Practical 04 - Build xsd and xml for Music Collection

Objectives:

- To produce a valid .xsd file based on the scenario below.
- To produce a valid .xml file based on the .xsd file, filled with credible sample data.

Scenario:

- We have a Music Collection.
- The collection consists of Albums.
- An Album has a Genre, Year, Artist, Title, and two or more Tracks.
- A Track has a Title, a Duration, an Artist and a Track Number.
- Valid Genres are Metal, Pop, Jazz and Classical.

Sample Solution:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<schema xmlns="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.ipa.ie.org/soa_and_ws/corishb/music_collection"
xmlns:tns="http://www.ipa.ie.org/music_collection" elementFormDefault="qualified">
<element name="music_collection" type="tns:music_collection_type"></element>

<complexType name="album_type">
<sequence>
<element name="genre" type="string" minOccurs="1" maxOccurs="1"></element>
<element name="year" type="gYear" minOccurs="1" maxOccurs="1"></element>
<element name="artist" type="string" minOccurs="1" maxOccurs="1"></element>
<element name="title" type="string" minOccurs="1" maxOccurs="1"></element>
<element name="track" type="tns:track_type" minOccurs="1" maxOccurs="unbounded"></element>
</sequence>
</complexType>

<complexType name="music_collection_type">
<sequence>
<element name="album" type="tns:album_type" minOccurs="0" maxOccurs="unbounded"></element>
</sequence>
</complexType>

<complexType name="track_type">
<sequence>
<element name="title" type="string" minOccurs="1" maxOccurs="1"></element>
<element name="duration" type="duration" minOccurs="1" maxOccurs="1"></element>
<element name="track_num" minOccurs="1" maxOccurs="1" type="positiveInteger">
</element>
</sequence>
</complexType>
</schema>
```