Cloud Computing: CS 497/597

Date: 08/28/2014

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**Exercise:**

Given the following WSDL definition, develop a java class hierarchy that is most likely to have generated this WSDL.

Draw the UML Diagram to represent the class hierarchy.

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| <?xml version="1.0" encoding="UTF-8"?> |
| <wsdl:definitions name="Promotions" targetNamespace="http://computing.cloud.course/" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:tns="http://computing.cloud.course/" xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"> |
| <wsdl:types> |
| <xs:schema xmlns:tns="http://computing.cloud.course/" xmlns:xs="http://www.w3.org/2001/XMLSchema" attributeFormDefault="unqualified" elementFormDefault="unqualified" targetNamespace="http://computing.cloud.course/"> |
| <xs:complexType name="customerInfo"> |
| <xs:sequence> |
| <xs:element minOccurs="0" name="name" type="xs:string"/> |
| <xs:element name="age" type="xs:int"/> |
| <xs:element minOccurs="0" name="phone" type="xs:string"/> |
| <xs:element minOccurs="0" name="shipping" type="tns:shippingType"/> |
| </xs:sequence> |
| </xs:complexType> |
| <xs:complexType name="promotion"> |
| <xs:sequence> |
| <xs:element minOccurs="0" name="start\_date" type="xs:dateTime"/> |
| <xs:element minOccurs="0" name="end\_date" type="xs:dateTime"/> |
| <xs:element name="percentage\_discount" type="xs:double"/> |
| <xs:element maxOccurs="unbounded" minOccurs="0" name="product\_codes" nillable="true" type="xs:string"/> |
| </xs:sequence> |
| </xs:complexType> |
| <xs:simpleType name="shippingType"> |
| <xs:restriction base="xs:string"> |
| <xs:enumeration value="REGULAR"/> |
| <xs:enumeration value="TWODAY"/> |
| <xs:enumeration value="ONEDAY"/> |
| </xs:restriction> |
| </xs:simpleType> |
| <xs:element name="getPromotions" type="tns:getPromotions"/> |
| <xs:complexType name="getPromotions"> |
| <xs:sequence> |
| <xs:element minOccurs="0" name="arg0" type="tns:customerInfo"/> |
| </xs:sequence> |
| </xs:complexType> |
| <xs:element name="getPromotionsResponse" type="tns:getPromotionsResponse"/> |
| <xs:complexType name="getPromotionsResponse"> |
| <xs:sequence> |
| <xs:element maxOccurs="unbounded" minOccurs="0" name="return" type="tns:promotion"/> |
| </xs:sequence> |
| </xs:complexType> |
| <xs:element name="applyPromotionToSale" type="tns:applyPromotionToSale"/> |
| <xs:complexType name="applyPromotionToSale"> |
| <xs:sequence> |
| <xs:element minOccurs="0" name="arg0" type="tns:customerInfo"/> |
| <xs:element minOccurs="0" name="arg1" type="tns:promotion"/> |
| </xs:sequence> |
| </xs:complexType> |
| <xs:element name="applyPromotionToSaleResponse" type="tns:applyPromotionToSaleResponse"/> |
| <xs:complexType name="applyPromotionToSaleResponse"> |
| <xs:sequence> |
| <xs:element name="return" type="xs:boolean"/> |
| </xs:sequence> |
| </xs:complexType> |
| </xs:schema> |
| </wsdl:types> |
| <wsdl:message name="getPromotions"> |
| <wsdl:part name="parameters" element="tns:getPromotions"> |
| </wsdl:part> |
| </wsdl:message> |
| <wsdl:message name="applyPromotionToSale"> |
| <wsdl:part name="parameters" element="tns:applyPromotionToSale"> |
| </wsdl:part> |
| </wsdl:message> |
| <wsdl:message name="applyPromotionToSaleResponse"> |
| <wsdl:part name="parameters" element="tns:applyPromotionToSaleResponse"> |
| </wsdl:part> |
| </wsdl:message> |
| <wsdl:message name="getPromotionsResponse"> |
| <wsdl:part name="parameters" element="tns:getPromotionsResponse"> |
| </wsdl:part> |
| </wsdl:message> |
| <wsdl:portType name="PromotionsPortType"> |
| <wsdl:operation name="getPromotions"> |
| <wsdl:input name="getPromotions" message="tns:getPromotions"> |
| </wsdl:input> |
| <wsdl:output name="getPromotionsResponse" message="tns:getPromotionsResponse"> |
| </wsdl:output> |
| </wsdl:operation> |
| <wsdl:operation name="applyPromotionToSale"> |
| <wsdl:input name="applyPromotionToSale" message="tns:applyPromotionToSale"> |
| </wsdl:input> |
| <wsdl:output name="applyPromotionToSaleResponse" message="tns:applyPromotionToSaleResponse"> |
| </wsdl:output> |
| </wsdl:operation> |
| </wsdl:portType> |
| <wsdl:binding name="PromotionsSoapBinding" type="tns:PromotionsPortType"> |
| <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/> |
| <wsdl:operation name="getPromotions"> |
| <soap:operation soapAction="" style="document"/> |
| <wsdl:input name="getPromotions"> |
| <soap:body use="literal"/> |
| </wsdl:input> |
| <wsdl:output name="getPromotionsResponse"> |
| <soap:body use="literal"/> |
| </wsdl:output> |
| </wsdl:operation> |
| <wsdl:operation name="applyPromotionToSale"> |
| <soap:operation soapAction="" style="document"/> |
| <wsdl:input name="applyPromotionToSale"> |
| <soap:body use="literal"/> |
| </wsdl:input> |
| <wsdl:output name="applyPromotionToSaleResponse"> |
| <soap:body use="literal"/> |
| </wsdl:output> |
| </wsdl:operation> |
| </wsdl:binding> |
| <wsdl:service name="Promotions"> |
| <wsdl:port name="PromotionsPort" binding="tns:PromotionsSoapBinding"> |
| <soap:address location="http://localhost:9090/PromotionsPort"/> |
| </wsdl:port> |
| </wsdl:service> |
| </wsdl:definitions> |