**Task 1. What does the XML language represents? What does it used for?**

**XML** stands for **Extensible Markup Language**. It is a general-purpose specification for creating custom markup languages. It is classified as an extensible language because it allows its users to define their own elements. Its primary purpose is to help information systems share structured data, particularly via the Internet, and it is used both to encode documents and to serialize data. In the latter context, it is comparable with other text-based serialization languages such as JSON and YAML.

XML was designed to describe data, with focus on what data is. It is just information wrapped in tags. Someone must write a piece of software to send, receive or display it.

XML is a markup language much like HTML, but it was designed to describe data, not to display it.

XML tags are not predefined. You must define your own tags.

XML is designed to be self-descriptive.

XML is a W3C Recommendation.

**Task 3. What does the namespaces represents in the XML documents? What are they used for?**

**XML namespaces** are used for providing uniquely named [elements](http://en.wikipedia.org/wiki/Data_element) and attributes in an [XML](http://en.wikipedia.org/wiki/XML) document.  In XML, element names are defined by the developer. This often results in a conflict when trying to mix XML documents from different XML applications. XML Namespaces provide a method to avoid element name conflicts.

**Task 4. Explore http://en.wikipedia.org/wiki/Uniform\_Resource\_Identifier to learn more about URI, URN and URL definitions.**

A **uniform resource identifier** (**URI**) is a [string](http://en.wikipedia.org/wiki/Character_string_(computer_science)) of [characters](http://en.wikipedia.org/wiki/Character_(computing)) used to [identify](http://en.wikipedia.org/wiki/Identifier) a name of a [resource](http://en.wikipedia.org/wiki/Resource_(computer_science)). Such identification enables interaction with representations of the resource over a network, typically the [World Wide Web](http://en.wikipedia.org/wiki/World_Wide_Web), using specific [protocols](http://en.wikipedia.org/wiki/Protocol_(computing)). Schemes specifying a concrete [syntax](http://en.wikipedia.org/wiki/Syntax) and associated protocols define each URI. The most common form of URI is the [uniform resource locator](http://en.wikipedia.org/wiki/Uniform_resource_locator) (URL), frequently referred to informally as a *web address.*

A **uniform resource locator** (**URL** or **web address**, particularly when used with [HTTP](http://en.wikipedia.org/wiki/HTTP)) is a specific [character string](http://en.wikipedia.org/wiki/Character_string) that constitutes a reference to a [resource](http://en.wikipedia.org/wiki/Web_resource). Most [web browsers](http://en.wikipedia.org/wiki/Web_browser) display the URL of a web page above the page in an [address bar](http://en.wikipedia.org/wiki/Address_bar). A URL implies the means to access an indicated resource, which is not true of every URI.[[2]](http://en.wikipedia.org/wiki/Uniform_resource_locator#cite_note-rfc3305-2)[[3]](http://en.wikipedia.org/wiki/Uniform_resource_locator#cite_note-uri-vs-url-3) URLs occur most commonly to reference web pages (http), but can also have a role in file transfer ([ftp](http://en.wikipedia.org/wiki/File_Transfer_Protocol)), email ([mailto](http://en.wikipedia.org/wiki/Mailto)), database access ([JDBC](http://en.wikipedia.org/wiki/Java_Database_Connectivity)), and many other applications (see [URI scheme](http://en.wikipedia.org/wiki/URI_scheme) for a list).

A **uniform resource name** (**URN**) is the historical name for a [uniform resource identifier](http://en.wikipedia.org/wiki/Uniform_resource_identifier) (URI) that uses the urn [scheme](http://en.wikipedia.org/wiki/URI_scheme). A URI is a [string](http://en.wikipedia.org/wiki/Character_string_(computer_science)) of [characters](http://en.wikipedia.org/wiki/Character_(computing)) used to [identify](http://en.wikipedia.org/wiki/Identifier) a name of a [web resource](http://en.wikipedia.org/wiki/Web_resource). Such identification enables interaction with representations of the web resource over a network, typically the [World Wide Web](http://en.wikipedia.org/wiki/World_Wide_Web), using specific [protocols](http://en.wikipedia.org/wiki/Protocol_(computing)).