Restrictions 1

1. **Use the following XML file and create the Schema XSD file to validate it.**

```xml
<?xml version="1.0" encoding="UTF-8"?>
<store name="The Best Store" location="Madrid">
   <product>
      <name>Smartphone</name>
      <description>A <brand>Samsung</brand> with a high-resolution
<feature>OLED</feature> screen.</description>
      <price> 699.99</price>
      <stock>Available</stock>
   </product>

   <product>
      <name>Sports T-shirt</name>
      <description>A <brand>Nike</brand> t-shirt made with
<feature>breathable</feature> material.</description>
      <price>29.99</price>
      <stock>Available</stock>
   </product>

   <product>
      <name>Blender</name>
      <description>A <brand>Philips</brand> with <feature>500
watts</feature> of power.</description>
      <price>49.99</price>
      <stock>Available</stock>
   </product>
</store>
```

A) Define the store element in a way that is obligatory to have two attributes with the names: **name** and **location. The location must be always the same value Madrid if you change the value you should have an error.**

B) The element **product** can be repeated in the range [1, 100].

C) The element **name, stock, feature, description, brand** should be restricted to only text.

D) The price should be restricted to the type of value that are represented in XML file.

E) The values of **stock** should be one of the following list*: {Available, NotAvailable, OverBooked}*. Also, the values cannot have any whitespace.

2. **Use the following XML file and create the Schema XSD file to validate it.**

Restrictions 1

```xml
<?xml version="1.0" encoding="UTF-8"?>
<nba id="1">
   <team>
      <player>
         <name>LeBron James</name>
         <age>38</age>
         <height>206</height>
         <weight>113</weight>
         <stats>
            <points_per_game>27.2</points_per_game>
            <rebounds_per_game>7.9</rebounds_per_game>
            <assists_per_game>7.3</assists_per_game>
         </stats>
      </player>
      <player>
         <name>Anthony Davis</name>
         <age>30</age>
         <height>208</height>
         <weight>115</weight>
         <stats>
            <points_per_game>24.1</points_per_game>
            <rebounds_per_game>10.2</rebounds_per_game>
            <assists_per_game>2.5</assists_per_game>
         </stats>
      </player>
   </team>

   <game>
      <team_home />
      <team_away />
      <highlights>
         <highlight>LeBron James scores a dunk.</highlight>
         <highlight>Stephen Curry hits a three-pointer.</highlight>
         <highlight>Anthony Davis blocks a shot.</highlight>
      </highlights>
   </game>
</nba>
```

A) Define the store element in a way that is obligatory to have only one attribute with the name: **id. The id cannot appear like a negative number, but it could be 0.**

B) The elements **age**,**height,weight** should be defined with the correct type like they appear to the XML file.

C) The element **player** can be repeated in the range [16, 19].

D) The elements **points_per_game, rebounds_per_game, assists_per_game** should be defined with the correct type like they appear to the XML file.

E) The elements **team_home** and **team_away** must be defined like empty elements.

F) The element **highlight** should be limited up to *15 characters*.

==Once you finished your exercises, you upload ONE zipped folder with 4 files, 2 XML and 2 XSD.==