

## DOM (Document Object Model)

- **DOM** stands for Document Object Model
- Browsers while browsing a HTML page will build an internal model of the HTML page called the Document Object Model
- Download the Screens-hot demonstrating DOM structure from [here](#).
  - Demonstrate the above in a DOM tab of Firebug by launching a created HTML page - Click [here](#) to download the file
- The following examples will demonstrate how the JavaScript uses JavaScript Expressions for locating the HTML elements which are represented as DOM objects:
  - document.title - [Refer file for Demonstration](#)
  - document.write - [Refer file for Demonstration](#)
  - Demonstrate how DOM can change the elements dynamically and we are going to use DOM for locating elements - [Refer file for Demonstration](#)
  - document.getElementById() - [Refer file for Demonstration](#)
  - document.getElementById().innerHTML - [Refer file for Demonstration](#)
  - document.getElementsByTagName() - [Refer file for Demonstration](#)
  - document.getElementsByClassName() - [Refer file for Demonstration](#)
  - document.getElementsByName() - [Refer file for Demonstration](#)
- Demonstrate locating an element using DOM in Selenium IDE (Demonstrate using Button2 button in omayo website)
  - document.getElementById("but2")
  - dom = document.getElementById("but2")
- Locating different elements using dom: (Demonstrate at [http://compendiumdev.co.uk/selenium/basic\\_web\\_page.html](http://compendiumdev.co.uk/selenium/basic_web_page.html) )
  - Use DOM tab as a reference to understand the below Absolute structure
  - Absolute Way:
    - Locating whole web page - document.documentElement
    - Locating Web Page body - document.body
    - Locating first p tag - document.body.childNodes[1]
    - Locating second p tag - document.body.childNodes[3]
  - Relative Way:
    - Locate whole web page - document.getElementsByTagName('html')[0]
    - Locate head portion - document.getElementsByTagName('head')[0]
    - Locate body portion - document.getElementsByTagName('body')[0]
    - Locate first p tag - document.getElementsByTagName('p')[0]
    - Locate second p tag - document.getElementsByTagName('p')[1]
    - (Demonstrate at <http://omayo.blogspot.in/> )
      - Locate image tag - dom=document.getElementsByTagName('img')[31]
      - Locating Using id value of an element - document.getElementById('but2')
      - Locate using name value of elements - document.getElementsByName('gender')[0]
      - Locate using class value of elements - document.getElementsByClassName('classone')[0]
      - Locating the hyperlinks - document.links[10]
    - Using DOM with table
      - Locate 'pune' cell in the table - document.getElementById('table1').getElementsByTagName('tr')[2].getElementsByTagName('td')[2]
    - Using DOM with Form
      - Locate HTML form - document.form1
      - Locate elements in the form - document.form1.getElementsByTagName('input')[0]
      - Locate elements in the form - document.form1.getElementsByTagName('input')[1]
      - Locate elements in the form - document.form1.getElementsByTagName('button')[0]
    - HTML DOM Properties and Methods - [https://www.w3schools.com/jsref/dom\\_obj\\_all.asp](https://www.w3schools.com/jsref/dom_obj_all.asp)