

```
<xsd:schema
  xmlns:xsd="http://www.w3.org/2000/10/XMLSchema"
  version="1.0">
```

The element uses the schema of XML Schema found at the W3C website. It is, so to speak, the foundation on which new schemas can be built. The prefix `xsd` denotes the namespace of that schema (more on namespaces in the next section). If the prefix is omitted in the `xmlns` attribute, then we are using elements from this namespace by default:

```
<schema
  xmlns="http://www.w3.org/2000/10/XMLSchema"
  version="1.0">
```

In the following we omit the `xsd` prefix.

Now we turn to schema elements. Their most important contents are the definitions of element and attribute types, which are defined using data types.

## Element Types

The syntax of element types is

```
<element name="..." />
```

and they may have a number of optional attributes, such as types,

```
type="..."
```

or cardinality constraints

- `minOccurs="x"`, where `x` may be any natural number (including zero),
- `maxOccurs="x"`, where `x` may be any natural number (including zero) or unbounded.