XML - extensible mark up language

Store and transfer data from one application layer to another

previous to communicate between different layer CORBA and Pearl were used

Generally termed as REmote procedure calls

it has its own disadvantages

Mobile

Desktop

Laptop

OS

UI language

W3 schools  list the standards

HTML

<p>

<table>

<tr>

<td> one </td>

</tr>

</table>

This is mainly informing browser about the display info HTML is mainly for UI

but XML it does not have any front end  XML contains only data

the data is enveloped as mark up language

HTML tag are predefined but xml is userdefined as per the data

HTML tags are not case sensitive but XML is case sensitive

Student ---> first name, last name, id, address- address1, address2, city, state, zip,  phone, email-id, course

simple elements and complex

<students>

<student>

         <id>1234</id>

          <name>

                 <first\_name> ABC</first\_name>

                   <last\_name> last name</last\_name>

          </name>

          <address>

                     <street>.....</street>

                      <city>......</city>

                        <state>...<state>

                         <zip>...</zip>

            </address>

              <phone>   </phone>

 </student>

<student>

         <id>1234</id>

          <name>

                 <first\_name> ABC</first\_name>

                   <last\_name> last name</last\_name>

          </name>

          <address>

                     <street>.....</street>

                      <city>......</city>

                        <state>...<state>

                         <zip>...</zip>

            </address>

              <phone>   </phone>

 </student>

</students>

<!Element Students student id name first\_name last\_name...

webdriver.findElement(getby id ="city")

www  w3 consortium

<! HTML>

DTD - data type definition DTD is a must

XSD - schema definition  XSD is optional

Web services -  SOAP and REST api

SOAP is protocol. it uses only xml

Data is sent as xml alongwith an envelope

WSDL envelopes all the elements

REST uses json

Json - Javascript Object Notation

REST - it uses HTTP calls and it uses json/xml/plain text

Json  - key and value pair

Object - { }

Array -     id1, id2    [ids : { id : 123}, {id : 456}]

Simple and complex

{                                          student[0].id=1234         student[0].name.first\_name = abcd

students : {

   [student : {

    id : 1234,

    name : { first\_name : "abcd", last\_name:"efd"},

   address : { street : "...", city : " ...", state :"  ", zip : "..."}

    phone : 51090000,

   email: "abcd@gmail.com"

     }

   ]

 [student : {

    id : 567,

    name : { first\_name : "abc d", last\_name:"efd"},

   address : { street : "...", city : " ...", state :"  ", zip : "..."}

    phone : 51090000,

   email: "abcd@gmail.com"

     }

   ]

}

}

student[0].id = 1234

student[0].name.first\_name = abcd

student[1].address.state

Xpath

path of an element in html

DOM - document object  Model

  compare to tree structure

mozilla firefox firebug

locators -- 8 different ways of find locators

 id, name, xpath, css selectors, tagname, partial link text, link text

xpath

.//\*[@id='navbar-collapse']/ul/li[1]/a

// - relative path

/absolute path

//p - show all the p tags

array object =webdriver. findElement(by.tagname="ul")

CSS

.nav-item>a

css is faster than xpath will go forward

xpath will be useful if you traverse back and forth in dom