

What is XML?

XML is a simple text based language which was designed to store and transport data in plain text format. It stands for Extensible Markup Language. Following are some of the salient features of XML.

- XML is a markup language.
- XML is a tag based language like HTML.
- XML tags are not predefined like HTML.
- You can define your own tags which is why it is called extensible language.
- XML tags are designed to be self descriptive.
- XML is W3C Recommendation for data storage and transport.

Example

```
<?xml version="1.0"?>
<Class>
  <Name>First</Name>
  <Sections>
    <Section>
      <Name>A</Name>
      <Students>
        <Student>Rohan</Student>
        <Student>Mohan</Student>
        <Student>Sohan</Student>
        <Student>Lalit</Student>
        <Student>Vinay</Student>
      </Students>
    </Section>
    <Section>
      <Name>B</Name>
      <Students>
        <Student>Robert</Student>
        <Student>Julie</Student>
        <Student>Kalie</Student>
        <Student>Michael</Student>
      </Students>
    </Section>
  </Sections>
</Class>
```

Advantages

Following are the advantages that XML provides:

- **Technology agnostic** - Being plain text, XML is technology independent. It can be used by any technology for data storage and transmission purpose.
- **Human readable**- XML uses simple text format. It is human readable and understandable.
- **Extensible** - in XML, custom tags can be created and used very easily.
- **Allow Validation** - Using XSD, DTD and XML structure can be validated easily.

Disadvantages

Following are the disadvantages of XML usage:

- **Redundant Syntax** - Normally XML file contains lot of repetitive terms.
- **Verbose**-Being a verbose language, XML file size increases the transmission and storage costs.