

# DTD - COMPONENTS

This chapter will discuss about XML Components from DTD perspective. A DTD will basically contain declarations of the following XML components:

- Element
- Attributes
- Entities

## Elements

XML elements can be defined as building blocks of an XML document. Elements can behave as a container to hold text, elements, attributes, media objects or mix of all.

Each XML document contains one or more elements, the boundaries of which are either delimited by start-tags and end-tags, or empty elements.

### Example

Below is a simple example of XML elements

```
<name>Tutorials Point</name>
```

As you can see we have defined a `<name>` tag. There's a text between start and end tag of `<name>`. Elements, when used in an XML-DTD, need to be declared which will be discussed in detail in the chapter [DTD Elements](#).

## Attributes

Attributes are part of the XML elements. An element can have any number of unique attributes. Attributes give more information about the XML element or more precisely it defines a property of the element. An XML attribute is always a *name-value* pair.

### Example

Below is a simple example of XML attributes:

```

```

Here `img` is the element name whereas `src` is an attribute name and `flower.jpg` is a value given for the attribute `src`.

If attributes are used in an XML DTD then these need to be declared which will be discussed in detail in the chapter [DTD Attributes](#)

## Entities

Entities are placeholders in XML. These can be declared in the document prolog or in a DTD. Entities can be primarily categorized as:

- Built-in entities
- Character entities
- General entities
- Parameter entities

There are five built-in entities that play in well-formed XML, they are:

- ampersand: &amp;
- Single quote: &apos;
- Greater than: &gt;
- Less than: &lt;
- Double quote: &quot;

We will study more about entity declarations in XML DTD in detail in the chapter [DTD Entities](#)