

Les services web SOAP

Exercice 1 :

Compléter le fichier WSDL suivant de manière que les opérations qu'il fournit correspondent aux méthodes suivantes :

- float div(int x, int y)
- int mul(int a, int b)
- String echo(String s)

Le service doit être disponible à l'adresse : <http://www.swsbook.com/theService>.

```
<?xml version="1.0" encoding="UTF-8"?>
<definitions name="CompService" targetNamespace="urn:Foo"
xmlns:tns="urn:Foo"
xmlns="http://schemas.xmlsoap.org/wsdl/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/">
<types/>
<message name="_____">
  <part name="parameter_1" type="xsd:integer"/>
  <part name="parameter_2" type="_____">/>
</message>
<message name="_____">
  <part name="par_1" type="_____">/>
  <part name="par_2" type="_____">/>
</message>
<message name="_____">
  <part name="echoRequestIn" type="_____">/>
</message>
<message name="_____">
  <part name="resultdiv" type="_____">/>
</message>
<message name="_____">
  <part name="resultmul" type="_____">/>
</message>
<message name="_____">
  <part name="resultecho" type="_____">/>
</message>
<portType name="CompIF">
  <operation name="div">
    <input message="_____">/>
    <output message="_____">/>
  </operation>
  <operation name="mul">
    <input message="_____">/>
    <output message="_____">/>
  </operation>
  <operation name="echo">
    <input message="_____">/>
    <output message="_____">/>
  </operation>
</portType>
<binding name="CompIFBinding" type="tns:CompIF">
  <operation name="mul">
    <input>
      <soap:body encodingStyle=http://schemas.xmlsoap.org/soap/encoding/
use="encoded" namespace="urn:Foo"/>
    </input>
```

```
<output>
  <soap:body
    encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
    use="encoded" namespace="urn:Foo"/>
</output>
<soap:operation soapAction=""/>
</operation>
<soap:binding transport="http://schemas.xmlsoap.org/soap/http" style="rpc"/>
</binding>
<service name="CompService">
  <port name="CompIFPort" binding="tns:CompIFBinding">
    <soap:address location="_____"/>
  </port>
</service>
</definitions>
```

Exercice 2 :

Soit le fichier WSDL suivant d'un service web, proposer une requête et une réponse SOAP pour l'opération GetQuote du portType StockQuoteSoap.

```
<wsdl:definitions targetNamespace="http://www.webserviceX.NET/"
  xmlns:http="http://schemas.xmlsoap.org/wsdl/http/"
  xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
  xmlns:s="http://www.w3.org/2001/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
  xmlns:tm="http://microsoft.com/wsdl/mime/textMatching/"
  xmlns:tns="http://www.webserviceX.NET/"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">

  <wsdl:types>
    <s:schema elementFormDefault="qualified"
      targetNamespace="http://www.webserviceX.NET/">
      <s:element name="GetQuote">
        <s:complexType>
          <s:sequence>
            <s:element maxOccurs="1" minOccurs="0" name="symbol" type="s:string"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="GetQuoteResponse">
        <s:complexType>
          <s:sequence>
            <s:element maxOccurs="1" minOccurs="0" name="GetQuoteResult"
              type="s:string"/>
          </s:sequence>
        </s:complexType>
      </s:element>
      <s:element name="string" nillable="true" type="s:string"/>
    </s:schema>
  </wsdl:types>

  <wsdl:message name="GetQuoteSoapIn">
    <wsdl:part element="tns:GetQuote" name="parameters"/>
  </wsdl:message>
  <wsdl:message name="GetQuoteSoapOut">
    <wsdl:part element="tns:GetQuoteResponse" name="parameters"/>
  </wsdl:message>
```

```
<wsdl:portType name="StockQuoteSoap">
  <wsdl:operation name="GetQuote">
    <documentation xmlns="http://schemas.xmlsoap.org/wsdl/">Get Stock quote for a
    company Symbol</documentation>
    <wsdl:input message="tns:GetQuoteSoapIn"/>
    <wsdl:output message="tns:GetQuoteSoapOut"/>
  </wsdl:operation>
</wsdl:portType>

<wsdl:binding name="StockQuoteSoap" type="tns:StockQuoteSoap">
  <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
  <wsdl:operation name="GetQuote">
    <soap:operation soapAction="http://www.webserviceX.NET/GetQuote" style="document"/>
    <wsdl:input>
      <soap:body use="literal"/>
    </wsdl:input>
    <wsdl:output>
      <soap:body use="literal"/>
    </wsdl:output>
  </wsdl:operation>
</wsdl:binding>

<wsdl:service name="StockQuote">
  <wsdl:port binding="tns:StockQuoteSoap" name="StockQuoteSoap">
    <soap:address location="http://www.webserviceX.NET/stockquote.asmx"/>
  </wsdl:port>
</wsdl:service>
</wsdl:definitions>
```

Exercice 3 :

Soit le fichier WSDL suivant.

- Cherchez le nom de la méthode unique proposée par ce service.
- Cherchez les entrées et sorties de cette méthode. Quel est le nom des entrées, quel est le nom des sorties ?
- Quels sont les paramètres (nom et types) qui composent l'entrée ?
- Quels sont les champs de la sortie ?

```
<definitions targetNamespace="http://v1.fraudlabs.com/soap/FraudLabsWebService"
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:SOAP-
  ENC="http://schemas.xmlsoap.org/soap/encoding/"
  xmlns:tns="http://v1.fraudlabs.com/soap/FraudLabsWebService"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
  xmlns="http://schemas.xmlsoap.org/wsdl/">
<types>
  <xsd:schema targetNamespace="http://v1.fraudlabs.com/soap/FraudLabsWebService">
    <xsd:import namespace="http://schemas.xmlsoap.org/soap/encoding/" />
    <xsd:import namespace="http://schemas.xmlsoap.org/wsdl/" />
    <xsd:complexType name="FraudLabsInput">
      <xsd:all>
        <xsd:element name="IP" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="CITY" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="REGION" type="xsd:string" minOccurs="0" maxOccurs="1"/>
      </xsd:all>
    </xsd:complexType>
  </xsd:schema>
</types>
```

```

        <xsd:element name="POSTAL" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="COUNTRY" type="xsd:string" minOccurs="0" maxOccurs="1"/>
    </xsd:all>
</xsd:complexType>
<xsd:complexType name="FraudLabsOutput">
    <xsd:all>
        <xsd:element name="COUNTMATCH" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="COUNTRY" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="RISKCOUNT" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="DISTANCE" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="FREEMAIL" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="POSTCMATCH" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="PHONCMATCH" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="SHIPFORWA" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="CREDITAVAI" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="FRAUDSCORE" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="QUERYID" type="xsd:string" minOccurs="0" maxOccurs="1"/>
        <xsd:element name="MESSAGE" type="xsd:string" minOccurs="0" maxOccurs="1"/>
    </xsd:all>
</xsd:complexType>
</xsd:schema>
</types>

<message name="FraudLabsRequest">
    <part name="inputdata" type="tns:FraudLabsInput"/>
</message>
<message name="FraudLabsResponse">
    <part name="return" type="tns:FraudLabsOutput"/>
</message>

<portType name="FraudLabsWebServicePortType">
    <operation name="FraudLabs">
        <documentation>The FraudLabs Web Service</documentation>
        <input message="tns:FraudLabsRequest"/>
        <output message="tns:FraudLabsResponse"/>
    </operation>
</portType>

<binding name="FraudLabsWebServiceBinding" type="tns:FraudLabsWebServicePortType">
    <soap:binding style="rpc" transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="FraudLabs">
        <soap:operation
            soapAction="http://v1.fraudlabs.com/fraudlabswebservice.asmx/FraudLabs"
            style="rpc"/>
        <input>
            <soap:body use="encoded" namespace="v1.fraudlabs.com"
                encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
        </input>
        <output>
            <soap:body use="encoded" namespace="v1.fraudlabs.com"
                encodingStyle="http://schemas.xmlsoap.org/soap/encoding"/>
        </output>
    </operation>
</binding>

<service name="FraudLabsWebService">
    <port name="FraudLabsWebServicePort" binding="tns:FraudLabsWebServiceBinding">
        <soap:address location="http://v1.fraudlabs.com/fraudlabswebservice.asmx"/>
    </port>
</service>
</definitions>

```