SELENIUM XPATH

Most powerful selector

PRIMARY DIFFERENCE

- XPath we can traverse both forward and backward whereas CSS selector only moves forward
- XPath can search by text, using contains functionality

GENERAL LOCATOR STRATEGY

1. ID first
2. CSS selector for everything else
3. When nothing else works, use XPath

WHAT IS XPATH?

- XPath is defined as **XML path**.

- XPath is used to find the location of any element on a webpage using HTML DOM structure.

TYPES OF X-PATH

There are two types of XPath:

1) Absolute XPath

2) Relative XPath

ABSOLUTE XPATH:

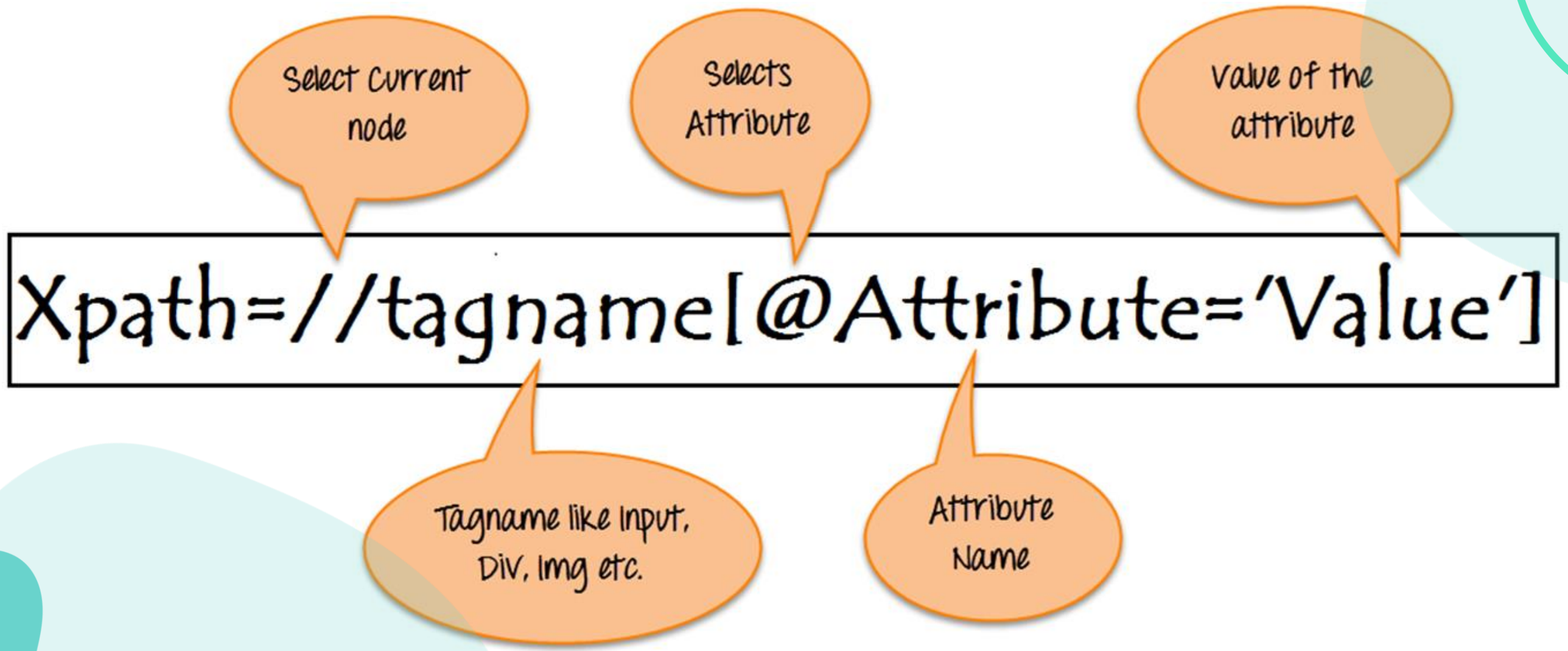
/html/body/div[2]/div/section/
figure/figcaption/div[2]

RELATIVE XPATH:

//*[@id= 'contact_form']

```
<!DOCTYPE html>
<html lang="en">
▶ <head>…</head>
▼ <body>
  ▶ <div class="wrapper row1">…</div>
  ▼ <div class="wrapper row2">
    ▼ <div id="container" class="clear">
        <!-- Slider -->
      ▼ <section id="slider" class="clear center">
        ▼ <figure>
          ▼ <figcaption>
              <h2>Contact Us</h2>
            ▶ <div class="small">…</div>
...         ▼ <div id="contact_form"> == $0
              "
                                  Username: "
              <input type="text" id="username">
              <br>
              "
                                  Password: "
              <input type="password" id="password">
              <br>
```

BASIC FORMAT OF RELATIVE XPATH



BASIC XPATH

Xpath=//input[@type='text']

Xpath=//label[@id='message23']

Xpath=//input[@value='RESET']

Xpath=//*[@class='barone']

Xpath=//a[@href='http://demo.guru99.com/']

Xpath= //img[@src='//cdn.guru99.com/images/home/java.png']

CONTAINS():

Xpath=//*[contains(@type,'sub')] type inde sub kelimesi geçen

Xpath=//*[contains(@name,'btn')]

Xpath=//*[contains(@id,'message')]

Xpath=//*[contains(@href,'guru99.com’)]

Xpath=//h2[contains(text(),'Popular right now')]

STARTS-WITH FUNCTION

Xpath=//label[starts-with(@id,'message')]

ENDS-WITH FUNCTION

Xpath=//label[ends-with(@id,'message')]

The ends-with function is part of xpath 2.0 but browsers generally only support 1.0

USING OR & AND

Xpath=//*[@type='submit' or @name='btnReset']

Xpath=//input[@type='submit' and @name='btnLogin’]

Xpath =//span[@role='menuitem' or @class='text-gray-darker’]
Or = || in java
And = && in java

Xpath =//a[@id='item_0_title_link' or @href='./inventory-item.html?id=0']

TEXT()

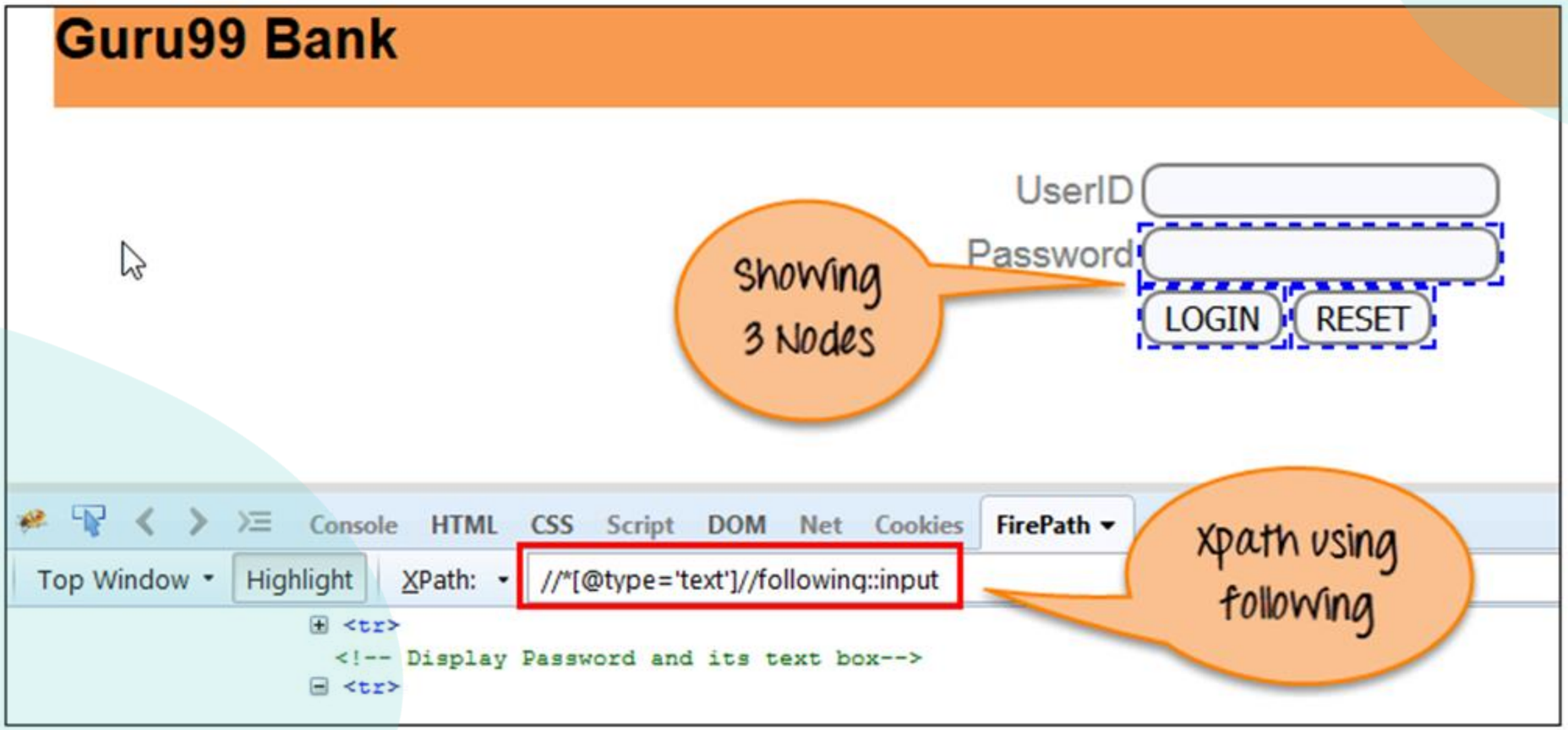
Xpath= //*[text()='Accepted usernames are:'] ekranda gözüken yani tag lerinin arasında olan yazı

```
<div class="login_credentials_wrap-inner">
  <div id="login_credentials" class="login_credentials">
    <h4>Accepted usernames are:</h4> == $0
    "standard_user"
    <br>
```

FOLLOWING

following: This function will return the following elements of the particular component.

Xpath=//*[@type='text']//following::input



BY INDEX []

Xpath=//*[@type='text']//following::input[1]

CHILD

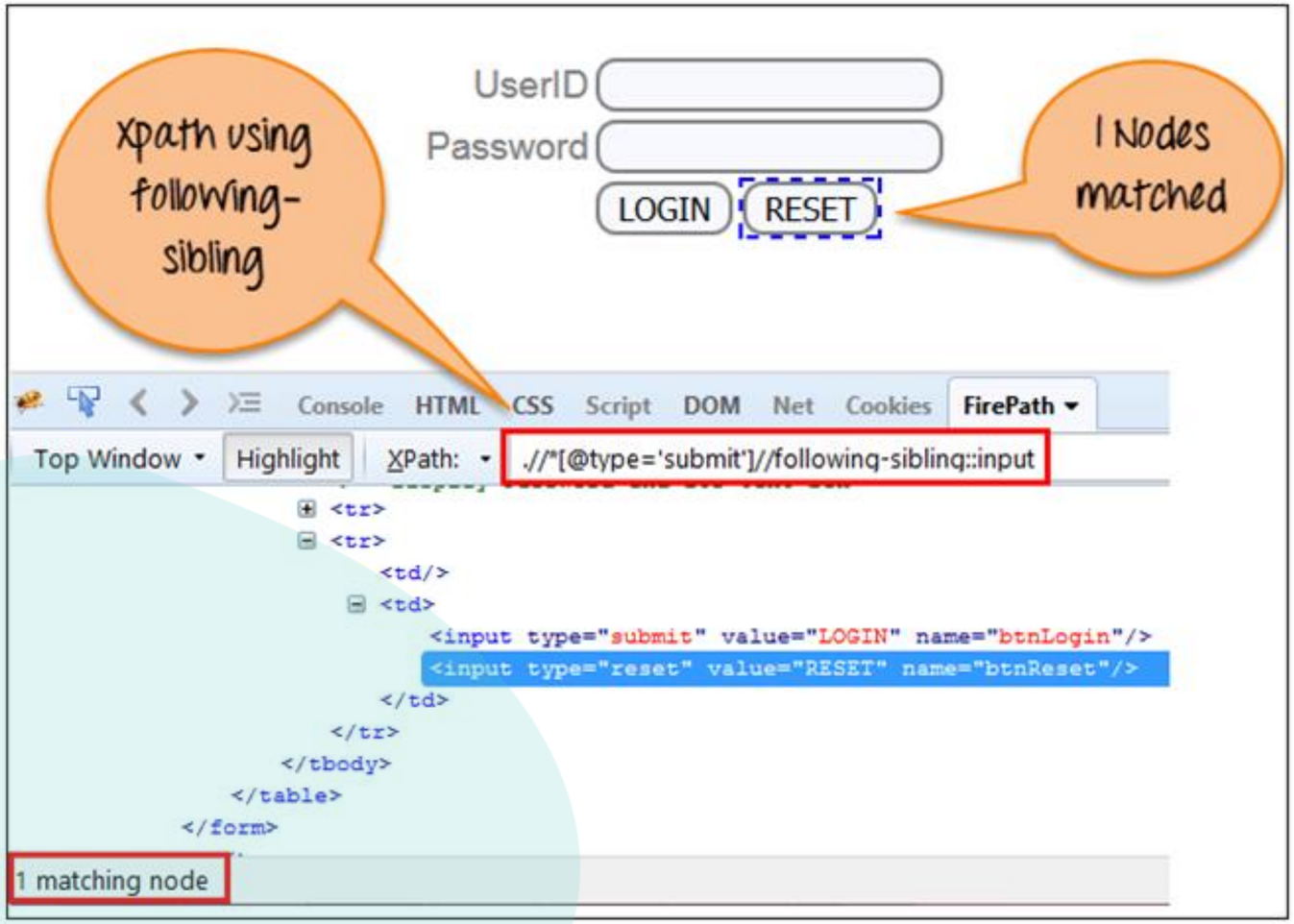
Xpath=//*[@id='java_technologies']//child::li

Xpath=//div[@class='cart_list']//a

Selects all children elements of the current node

FOLLOWING-SIBLING (SIBLINGS ON SAME LEVEL)

xpath=//*[@type='submit']//following-sibling::input



PRECEDING-SIBLING

xpath=//*[@type='submit'
]
//preceding-sibling::input

.. GOING UP ONE LEVEL

xpath=//*[@type='submit']/../span

Xpath=//*[text()='ADD TO CART']/parent::div