Resource Addressing

URI

* Is currently the only web resource naming/addressing technology. Uniform Resource Identifiers (URIs) can also be further classified as a Uniform Resource Locator (URL) or a Uniform Resource Name (URN).
  + URI Generic Syntax :
    - foo://sample.com:8080/sample/path?name=query#section : URL
    - urn:sample:person:foot:nail : URN
* a URL is a URI in its completeness. URLs always start with a scheme, then the authority, path, query, and the fragment.
  + Scheme – this component indicates the access mechanism to be applied when retrieving a web resource.
  + Authority – this component is preceded with a double slash. It may consist of subcomponents namely, user information, host, and port.
    - User information – are the credentials of the user accessing the web resource. However, the use of the “user:password” format for this subcomponent has been deprecated. It has been proven to be a security risk since user credentials/ authentication passed in clear text or unencrypted form. This subcomponent may consist of a user name followed by an At-sign (@) that acts as a delimeter for the user information and the host.
    - Host – this subcomponent may either be an IP literal enclosed with square brackets, an IPv4 address, or a registered name and is case sensitive.
    - Port – the port subcomponent is an optional port number delimited by a colon (:) following the host.
      * A scheme may define a default port. URI producers and normalizers are advised to omit this subcomponent if it is empty or if the value is the same as the default port number.
  + Path – the path component is a string of characters that describes the relative location of a resource to its server.
  + Query – this component is a string of characters preceded with a question mark (?) that may or may not be written with the URL. This component along with the path component serves to identify a specific resource. It is in the form of “key=value” pairs, also with an ampersand to delimit each pairs.
  + Fragment – the fragment component is preceded with a hashtag or a number sign (#) that is used to identify a portion of the resource of the document.

HTML Document structure

Version Information

* Indicates the html version used for the document.

Root Element

* The html element indicates that the webpage is written in HTML. It contains the remainder of the document.

Head Element

* Contains the title and meta-information about a document, such as the character set used, author, etc.

Body Element

* Contains the actual content of the document.