JSF - EXPRESSION LANGUAGE

http://www.tutorialspoint.com/jsf/jsf_expression_language.htm

JSF provides a rich expression language. We can write normal operations using #{operation-expression} notation. Some of the advantages of JSF Expression languages are following.

- Can reference bean properties where bean can be a object stored in request, session or application scope or is a managed bean.
- Provides easy access to elements of a collection which can be a list, map or an array.
- Provides easy access to predefined objects such as request.
- Arithmetic, logical, relational operations can be done using expression language.
- Automatic type conversion.
- Shows missing values as empty strings instead of NullPointerException.

Example Application

Let us create a test JSF application to test expression language.

Step	Description
1	Create a project with a name *helloworld* under a package *com.tutorialspoint.test* as explained in the *JSF - First Application* chapter.
8	Modify *UserData.java* under package *com.tutorialspoint.test* as explained below.
9	Modify *home.xhtml* as explained below. Keep rest of the files unchanged.
10	Compile and run the application to make sure business logic is working as per the requirements.
11	Finally, build the application in the form of war file and deploy it in Apache Tomcat Webserver.
12	Launch your web application using appropriate URL as explained below in the last step.

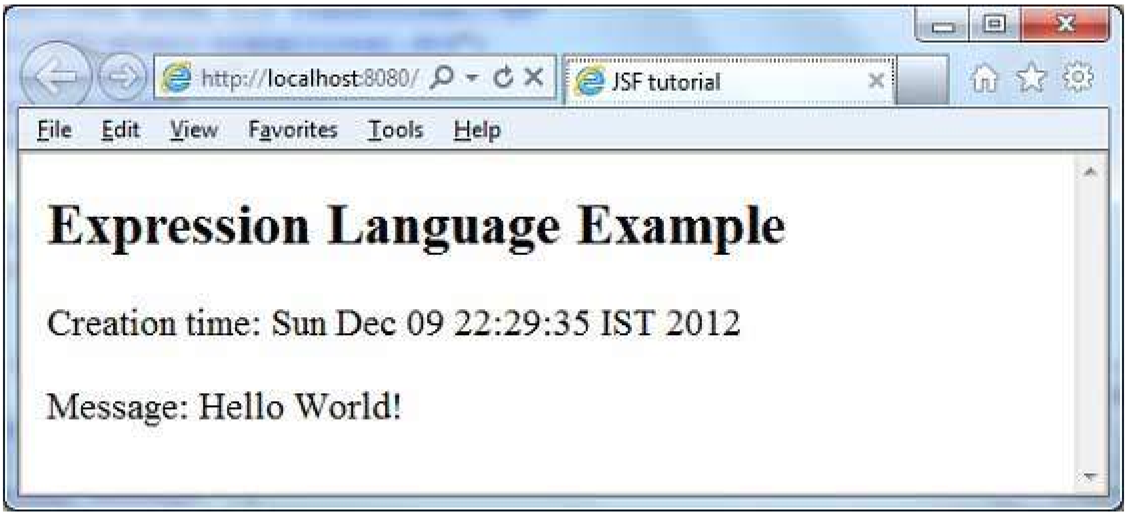
UserData.java

```
package com.tutorialspoint.test;

import java.io.Serializable;
import java.util.Date;

import javax.faces.bean.ManagedBean;
import javax.faces.bean.SessionScoped;

@ManagedBean(name = "userData", eager = true)
@SessionScoped
public class UserData implements Serializable {

private static final long serialVersionUID = 1L;

   private Date createTime = new Date();
   private String message = "Hello World!";

   public Date getCreateTime() {
      return(createTime);
   }
   public String getMessage() {
      return(message);
   }
}
```

home.xhtml

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
   xmlns:f="http://java.sun.com/jsf/core"
   xmlns:h="http://java.sun.com/jsf/html">
   <h:head>
      <title>JSF Tutorial!</title>
   </h:head>
   <h2>Expression Language Example</h2>
   Creation time:
   <h:outputText value="#{userData.createTime}"/>
   <br/><br/>Message:
   <h:outputText value="#{userData.message}"/>
   </h:body>
</html>
```

Once you are ready with all the changes done, let us compile and run the application as we did in JSF - First Application chapter. If everything is fine with your application, this will produce following result:



Expression Language Example

Creation time: Sun Dec 09 22:29:35 IST 2012

Message: Hello World!