WSDL Components

**WSDL Message :** Message is the abstract definition of data exchanged between web service provider and consumer. Each web service has two messages : input message and output message. Input describes the parameters for the web service and the output describes the return data from the web service.

<message name="getTermRequest">  
  <part name="term" type="xs:string"/>  
</message>  
  
<message name="getTermResponse">  
  <part name="value" type="xs:string"/>  
</message>

**WSDL PortType :** PortType is the abstract set of named operations/methods mapped to one or more end points.

<portType name="glossaryTerms">  
  <operation name="getTerm">  
    <input message="getTermRequest"/>  
    <output message="getTermResponse"/>  
  </operation>  
</portType>

**WSDL Message and PortType**

<message name="getTermRequest">  
  <part name="term" type="xs:string"/>  
</message>  
  
<message name="getTermResponse">  
  <part name="value" type="xs:string"/>  
</message>  
  
<portType name="glossaryTerms">  
  <operation name="getTerm">  
    <input message="getTermRequest"/>  
    <output message="getTermResponse"/>  
  </operation>  
</portType>

**WSDL Bindings : Binding is the concrete protocol and data formats for the operations and messages defined for a particular portType.**

<message name="getTermRequest">  
  <part name="term" type="xs:string"/>  
</message>  
  
<message name="getTermResponse">  
  <part name="value" type="xs:string"/>  
</message>

**For Example - Message**

public String getInfo(String empId) {

…..;

}

<message name="getInfoRequest">  
  <part name="empId" type="xsd:string"/>  
</message>  
  
<message name="getInfoResponse">  
  <part name="value" type="xsd:string"/>  
</message>

**PORTType**  
  
<portType name="glossaryTerms">  
  <operation name="getTerm">  
    <input message="getTermRequest"/>  
    <output message="getTermResponse"/>  
  </operation>  
</portType>

**For Example - PortType**

public String getInfo(String empId) {

…..;

}

<portType name="getInfo\_PortType">  
  <operation name="getInfo">  
    <input message="getInfoRequest"/>  
    <output message="getInfoResponse"/>  
  </operation>  
</portType>

**Binding**  
<binding name="b1" type="glossaryTerms">  
   <soap:binding style="document"  
   transport="http://schemas.xmlsoap.org/soap/http" />  
   <operation>  
     <soap:operation soapAction="http://example.com/getTerm"/>  
     <input><soap:body use="literal"/></input>  
     <output><soap:body use="literal"/></output>  
  </operation>  
</binding>

**For Example - Binding**

public String getInfo(String empId) {

…..;

}

<binding name="b1" type="getInfo\_PortType">  
   <soap:binding style="document"  
   transport="http://schemas.xmlsoap.org/soap/http" />  
   <operation>  
     <soap:operation soapAction="http://example.com/getInfo"/>  
     <input>

<soap:body use="literal"/>

</input>

      <output>

<soap:body use="literal"/>

</output>

  </operation>  
</binding>

**WSDL Service : Service is a collection of end points encompassing service definition.**

<service name="Hello\_Service">

<documentation>WSDL File for HelloService</documentation>

<port name="Hello\_Port" binding="tns:Hello\_Binding">

<soap:address location="http://www.examples.com/SayHello/">

</port>

</service>

**PORT** : A port defines an individual end point by specifying the single address for a binding. The port element has two attributes: *name* and *binding.* Binding provides information about what protocol is being used to transfer portyType operations.