

## Captura xml aules.xml amb els errors d'aforament i radiadors:

```
Examen_xml_json > aules.xml
1 <?xml version="1.0" encoding="utf-8"?>
2 <!DOCTYPE institut SYSTEM "aules.dtd">
3 <institut curs="2024">
4   <nom_insti>Institut de l'Ebre</nom_insti>
5   <edifici>
6     <planta pis="0">
7       <aula>
8         <nom_aula>Sala Mestral</nom_aula>
9         <projector>EPSON</projector>
10        <aforament>50</aforament>
11        <radiadors>4</radiadors>
12      </aula>
13    </planta>
14    <planta pis="2">
15      <aula>
16        <num_aula>202</num_aula>
17        <grup>SMX1A</grup>
18        <grup>SMX2A</grup>
19        <informatica>/>
20        <projector>EPSON</projector>
21        <aforo>18</aforo>
22      </aula>
23    </planta>
24    <nom_aula>A20.3</nom_aula>
25    <grup>ASIX1A</grup>

```

```
Examen_xml_json > aules.dtd
1 <!ELEMENT institut (nom_insti, edifici+)>
2 <!--ATTLIST institut curs CDATA #REQUIRED-->
3 <!ELEMENT nom_insti (#PCDATA)>
4 <!ELEMENT edifici (planta+)>
5 <!ELEMENT planta (aula+)>
6 <!--ATTLIST planta pis CDATA #REQUIRED-->
7 <!--ELEMENT aula ((nom_aula | num_aula), grup*, informatica?,
8 <!--ELEMENT nom_aula (#PCDATA)>
9 <!--ELEMENT num_aula (#PCDATA)>
10 <!--ELEMENT grup (#PCDATA)>
11 <!--ELEMENT informatica EMPTY-->
12 <!--ELEMENT projector (#PCDATA)>
13 <!--ELEMENT pantalla (#PCDATA)>
14 <!--ELEMENT aforo (#PCDATA)>
15 <!--ELEMENT radiadors (#PCDATA)>

```

```
Examen_xml_json git:(main) x xmlLint --valid --noout aules.xml
aules.xml:10: element aforament: validity error : No declaration for element aforament
<aforament>50</aforament>
^

aules.xml:12: element aula: validity error : Element aula content does not follow the DTD, expecting ((nom_aula | num_aula) , grup* , informatica? ,
(projector | pantalla) , aforo , radiadors?), got (nom_aula projector aforament radiadors )
</aula>
^

aules.xml:32: element aula: validity error : Element aula content does not follow the DTD, expecting ((nom_aula | num_aula) , grup* , informatica? ,
(projector | pantalla) , aforo , radiadors?), got (nom_aula grup grup grup informatica pantalla radiadors aforo )
</aula>
^

Examen_xml_json git:(main) x
```

## Captura xml aules2.xml sense errors:

```
Examen_xml_json > aules2.xml
1 <?xml version="1.0" encoding="utf-8"?>
2 <!DOCTYPE institut SYSTEM "aules.dtd">
3 <institut curs="2024">
4   <nom_insti>Institut de l'Ebre</nom_insti>
5   <edifici>
6     <planta pis="0">
7       <aula>
8         <nom_aula>Sala Mestral</nom_aula>
9         <projector>EPSON</projector>
10        <aforo>50</aforo>
11        <radiadors>4</radiadors>
12      </aula>
13    </planta>
14    <planta pis="2">
15      <aula>
16        <num_aula>202</num_aula>
17        <grup>SMX1A</grup>
18        <grup>SMX2A</grup>
19        <informatica>/>
20        <projector>EPSON</projector>
21        <aforo>18</aforo>
22      </aula>
23    </planta>
24    <nom_aula>A20.3</nom_aula>
25    <grup>ASIX1A</grup>

```

```
Examen_xml_json > aules.dtd
1 <!ELEMENT institut (nom_insti, edifici+)>
2 <!--ATTLIST institut curs CDATA #REQUIRED-->
3 <!ELEMENT nom_insti (#PCDATA)>
4 <!--ELEMENT edifici (planta+)>
5 <!--ELEMENT planta (aula+)>
6 <!--ATTLIST planta pis CDATA #REQUIRED-->
7 <!--ELEMENT aula ((nom_aula | num_aula), grup*, informatica?,
8 <!--ELEMENT nom_aula (#PCDATA)>
9 <!--ELEMENT num_aula (#PCDATA)>
10 <!--ELEMENT grup (#PCDATA)>
11 <!--ELEMENT informatica EMPTY-->
12 <!--ELEMENT projector (#PCDATA)>
13 <!--ELEMENT pantalla (#PCDATA)>
14 <!--ELEMENT aforo (#PCDATA)>
15 <!--ELEMENT radiadors (#PCDATA)>

```

```
Examen_xml_json git:(main) x xmlLint --valid --noout aules2.xml
Examen_xml_json git:(main) x
```

## Captura xsd amb errors:

```

Examen_xml_json > aules.xml
1 <?xml version="1.0" encoding="utf-8"?>
2 <!DOCTYPE institut SYSTEM "aules.xsd">
3 <institut curs="2024">
4   <nom_insti>Institut de l'Ebre</nom_insti>
5   <edifici>
6     <planta pis="0">
7       <aula>
8         <nom_aula>Sala Mestral</nom_aula>
9         <projector>EPSON</projector>
10        <aforament>50</aforament>
11        <radiadors>4</radiadors>
12      </aula>
13    </planta>
14    <planta pis="2">
15      <aula>
16        <num_aula>202</num_aula>
17        <grup>SMX1A</grup>
18        <grup>SMX2A</grup>
19        <informatica>
20        <projector>EPSON</projector>
21        <aforo>18</aforo>
22      </aula>
23    </planta>
24    <nom_aula>A20.3</nom_aula>
25    <grup>ASIX1A</grup>

```

```

Examen_xml_json > aules.xsd
1 <?xml version="1.0" encoding="UTF-8"?>
2 <schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
3   <xs:element name="institut">
4     <xs:complexType>
5       <xs:sequence>
6         <xs:element name="nom_insti" type="xs:string"/>
7         <xs:element name="edifici" type="EdificiType" minOccurs="1" maxOccurs="12"/>
8       </xs:sequence>
9     </xs:complexType>
10  </xs:element>
11
12  <xs:complexType name="EdificiType">
13    <xs:sequence>
14      <xs:element name="planta" type="PlantaType" minOccurs="1" maxOccurs="12"/>
15    </xs:sequence>
16  </xs:complexType>
17
18  <xs:complexType name="PlantaType">
19    <xs:sequence>
20      <xs:element name="aula" type="AulaType" minOccurs="1" maxOccurs="10"/>
21    </xs:sequence>
22    <xs:attribute name="pis" type="xs:integer" use="required"/>
23  </xs:complexType>
24
25  <xs:complexType name="AulaType">
26    <xs:sequence>
27      <xs:choice>
28        <xs:element name="nom_aula" type="xs:string"/>
29        <xs:element name="num_aula" type="xs:integer" minOccurs="1" maxOccurs="999"/>
30      </xs:choice>
31      <xs:element name="grup" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
32      <xs:element name="informatica" type="xs:string" minOccurs="0"/>
33      <xs:choice>
34        <xs:element name="projector" type="xs:string"/>
35        <xs:element name="pantalla" type="PantallaType"/>
36      </xs:choice>
37      <xs:element name="aforo" type="xs:integer" minOccurs="1" maxOccurs="100"/>
38      <xs:element name="radiadors" type="xs:integer" minOccurs="1" maxOccurs="100"/>
39    </xs:sequence>
40  </xs:complexType>

```

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
aules.xsd:2: parser error : Content error in the external subset
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
^
Examen_xml_json git:(main) x xsltint --schema aules.xsd aules.xml --noout
aules.xsd:10: element attribute: Schemas parser error : Element '{http://www.w3.org/2001/XMLSchema}element': The content is not valid. Expected is ( a
nnotation?, ((simpleType | complexType)?, (unique | key | keyref)*)).
WXS schema aules.xsd failed to compile
Examen_xml_json git:(main) x xsltint --schema aules.xsd aules.xml --noout
aules.xml:10: element aforament: Schemas validity error : Element 'aforament': This element is not expected. Expected is ( aforo ).
aules.xml:15: element aula: Schemas validity error : Element 'aula': Missing child element(s). Expected is ( aforo ).
aules.xml:30: element radiadors: Schemas validity error : Element 'radiadors': This element is not expected. Expected is ( aforo ).
aules.xml fails to validate
Examen_xml_json git:(main) x

```

## Captura xsd sense errors:

```

Examen_xml_json > aules.xsd
2 <xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
13   <xs:complexType name="EdificiType">
14     <xs:sequence>
15       <xs:element name="planta" type="PlantaType" minOccurs="1" maxOccurs="12"/>
16     </xs:sequence>
17   </xs:complexType>
18
19   <xs:complexType name="PlantaType">
20     <xs:sequence>
21       <xs:element name="aula" type="AulaType" minOccurs="1" maxOccurs="10"/>
22     </xs:sequence>
23     <xs:attribute name="pis" type="xs:integer" use="required"/>
24   </xs:complexType>
25
26   <xs:complexType name="AulaType">
27     <xs:sequence>
28       <xs:choice>
29         <xs:element name="nom_aula" type="xs:string"/>
30         <xs:element name="num_aula" type="xs:integer" minOccurs="1" maxOccurs="999"/>
31       </xs:choice>
32       <xs:element name="grup" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>
33       <xs:element name="informatica" type="xs:string" minOccurs="0"/>
34       <xs:choice>
35         <xs:element name="projector" type="xs:string"/>
36         <xs:element name="pantalla" type="PantallaType"/>
37       </xs:choice>
38       <xs:element name="aforo" type="xs:integer" minOccurs="1" maxOccurs="100"/>
39       <xs:element name="radiadors" type="xs:integer" minOccurs="1" maxOccurs="100"/>
40     </xs:sequence>

```

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
Examen_xml_json git:(main) x xsltint --schema aules.xsd aules2.xml --noout
aules2.xml:15: element aula: Schemas validity error : Element 'aula': Missing child element(s). Expected is ( aforo ).
aules2.xml fails to validate
Examen_xml_json git:(main) x

```

## Captura json I json-schema amb errors:

```
Examen_xml_json > {} aules.json > # pas
1 {
2   "nom_aula": "20.3",
3   "pas": 2,
4   "grups": ["ASIX1A", "ASIX1B", "ASIX2"],
5   "informatica": true,
6   "pantalla": "Newline Lyra Q23",
7   "aforo": -1,
8   "radiadors": 2
9 }

Examen_xml_json > {} aules-schema.json > {} properties > {} pantalla
4 "properties": {
18   "grups": {
23     "minItems": 1,
24     "maxItems": 20
25   },
26   "informatica": {
27     "type": "boolean"
28   },
29   "projector": {
30     "type": "string"
31   },
32   "pantalla": {
33     "type": "string",
34     "enum": [
35       "Newline Lyra Q23",
36       "Synetech Taurus"
37     ]
38   },
39   "aforo": {
40     "type": "integer",
41     "minimum": 1,
42     "maximum": 100
43   },
44   "radiadors": {
45     "type": "integer",

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

```
Examen_xml_json git:(main) x check-jsonschema --schemafile aules-schema.json aules.json
Schema validation errors were encountered.
aules.json:$.aforo: -1 is less than the minimum of 1
aules.json:$.pas: 'pas' is a required property
aules.json:$.: Additional properties are not allowed ('pas' was unexpected)
Examen_xml_json git:(main) x check-jsonschema --schemafile aules-schema.json aules.json
```

Captura json I json-schema sense errors:

```
Examen_xml_json > {} aules.json > # aforo
1 {
2   "nom_aula": "20.3",
3   "pis": 2,
4   "grups": ["ASIX1A", "ASIX1B", "ASIX2"],
5   "informatica": true,
6   "pantalla": "Newline Lyra Q23",
7   "aforo": 1,
8   "radiadors": 2
9 }

Examen_xml_json > {} aules-schema.json > {} properties > {} pantalla
4 "properties": {
18   "grups": {
23     "minItems": 1,
24     "maxItems": 20
25   },
26   "informatica": {
27     "type": "boolean"
28   },
29   "projector": {
30     "type": "string"
31   },
32   "pantalla": {
33     "type": "string",
34     "enum": [
35       "Newline Lyra Q23",
36       "Synetech Taurus"
37     ]
38   },
39   "aforo": {
40     "type": "integer",
41     "minimum": 1,
42     "maximum": 100
43   },
44   "radiadors": {
45     "type": "integer",

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

```
Examen_xml_json git:(main) x check-jsonschema --schemafile aules-schema.json aules.json
ok -- validation done
Examen_xml_json git:(main) x
```