

library3.simplified.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="descType">
    <xs:restriction base="xs:string"/>
  </xs:simpleType>
  <xs:simpleType name="isbnType">
    <xs:restriction base="xs:string">
      <xs:pattern value="[0-9]{10}"/>
    </xs:restriction>
  </xs:simpleType>
  <!-- definition of complex types -->
  <xs:complexType name="characterType">
    <xs:sequence>
      <xs:element name="name" type="nameType"/>
      <xs:element name="friend-of" type="nameType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="since" type="sinceType"/>
      <xs:element name="qualification" type="descType"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="bookType">
    <xs:sequence>
      <xs:element name="title" type="nameType"/>
      <xs:element name="author" type="nameType"/>
      <xs:element name="character" type="characterType" minOccurs="0" maxOccurs="unbounded"/>
      <!-- the definition of the "character" element is
           using the "characterType" complex type -->
    </xs:sequence>
    <xs:attribute name="isbn" type="isbnType" use="required"/>
  </xs:complexType>
  <xs:complexType name="LibraryType">
    <xs:sequence>
      <xs:element name="book" type="bookType" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <!-- Reference to "libraryType" to define the
       "library" element -->
  <xs:element name="Library" type="LibraryType" />
</xs:schema>
```