Multiple Fault in WSDL

There can be multiple faults in an operations in WSDL as it is clear from the WSDL Schema given below.

<xs:complexType name="tBindingOperation" >

<xs:complexContent>

<xs:extension base="wsdl:tExtensibleDocumented" >

<xs:sequence>

<xs:element name="input" type="wsdl:tBindingOperationMessage" minOccurs="0" />

<xs:element name="output" type="wsdl:tBindingOperationMessage" minOccurs="0" />

**<xs:element name="fault" type="wsdl:tBindingOperationFault" minOccurs="0" maxOccurs="unbounded" />**

</xs:sequence>

<xs:attribute name="name" type="xs:NCName" use="required" />

</xs:extension>

</xs:complexContent>

</xs:complexType>

There will be only one Fault in SOAP response XML. The Fault schema in the soap XML is given below.

<xs:element name="Fault" type="tns:Fault" />

<xs:complexType name="Fault" final="extension" >

<xs:annotation>

<xs:documentation>

Fault reporting structure

</xs:documentation>

</xs:annotation>

<xs:sequence>

<xs:element name="faultcode" type="xs:QName" />

<xs:element name="faultstring" type="xs:string" />

<xs:element name="faultactor" type="xs:anyURI" minOccurs="0" />

<xs:element name="detail" type="tns:detail" minOccurs="0" />

</xs:sequence>

</xs:complexType>

<xs:complexType name="detail">

<xs:sequence>

<xs:any namespace="##any" minOccurs="0" maxOccurs="unbounded" processContents="lax" />

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax" />

</xs:complexType>

The SOAP Fault Element

The optional SOAP Fault element is used to indicate error messages.

The SOAP Fault element holds errors and status information for a SOAP message.

If a Fault element is present, it must appear as a child element of the Body element. A Fault element can only appear once in a SOAP message.

The SOAP Fault element has the following sub elements:

|  |  |
| --- | --- |
| **Sub Element** | **Description** |
| <faultcode> | A code for identifying the fault |
| <faultstring> | A human readable explanation of the fault |
| <faultactor> | Information about who caused the fault to happen |
| <detail> | Holds application specific error information related to the Body element |

SOAP Fault Codes

The faultcode values defined below must be used in the faultcode element when describing faults:

|  |  |
| --- | --- |
| **Error** | **Description** |
| VersionMismatch | Found an invalid namespace for the SOAP Envelope element |
| MustUnderstand | An immediate child element of the Header element, with the mustUnderstand attribute set to "1", was not understood |
| Client | The message was incorrectly formed or contained incorrect information |
| Server | There was a problem with the server so the message could not proceed |