XML Schema extension Element

[❮ Complete XML Schema Reference](https://www.w3schools.com/xml/schema_elements_ref.asp)

Definition and Usage

The extension element extends an existing simpleType or complexType element.

Element Information

* **Parent elements:** simpleContent, complexContent

Syntax

<extension  
id=ID  
base=QName  
*any attributes*  
>  
  
(annotation?,((group|all|choice|sequence)?,  
((attribute|attributeGroup)\*,anyAttribute?)))  
  
</extension>

(The ? sign declares that the element can occur zero or one time, and the \* sign declares that the element can occur zero or more times inside the extension element)

|  |  |
| --- | --- |
| **Attribute** | **Description** |
| id | Optional. Specifies a unique ID for the element |
| base | Required. Specifies the name of a built-in data type, a simpleType element, or a complexType element |
| *any attributes* | Optional. Specifies any other attributes with non-schema namespace |

Example 1

The following example extends an existing simpleType by adding an attribute:

<?xml version="1.0"?>  
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  
<xs:simpleType name="size">  
  <xs:restriction base="xs:string">  
    <xs:enumeration value="small" />  
    <xs:enumeration value="medium" />  
    <xs:enumeration value="large" />  
  </xs:restriction>  
</xs:simpleType>  
  
<xs:complexType name="jeans">  
  <xs:simpleContent>  
    <xs:extension base="size">  
      <xs:attribute name="sex">  
        <xs:simpleType>  
          <xs:restriction base="xs:string">  
            <xs:enumeration value="male" />  
            <xs:enumeration value="female" />  
          </xs:restriction>  
        </xs:simpleType>  
      </xs:attribute>  
    </xs:extension>  
  </xs:simpleContent>  
</xs:complexType>  
  
</xs:schema>

Example 2

The following example extends an existing complexType element by adding three elements:

<?xml version="1.0"?>  
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  
<xs:element name="employee" type="fullpersoninfo"/>  
  
<xs:complexType name="personinfo">  
  <xs:sequence>  
    <xs:element name="firstname" type="xs:string"/>  
    <xs:element name="lastname" type="xs:string"/>  
  </xs:sequence>  
</xs:complexType>  
  
<xs:complexType name="fullpersoninfo">  
  <xs:complexContent>  
    <xs:extension base="personinfo">  
      <xs:sequence>  
        <xs:element name="address" type="xs:string"/>  
        <xs:element name="city" type="xs:string"/>  
        <xs:element name="country" type="xs:string"/>  
      </xs:sequence>  
    </xs:extension>  
  </xs:complexContent>  
</xs:complexType>  
  
</xs:schema>