Lab Assignment-7

XML ASSIGNMENTS

1.

test1.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!-- <!DOCTYPE collection [

<!ELEMENT collection (description,recipe+)>

<!ELEMENT description (#PCDATA)>

<!ELEMENT recipe (title,ingredient+,preparation,comment,nutrition)>

<!ELEMENT title (#PCDATA)>

<!ELEMENT preparation (step+)>

<!ELEMENT step (#PCDATA)>

<!ELEMENT comment (#PCDATA)>

<!ATTLIST ingredient name CDATA #REQUIRED>

<!ATTLIST ingredient amount CDATA #IMPLIED>

<!ATTLIST ingredient unit CDATA #IMPLIED>

<!ATTLIST nutrition calories CDATA #IMPLIED>

<!ATTLIST nutrition fat CDATA #IMPLIED>

<!ATTLIST nutrition carbohydrates CDATA #IMPLIED>

<!ATTLIST nutrition protein CDATA #IMPLIED>

]> -->

<collection xmlns=*"http://www.example.org"* xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xsi:noNamespaceSchemaLocation=*"http://www.example.org http://www.example.org/xsds/test1.xsd"*>

<description>Some recipes used for the XML tutorial.</description>

<recipe>

<title>Beef Parmesan with Garlic Angel Hair Pasta</title>

<ingredient name=*"beef cube steak"* amount=*"1.5"* unit=*"pound"*/>

<preparation>

<step>Preheat oven to 350 degrees F (175 degrees C).</step>

</preparation>

<comment>Make the meat ahead of time, and refrigerate over night, the acid in the tomato sauce will tenderize the meat even more. If you do this, save the mozzarella till the last minute.</comment>

<nutrition calories=*"1167"* fat=*"23"* carbohydrates=*"45"* protein=*"32"*/>

</recipe>

</collection>

test1.xsd

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<xs:schema xmlns:xs=*"http://www.w3.org/2001/XMLSchema"* targetNamespace=*"http://www.example.org/test1"* xmlns:tns=*"http://www.example.org/test1"* elementFormDefault=*"qualified"*>

<xs:element name=*"collection"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"description"* type=*"xs:string"*/>

<xs:element name=*"recipe"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"title"* type=*"xs:string"*/>

<xs:element name=*"ingredient"*>

<xs:complexType>

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

<xs:attribute name=*"amount"* type=*"xs:integer"* use=*"optional"*/>

<xs:attribute name=*"unit"* type=*"xs:string"* use=*"optional"*/>

</xs:complexType>

</xs:element>

<xs:element name=*"preparation"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"step"* type=*"xs:string"*/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name=*"comment"* type=*"xs:string"*/>

<xs:element name=*"nutrition"*>

<xs:complexType>

<xs:attribute name=*"calories"* type=*"xs:integer"* use=*"optional"*/>

<xs:attribute name=*"fat"* type=*"xs:integer"* use=*"optional"*/>

<xs:attribute name=*"carbohydrates"* type=*"xs:integer"*/>

<xs:attribute name=*"protein"* type=*"xs:integer"* use=*"optional"*/>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:schema>

2.

test.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE addresses SYSTEM "addresses.dtd">

<addresses xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:noNamespaceSchemaLocation=*"http://www.w3.org/2001/XMLSchema-instance test.xsd"*>

<address>

<name>Joe Tester</name>

<street>Baker street 5</street>

<wrongExtraField/>

</address>

</addresses>

addresses.dtd

<?xml version="1.0" encoding="UTF-8"?>

<!ELEMENT addresses (address+)>

<!ELEMENT address (name,street,wrongExtraField)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT street (#PCDATA)>

<!ELEMENT wrongExtraField EMPTY>

test.xsd

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<xs:schema xmlns:xs=*"http://www.w3.org/2001/XMLSchema"* targetNamespace=*"http://www.example.org/test"* xmlns:tns=*"http://www.example.org/test"* elementFormDefault=*"qualified"*>

<xs:element name=*"addresses"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"address"*>

<xs:complexType>

<xs:sequence>

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

<xs:element name=*"street"* type=*"xs:string"*/>

<xs:element name=*"wrongExtraField"*/>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:schema>

3.

test3.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<coupon>

<serial-number>1234567890</serial-number>

<valid-at>

<location>FREDS</location>

<location>LITTL</location>

</valid-at>

<deal>

<location>FREDS</location>

<value>5.00</value>

<requirement guests=*"8"* dollars=*"75.00"* />

</deal>

<deal>

<location>LITTL</location>

<value>7.00</value>

<requirement guests=*"8"* dollars=*"75.00"* />

</deal>

<body>

<text type=*"header"*>

Save $5 at your next party at Fred's, or $7 off your next party at Little Italy!

</text>

<text type=*"regular"*>

You will receive $5 off your check at Fred's Restaurant,

or $7 off your check at Little Italy, when you bring a

party of eight or more to visit and purchase at least

$75 worth of food and drink.

</text>

</body>

<terms>

<boiler code=*"LIMIT1"* />

<boiler code=*"NOCOMBINE"* />

<boiler code=*"GRATUITY8"* />

<text>

Coupon may not be applied toward price of alcoholic beverages.

</text>

</terms>

</coupon>

test3.xsd

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<!DOCTYPE coupon SYSTEM “coupon.dtd”>

<xs:schema xmlns:xs=*"http://www.w3.org/2001/XMLSchema"* targetNamespace=*"http://www.example.org/test3"* xmlns:tns=*"http://www.example.org/test3"* elementFormDefault=*"qualified"*>

<xs:element name=*"collection"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"coupon"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"serial-number"* type=*"xs:integer"*/>

<xs:element name=*"valid-at"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"location"* type=*"xs:string"* minOccurs=*"2"*/>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name=*"deal"* minOccurs=*"2"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"location"* type=*"xs:string"*/>

<xs:element name=*"value"* type=*"xs:float"*/>

<xs:element name=*"requirement"*>

<xs:complexType>

<xs:attribute name=*"guests"* type=*"xs:integer"*/>

<xs:attribute name=*"dollars"* type=*"xs:float"*/>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name=*"body"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"text"* maxOccurs=*"2"*>

<xs:complexType>

<xs:attribute name=*"type"* default=*"header|regular"*/>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name=*"terms"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"boiler"*>

<xs:complexType>

<xs:attribute name=*"code"* default=*"LIMIT1|NOCOMBINE|GRATUITY8"*/>

</xs:complexType>

</xs:element>

<xs:element name=*"text"* type=*"xs:string"*/>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:schema>

coupon.dtd

<?xml version="1.0" encoding="UTF-8"?>

<!ELEMENT coupon (serial-Number,valid-at,deal,body,terms)>

<!ELEMENT serial-Number (#PCDATA)>

<!ELEMENT valid-at (location+)>

<!ELEMENT location (#PCDATA)>

<!ELEMENT deal (location,value,requirement)>

<!ELEMENT value (#PCDATA)>

<!ELEMENT requirement EMPTY>

<!ELEMENT body (text+)>

<!ELEMENT text (#PCDATA)>

<!ELEMENT terms (boiler+,text)>

<!ELEMENT boiler EMPTY>

<!ATTLIST requirement guests CDATA #REQUIRED>

<!ATTLIST requirement dollars CDATA #REQUIRED>

<!ATTLIST body text (header|regular) #REQUIRED>

<!ATTLIST terms boiler CDATA #REQUIRED>

4.

test2.xml

<!DOCTYPE order [

<!ELEMENT order (user,products)>

<!ELEMENT user (fullname,deliveryAddress)>

<!ELEMENT fullname (#PCDATA)>

<!ELEMENT deliveryAddress (#PCDATA)>

<!ELEMENT products (product+)>

<!ELEMENT product EMPTY>

<!ATTLIST product id CDATA #REQUIRED>

<!ATTLIST product quantity CDATA #REQUIRED>

]>

<order xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"*

xsi:noNamespaceSchemaLocation=*"http://www.w3.org/2001/XMLSchema-instance order.xsd"*>

<user>

<fullname>Bob Jones</fullname>

<deliveryAddress>

123 This road,

That town,

Bobsville

</deliveryAddress>

</user>

<products>

<product id=*"12345"* quantity=*"1"* />

<product id=*"3232"* quantity=*"3"* />

</products>

</order>

order.xsd

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<xs:schema xmlns:xs=*"http://www.w3.org/2001/XMLSchema"* targetNamespace=*"http://www.example.org/order"* xmlns:tns=*"http://www.example.org/order"* elementFormDefault=*"qualified"*>

<xs:element name=*"order"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"user"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"fullname"* type=*"xs:string"*></xs:element>

<xs:element name=*"deliveryAddress"* type=*"xs:string"*></xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

<xs:element name=*"products"*>

<xs:complexType>

<xs:sequence>

<xs:element name=*"product"*>

<xs:complexType>

<xs:attribute name=*"id"* type=*"xs:integer"* use=*"required"*></xs:attribute>

<xs:attribute name=*"quantity"* type=*"xs:integer"* use=*"required"*></xs:attribute>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:sequence>

</xs:complexType>

</xs:element>

</xs:schema>