**Handling Dynamic Elements:**

*In this section we will learn different ways to handle dynamic element and construct generic Xpath.*

*In few scenarios, element attributes change dynamically. It can be ‘id’, ’name’ etc.*

*Example: let’s say ‘id’ of a username field is ‘username\_123’ and the XPath will be*

*//\*[@id=’username\_123′] but when you open the page again the ‘id’ of ‘username’ field might have changed and the new value may be ‘username\_234’.*

*In this case, the test will fail because the selenium could not find the XPath you have passed earlier as the id of the field has changed to some other value.*

*There are many approaches depending upon the type of problem:*

**Problem Type 1:** If part of the attribute value changes.

**Example:** As in the above example, id value changes but few fields remains constant.

‘username\_123’ changed to ‘username\_234’ but ‘username’ always remained constant.

You can construct xpath as below:

driver.FindElement(By.Xpath(“//\*[contains(@id,’username’)]”)).SendKeys(“username”);

driver.FindElement(By.xpath(“//\*[starts-with(@id,’user’)]”)).SendKeys(“username”);

‘contains’ is a java script method which checks if id contains the substring username.

starts-with() checks if any attribute starts with “user”.