Edition)
 - Apache Tomcat 9.x
 - Struts 2.5.x libraries
 - Java JDK 1.8
-

Step 1: Create New Dynamic Web Project

Project Name: DateValidationDemo

Target Runtime: Apache Tomcat 9

Click Finish

Step 2: Add Struts Libraries

Copy these JARs into your project:

WebContent/WEB-INF/lib/

Required JARs:

struts2-core-2.5.x.jar
xwork-core-2.5.x.jar
commons-fileupload-1.x.jar
commons-io-2.x.jar
commons-lang3-3.x.jar
commons-logging-1.x.jar
ognl-3.x.jar
freemarker-2.x.jar
javassist-3.x.jar
log4j-api-2.x.jar
log4j-core-2.x.jar

Step 3: Project Structure

DateValidationDemo/

 └ src/
 | └ com/example/action/
 | └ DateAction.java

```
├─ WebContent/
|   ├─ WEB-INF/
|   |   ├─ lib/
|   |   ├─ struts.xml
|   |   └─ web.xml
|   ├─ index.jsp
|   └─ success.jsp
```

🧠 Step 4: Action Class

File: src/com/example/action/DateAction.java

```
package com.example.action;
```

```
import com.opensymphony.xwork2.ActionSupport;
import java.text.ParseException;
import java.text.SimpleDateFormat;
```

```
public class DateAction extends ActionSupport {
    private String date;
```

```
    public String getDate() { return date; }
    public void setDate(String date) { this.date = date; }
```

```
@Override
public String execute() {
    return SUCCESS;
}
```

```
@Override
public void validate() {
    if (date == null || date.trim().isEmpty()) {
        addFieldError("date", "Date is required!");
    } else {
        SimpleDateFormat sdf = new SimpleDateFormat("dd-MM-yyyy");
        sdf.setLenient(false);
        try {
            sdf.parse(date);
        } catch (ParseException e) {
            addFieldError("date", "Invalid date format! Use dd-MM-yyyy");
        }
    }
}
```

```
    }  
}
```

Step 5: Configuration – struts.xml

File: WebContent/WEB-INF/struts.xml

```
<?xml version="1.0" encoding="UTF-8"?>  
<!DOCTYPE struts PUBLIC  
        "-//Apache Software Foundation//DTD Struts Configuration 2.5//EN"  
        "http://struts.apache.org/dtds/struts-2.5.dtd">  
  
<struts>  
    <package name="default" namespace="/" extends="struts-default">  
        <action name="validateDate" class="com.example.action.DateAction">  
            <result name="success">/success.jsp</result>  
            <result name="input">/index.jsp</result>  
        </action>  
    </package>  
</struts>
```

Step 6: Configuration – web.xml

File: WebContent/WEB-INF/web.xml

```
<?xml version="1.0" encoding="UTF-8"?>  
<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"  
         xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
         xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee  
                           http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd"  
         version="3.1">  
  
    <display-name>Date Validation Demo</display-name>  
  
    <filter>  
        <filter-name>struts2</filter-name>  
        <filter-  
            class>org.apache.struts2.dispatcher.filter.StrutsPrepareAndExecuteFilter</filter-class>  
        </filter>  
  
    <filter-mapping>  
        <filter-name>struts2</filter-name>  
        <url-pattern>/*</url-pattern>  
    </filter-mapping>
```

```
<welcome-file-list>
    <welcome-file>index.jsp</welcome-file>
</welcome-file-list>
</web-app>
```

Step 7: Create JSP Pages

index.jsp

```
<%@ taglib prefix="s" uri="/struts-tags" %>
<html>
<head>
    <title>Date Validation</title>
</head>
<body>
    <h2>Enter Date for Validation</h2>

    <s:form action="validateDate" method="post">
        <s:textfield name="date" label="Enter Date (dd-MM-yyyy)" />
        <s:submit value="Validate" />
    </s:form>

    <s:fielderror fieldName="date" />
</body>
</html>
```

success.jsp

```
<%@ taglib prefix="s" uri="/struts-tags" %>
<html>
<head><title>Validation Success</title></head>
<body>
    <h2>  Date Validation Successful!</h2>
    <p>You entered: <s:property value="date"/></p>
</body>
</html>
```

Step 8: Run the Application

1. Right-click project → **Run As** → **Run on Server**

2. Go

to:

👉 <http://localhost:8080/DateValidationDemo/>

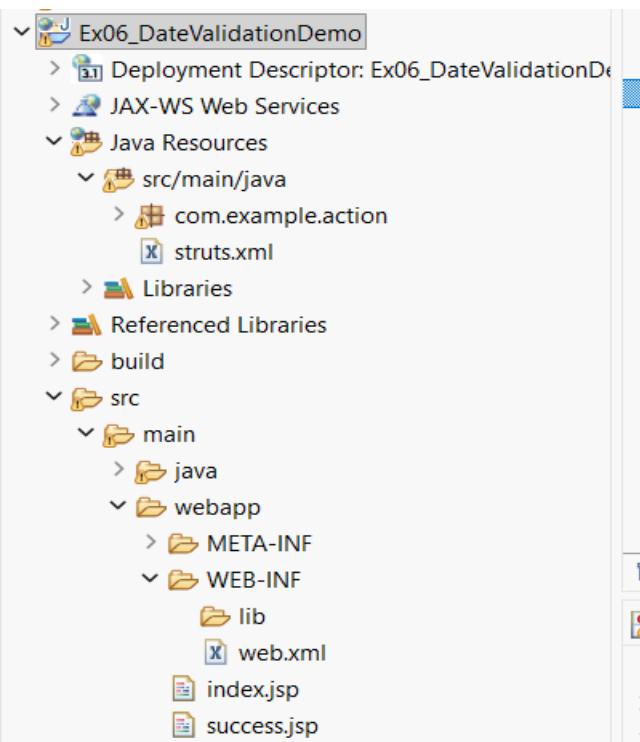
3. Try inputs:

- 12-05-2025 → Success
-

-  2025/05/12 → “Invalid date format!”

Expected Output

Input	Output
12-05-2025	Success page
12/05/2025	Error: Invalid date format
(empty)	Error: Date is required



OUTPUT :



The screenshot shows a web browser window with the URL 'localhost:8080/exp_06/'. The page title is 'Enter Date for Validation'. The form contains a single input field with the placeholder 'Enter Date (dd-MM-yyyy):' and a 'Validate' button below it.

← → ⌂ ⓘ localhost:8080/exp_06/validateDate;jsessionid=A86E25B46EB18F28F0B5B2534CF2C182

Date Validation Successful!

You entered: 02-03-2006

← → ⌂ ⓘ localhost:8080/exp_06/validateDate;jsessionid=A86E25B46EB18F28F0B5B2534CF2C182

Enter Date for Validation

Invalid date format! Use dd-MM-yyyy

Enter Date (dd-MM-yyyy):

- Invalid date format! Use dd-MM-yyyy

Conclusion : Thus, I have Successfully created a web application using **Struts 2** that validates the **Date field** entered by the user and displays appropriate error messages