



**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**19CSO303-Web Designing(Open Elective)**

**XML & XSLT**

**Document Type Definition:**

A Document Type Definition (**DTD**) describes the tree structure of a document and something about its data. It is a set of markup affirmations that actually define a type of document for the SGML family, like GML, SGML, HTML, XML.

A DTD can be declared inside an XML document as inline or as an external recommendation. DTD determines how many times a node should appear, and how their child nodes are ordered.

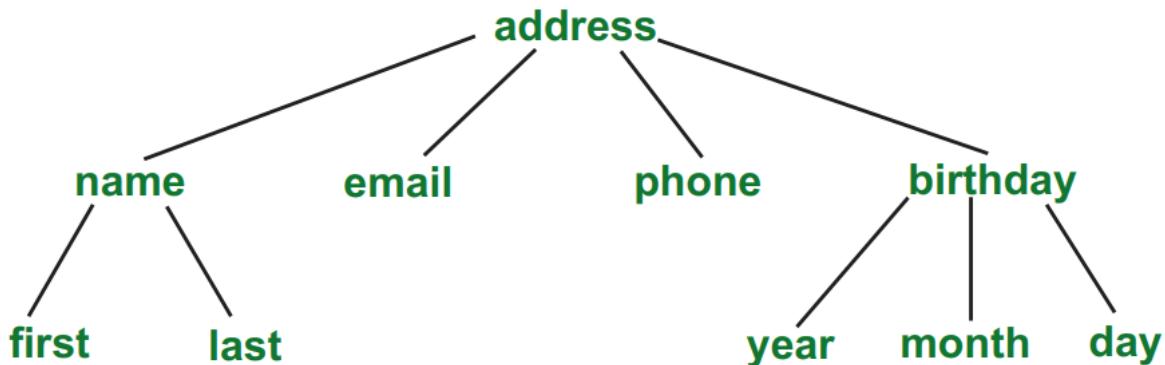
There are 2 data types, PCDATA and CDATA

- PCDATA is parsed character data.
- CDATA is character data, not usually parsed.

**Syntax:**

```
<!DOCTYPE element DTD identifier  
[  
    first declaration  
    second declaration  
    .  
    .  
    nth declaration  
]>
```

**Example:**



## XML Namespaces

**XML Namespace** is used *to avoid element name conflict* in XML document.

XML Namespace Declaration

An XML namespace is declared using the reserved XML attribute. This attribute name must be started with "xmlns".

Let's see the XML namespace syntax:

```
<element xmlns:name = "URL">
```

Here, namespace starts with keyword "**xmlns**". The word **name** is a namespace prefix. The **URL** is a namespace identifier.

Let's see the example of XML file.

```
<?xml version="1.0" encoding="UTF-8"?>
<cont:contact xmlns:cont="http://sssit.org/contact-us">
<cont:name>Vimal Jaiswal</cont:name>
<cont:company>SSSIT.org</cont:company>
<cont:phone>(0120) 425-6464</cont:phone>
```

```
</cont:contact>
```

## The Default Namespace

The default namespace is used in the XML document to save you from using prefixes in all the child elements.

The only difference between default namespace and a simple namespace is that: There is no need to use a prefix in default namespace.

You can also use multiple namespaces within the same document just define a namespace against a child node.

Example of Default Namespace:

```
<tutorials xmlns="http://www.javatpoint.com/java-tutorial">
```

```
  <tutorial>
```

```
    <title>Java-tutorial</title>
```

```
    <author>Sonoo Jaiswal</author>
```

```
  </tutorial>
```

```
...
```

```
</tutorials>
```