## Struts 2 - Tiles 2 Integration

- Tiles Framework is mainly a Layout design framework which allows you to centralize the web page layouts or templates, text formats, styles required etc.
- Tiles Framework is a separate Framework and is not a part of Struts 2 Framework.
- You have to explicitly integrate Tiles Framework with Struts2.x Framework.
- When you want to use Tiles Framework with Struts 2, you must explicitly integrate Tiles Framework with Struts 2 by writing the following <listener> in web.xml.

```
<listener>
     <listener-class>org.apache.struts2.tiles.StrutsTilesListener</listener-class>
</listener>
```

- Specify the following <context-param> in web.xml

```
<context-param>
        <param-name>tilesDefinitions</param-name>
        <param-value>/WEB-INF/tiles.xml</param-value>
</context-param>
```

<u>Sample Code:</u>

```
public class StrutsTilesListener imp ServletContextListener{
public void contextInitialized(ServletContextEvent e){
ServletContext sc=e.getServletContext();
String xml=sc.getInitParameter("tilesDefinitions");
if(xml!=null){
        // Read the tiles definitions
        // Creates the Tiles Factory.
}
}
}
```

- In the above <context-param> tag , one xml document is specified:
  - tiles.xml

## tiles.xml
- It should be placed under WEB-INF folder.
- It contains tiles definitions.