## **Definition of the XML-- language**

## Extended BNF grammar:

Document	Element
Element	StartTag (Element   Data)* EndTag   EmptyTag
StartTag	< Name Attribute* >
EndTag	Name
EmptyTag	< Name Attribute* />
Attribute	Name = String

## Lexical summary:

Name	Initial Other*
Initial	Letter   _   :
Other	Initial   Digit   -   .
String	" (Char   ')* "   ' (Char   ")* '
Data	Char <sup>+</sup>
Char	Ordinary   Special   Reference
Ordinary	not (<   >   "   '   &)
Special	<   >   "   '   &
Reference	&# $(Digit)^+$ ;   &#x <math>(Digit   af   AF)^+</math>;</td></tr><tr><td>Letter</td><td>az   AZ</td></tr><tr><td>Digit</td><td>09</td></tr><tr><td>Comment</td><td><! ((not -)   (- (not -)))*></td></tr><tr><td>Whitespace</td><td>blank   tab (\t)   newline (\n)   return (\r)</td></tr></tbody></table>

## Additional constraints:

- The tokens are Name, String, Data, <, >, </, />, and =.
- Names and = may only appear inside tags, so elsewhere treat them as Data.
- Names are case-sensitive.
- Each StartTag and its corresponding EndTag must have matching names.
- Within each StartTag or EmptyTag, all attribute names must be distinct.
- The start symbol of the grammar is Document.
- Comments and Whitespace characters are ignored (except within a String).