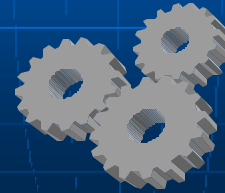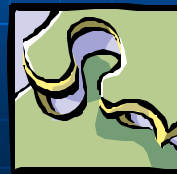# Struts

Strut Your Stuff!

What Is Struts?

- An extension to the standard Java Server Environment
- A web application framework
- A collection of useful JSP tags

An Extension

An Extension

- Works with your existing applications
- You can use all of the Struts framework, or just a few pieces
- Not all parts of your application need to use the Struts framework
- Easy to install.

A Framework

A Framework

- Implements a Model / Control / View architecture

Views   **Controller**   **Model**

A Framework

- The ActionServlet maps requests to their corresponding Actions
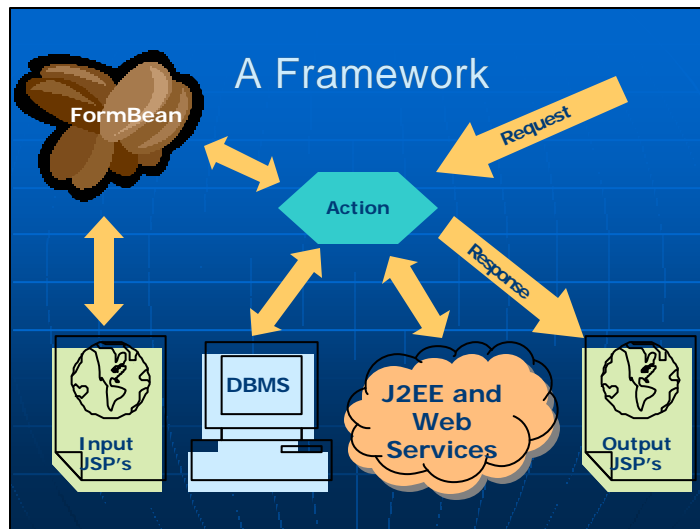

A Framework

- Actions collect input using FormBean's and Java Server Pages (JSP's)
- Value's from JSP form's are used to set the properties of the FormBean's
- FormBeans validate input based on the data type
- Actions validate input based on application model and business logic

A Framework

- Errors are recorded in an application wide error reporting system
- Errors may be displayed on JSP pages using a custom <errors> tag
- Web client is sent back to the JSP form until the data is validated
- User can cancel the action at anytime

A Framework

- Actions interact with J2EE, web services, and DBMS
- Can use the full power of J2SE
- JSP's don't contain any business logic
- Actions display their output using Java Server Page's
- Forward to different JSP's based on the result of the action performed

A Framework

A Collection of JSP Tags

A Collection of JSP Tags

Struts defines collections of JSP tags for handling different tasks

- bean tags
- html tags
- logic tags
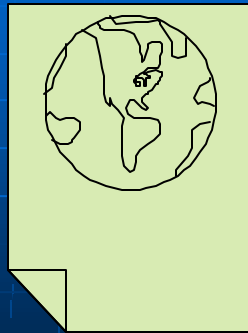- template tags

A Collection of JSP Tags

Bean Tag Library
- Help to define new beans from different sources
- Render bean, or bean properties, to the output response

A Collection of JSP Tags

HTML Tag Library
- Help create dynamic HTML user interfaces
- Support mapping form inputs to FormBeans
- Internationalization and regionalization

A Collection of JSP Tags

Logic Tag Library
- Conditional code generation
- Collection iteration
- Application flow management

A Collection of JSP Tags

Template Tag Library
- Used for creating dynamic JSP templates
- Change layout and content across multiple pages

Where Is Struts Going?

Where Is Struts Going?

- Tag support for XML and XSLT
- Native support for web services
- New input form elements (grid inputs, standard select input population)
- Support for multi-part, "Wizard" style input forms
- Much already available in add-ons

Get Strutting!

Get Strutting!

Official Homepage:

- http://jakarta.apache.org/struts
- download Struts libraries
- Javadoc, getting started guide, references, resource lists, add-ons

Struts Forum

- http://www.jguru.com/faq/home.jsp?topic=Struts