Struts

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Introduction

- Struts is a Standard for developing Open source Web Applications.
- Struts is based on MVC (Model View Controller) framework
- It is used to build Web applications using Servlet and JSP.

Features:

- Open Source
- Encourages good design practice and modeling.
- Flexible and extensible
- Large user community
- Feature-rich
- Easy to learn and use

Why Struts?

- <u>Struts Leverage 'ready to use' framework objects through xml</u> <u>configuration files</u>
- Struts has its own set of custom tag libraries.
- They also support utility classes.
- Integrates Well with J2EE.
- Good tablib Support.
- Works with existing web Apps.
- Unified Error Handling Programmatically and Declaratively.

Struts:MVC based Architecture

- The 3 major components in Struts are:
 o Controller:Handles requests and responses.
 o Java Server Pages or any other presentation
 - technology(View).
 - o Application Business Logic (Model).

Ctd..

- Struts is focused on Controller.
- ActionServlet,Action,ActionForm,Config.xml
- It is Model and View independent

Struts Architecture



Configuration File:

- Struts has a Configuration File "struts-config.xml" which contains "Action Mappings".
- The action mappings also determines forwarding and navigation depending the outcome of the Actions.

Struts-config.xml

```
<struts-config>
<!..Form Beans Definition>
<form-beans>
<action>
   path = "/Login "
  type = ""
   name = "LoginForm "
   scope = "request"
  validate = "true"
   input = "/pages/Login.jsp "
<forward name = "success" path = "success.jsp"
<forward name = "failure" path = "failure.jsp"
</action>
</action-mappings>
 </struts-config>
```

View

- JSP Pages
- Uses Stuts to populate the forms. They get the properties from the view state javabean that has been put in the request by the controller

Conclusion

- Struts is Very robust and real world tested.
- It is very powerful.
- Has lots of advanced features.

Refernces

- [1] Struts tutorial by Benmira free <u>http://benmira.free.fr/en/j2ee/struts3.htm</u>
- [2]Implementing MVC Architecture Using Struts

<u>http://www.oracle.com/technology/sample_c</u> <u>ode/tech/java/j2ee/jintdemo/tutorials/Struts.</u> <u>html</u>