

library3.xsd

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <!-- definition of simple types -->
  <xs:simpleType name="nameType">
    <xs:restriction base="xs:string">
      <xs:maxLength value="32"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="sinceType">
    <xs:restriction base="xs:date"/>
  </xs:simpleType>
  <xs:simpleType name="isbnType">
    <xs:restriction base="xs:string">
      <xs:pattern value="[0-9]{3}-[0-9]{2}-[0-9]{4}-[0-9]{3}-[0-9]"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="dimension">
    <xs:restriction base="xs:string">
      <xs:pattern value="[0-9]+([.][0-9]+)? x [0-9]+([.][0-9]+)? x [0-9]+([.][0-9]+)? (centimeters/cm/in/inches)"/>
    </xs:restriction>
  </xs:simpleType>
  <!-- definition of complex types -->
  <xs:complexType name="LibraryType">
    <xs:sequence>
      <xs:element name="book" type="bookType" maxOccurs="unbounded" minOccurs="0"/>
      <xs:element name="customer" type="customerType" maxOccurs="unbounded" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="bookType">
    <xs:sequence>
      <xs:element name="name" type="xs:ID"/>
      <xs:element name="title" type="xs:string"/>
      <xs:element name="author" type="nameType"/>
      <xs:element name="pages" type="xs:int"/>
      <xs:element name="dimension" type="dimension"/>
    </xs:sequence>
    <xs:attribute name="isbn" type="isbnType" use="required"/>
  </xs:complexType>
  <xs:complexType name="customerType">
    <xs:sequence>
      <xs:element name="firstName" type="xs:string"/>
      <xs:element name="lastName" type="xs:string"/>
      <xs:element name="borrowedBookId" type="xs:IDREF"/>
      <xs:element name="borrowedBookSince" type="sinceType"/>
    </xs:sequence>
  </xs:complexType>
  </xs:complexType>
  <!-- root element -->
  <xs:element name="Library" type="LibraryType"/></xs:element>
</xs:schema>
```