

ABSTRACT

Hypertext Markup Language (HTML) is the official format for creating web pages. By using HTML, all of information can be displayed in a web page. Unfortunately, HTML is merely design to present hypertext page in a browser. Although HTML provides many facilities to present it, HTML doesn't provide a standard method for data processing.

XML (eXtensible Markup Language) is a language for describing and storing data, developed by World Wide Web Consortium (W3C) as a means to enable multiple systems, platforms, and applications to share data, by strictly defining how the data is to be stored and accessed. Unlike HTML, XML enables the users to define new elements to process information according to its domain and subject, this is where the extensibility in XML comes from.

XML itself is not alone, W3C has developed a number of standards that complement XML or often referred to as "XML companion standards" such as XML namespace for avoiding conflicts that are caused by XML extensibility, XSL for defining the presentation of XML documents, DOM and SAX as APIs for accessing XML documents, Document Type Definitions (DTDs) and XML Schemas are used to validate XML documents, XLink and XPointer are languages which are used to link XML documents to each other as the way HTML hyperlinks do, and many more.

This final project discusses about XML concepts. As a case study in order to know how the concepts can be applied to, the XML will be applied to develop a student information system for a faculty of a university.