**DTD Exercise**

Taking the attached “SportEvent.xml” XML file as a valid example, please develop a validation file (based on the DTD standard) that validates the following rules:

1. All entities must be declared.
2. All attributes must be declared and set as mandatory, except “elevation” and “duration” (both optional).
3. Attributes called “id” must be declared as identifiers.
4. “duration” must be an integer value between 1 and 10.
5. Only “title” and “modality” can contain text as node content.
6. <*event*> must be composed of “data” and “modalities”, both of them mandatory.
7. < modalities> must contain one (at least) or more “modality” childs.
8. Every <modality> can have <provisioning> section or not.
9. Every <provisioning> section can have zero, one or more <provpoint>s.

**XSD Exercise**

Repeat the previous task using XML Schema standard. In addition to the 9 points, include the following ones as further validation rules:

1. The “date” attribute must be declared as a valid date (without time).
2. The “name” of each modality must contain 30 characters as much.
3. The “distance” must be a decimal value with 3 digits in the integer part and (as much) one more fractional.
4. The amount of “<provpoint>s” must be 10 as much.