

# Introduction to XML

**HT-ML=HyperText Markup Language**  
**X-ML**  
**(Markup Language)**



UNIVERSITAS  
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# Kegunaan

- HTML → Display, presentation
- XML → Store, transfer data
- Nim
- Nama
- Alamat

Table : mahasiswa

| NIM        | Nama  | Alamat  |
|------------|-------|---------|
| 2019230200 | Susi  | Bekasi  |
| 2019230201 | Anton | Jakarta |
|            |       |         |

```
<?xml version="1.0"    coding="UTF-8"  ?>
<mahasiswa>
<nim>2019230200</nim>
<nama>Susi</nama>
<alamat>Bekasi</alamat>
<nim>2019230201</nim>
<nama>Anton</nama>
<alamat>Jakarta</alamat>
</mahasiswa>
```



# What is XML

- XML stands for eXtensible Markup Language.
- A markup language is used to provide information about a document.
- Tags are added to the document to provide the extra information.
- HTML tags tell a browser how to display the document.
- XML tags give a reader some idea what some of the data means.



# What is XML Used For?

- XML documents are used to transfer data from one place to another often over the Internet.
- XML subsets are designed for particular applications.
- One is RSS (Rich Site Summary or Really Simple Syndication ). It is used to send breaking news bulletins from one web site to another.
- A number of fields have their own subsets. These include chemistry, mathematics, and books publishing.
- Most of these subsets are registered with the W3Consortium and are available for anyone's use.



# Advantages of XML

- XML is text (Unicode) based.
  - Takes up less space.
  - Can be transmitted efficiently.
- One XML document can be displayed differently in different media.
  - Html, video, CD, DVD,
  - You only have to change the XML document in order to change all the rest.
- XML documents can be modularized. Parts can be reused.



# Example of an HTML Document

```
<html>  
  <head><title>Example</title></head>  
<body>  
  <h1>This is an example of a page.</h1>  
  <h2>Some information goes here.</h2>  
</body>  
</html>
```



# Example of an XML Document

```
<?xml version="1.0"/>
```

```
<address>
```

```
  <name>Alice Lee</name>
```

```
  <email>alee@aol.com</email>
```

```
  <phone>212-346-1234</phone>
```

```
  <birthday>1985-03-22</birthday>
```

```
</address>
```



# Difference Between HTML and XML

- HTML tags have a fixed meaning and browsers know what it is.
- XML tags are different for different applications, and users know what they mean.
- HTML tags are used for display.
- XML tags are used to describe documents and data.





# XML Rules

- Tags are enclosed in angle brackets.
- Tags come in pairs with start-tags and end-tags.
- Tags must be properly nested.
  - `<name><email>...</name></email>` is not allowed.
  - `<name><email>...</email><name>` is.
- Tags that do not have end-tags must be terminated by a `'/'`.
  - `<br />` is an html example.



# More XML Rules

- Tags are case sensitive.
  - `<address>` is not the same as `<Address>`
- XML in any combination of cases is not allowed as part of a tag.
- Tags may not contain '`<`' or '`&`'.
- Tags follow Java naming conventions, except that a single colon and other characters are allowed. They must begin with a letter and may not contain white space.
- Documents must have a single *root* tag that begins the document.

