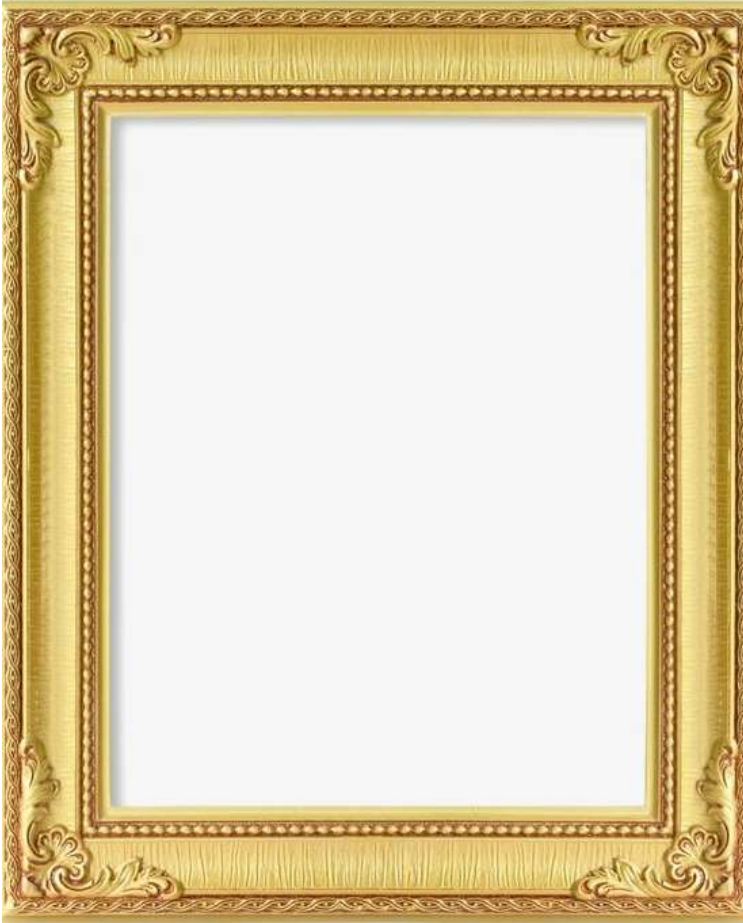


Selenium WebDriver Training

Target Locators
Frame

Frames



Pictures are **embedded** inside the frame

Frames



Important documents/jewels are **embedded** inside the frame

The Golden Circle

What

What is a Frame?

Frames are like another DOM embeded inside the DOM

Why

Why do we need to handle it?

To act on any element inside the frame

How

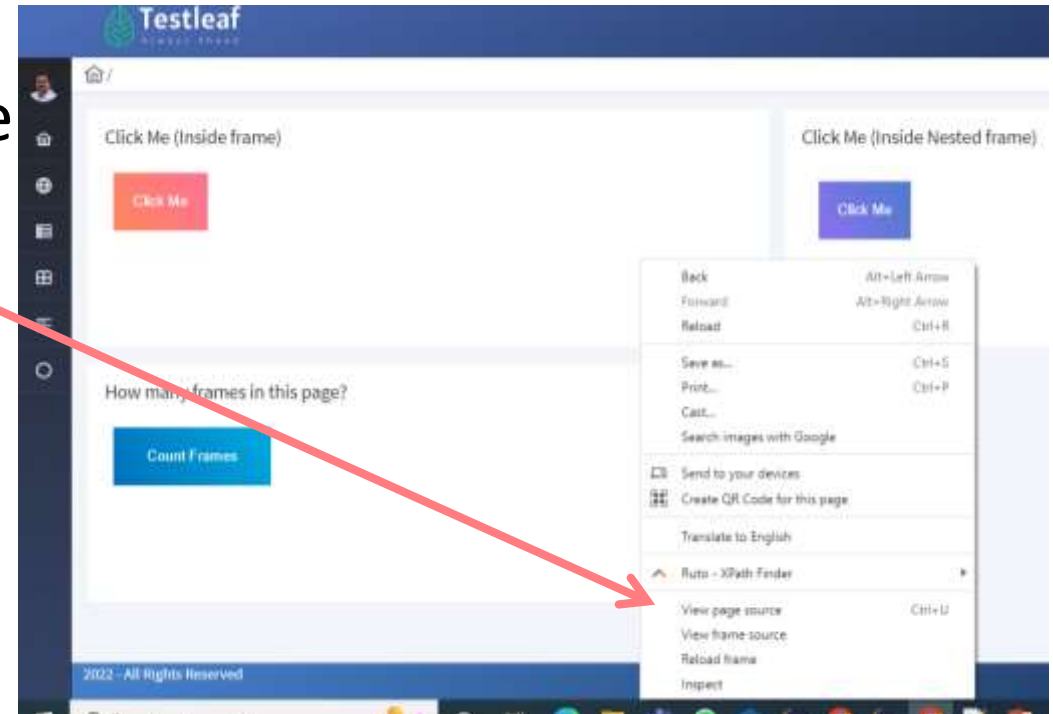
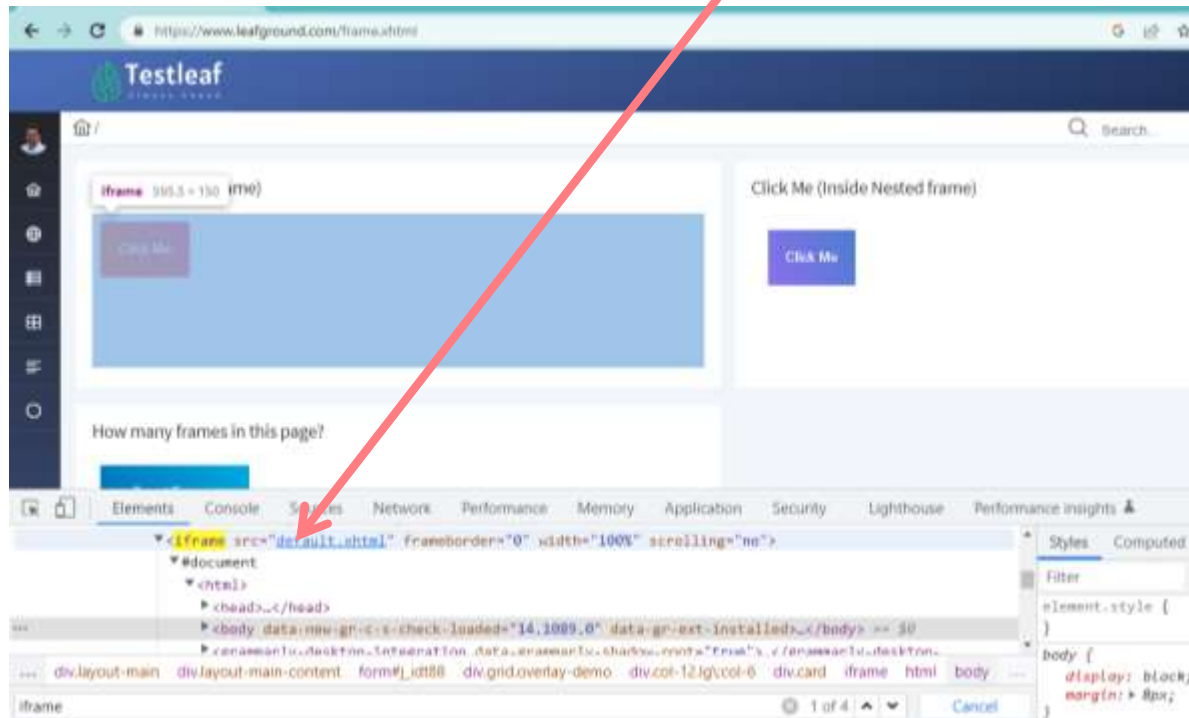
How to handle iframe?

Transfer the driver focus to frame

How to identify iframe..

Iframes->inline frame are identified in two ways

- By right click on Webpage → frame source
- By searching //frame in DOM



Structure of frame..

The image shows a web application interface on the left and its underlying HTML structure in Chrome DevTools on the right.

Web Application Interface (Left):

- Header: Testleaf Always Ahead
- Navigation: Home icon, profile icon, and a sidebar with icons for home, search, list, grid, and menu.
- Main Content: A blue box with a "Click Me" button. Below it, a text prompt "How many frames in this page?" and a blue button labeled "Count Frames".

Chrome DevTools (Right):

- URL: `www.leafground.com/frame.xhtml`
- Elements Panel: Shows the DOM tree. The selected element is an `iframe` with `src="default.xhtml"`, `frameborder="0"`, `width="100%"`, and `scrolling="no"`. The content of the iframe is visible in the preview pane, showing a "Click Me (Inside frame)" button.
- Console Panel: Shows the output of the "Count Frames" button click, displaying "1 of 4".

Contd..

Structure of iframe..

The image shows a web application interface on the left and its corresponding HTML structure in DevTools on the right. The web application has a blue header with the Testleaf logo and navigation links. Below the header, there is a light blue box containing a button labeled "Click Me". Below this box, there is a text prompt "How many frames in this page?" and a blue button labeled "Count Frames". The footer of the web application states "2022 - All Rights Reserved".

The DevTools window on the right shows the HTML structure of the page. The main content area is a form with a hidden input field and a button labeled "Click Me (Inside frame)". The HTML structure is as follows:

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
  <head id="j_idt2">...</head>
  <body class="main-body ui-input-filled" data-new-gr-c-s-check-loaded="14.1089.0" data-installed-data-new-gr-c-s-loaded="14.1089.0">
    <div class="layout-wrapper layout-wrapper-slim-sidebar slim">
      <div class="layout-topbar">
        <a href="/dashboard.xhtml" class="logo">...</a>
        <a id="menu-button" href="#">...</a>
        <form id="topbarProfileForm" name="topbarProfileForm" method="post" action="/f...>
          <input type="text" value="Search" />
        <a id="right-sidebar-button" href="#">...</a>
      </div>
      <div class="layout-sidebar layout-sidebar-dark layout-sidebar-gradient">
        <div class="sidebar-scroll-content">...</div>
      </div>
      <div id="layout-right-sidebar">...</div>
      <a tabindex="0" id="layout-config-button" class="layout-config-button">...</a>
      <div class="layout-config">...</div>
      <div class="layout-main">
        <div class="route-bar">...</div>
        <div class="layout-main-content">
          <form id="j_idt88" name="j_idt88" method="post" action="/frame.xhtml" enctype="application/x-www-form-urlencoded">
            <input type="hidden" name="j_idt88" value="j_idt88">
            <div class="grid overlay-demo">
              <div class="col-12 lg:col-6">
                <div class="card">
                  <h5> Click Me (Inside frame)</h5>
                  <iframe src="/default.xhtml" frameborder="0" width="100%" scrolling="no">...</iframe>
                </div>
              </div>
            </div>
          </form>
        </div>
      </div>
    </div>
  </body>
</html>
```

A red dashed line points from the "Click Me (Inside frame)" text in the DevTools HTML to the "Click Me" button in the web application, illustrating the concept of HTML inside another HTML document via an iframe.

HTML inside the other HTML

How to Handle it ?

To handle alert

- ✓ Transfer the driver focus into frame

syntax:

driver.switchTo().frame(args);



Note: Return type of it is *WebDriver interface*
and the implementation class is
RemoteWebDriver

Ways to SwitchTo frame

Using Index

- `driver.switchTo().frame(int index)`
- Index starts with 0

Using id/name attribute

- `driver.switchTo().frame(String id/Attribute);`

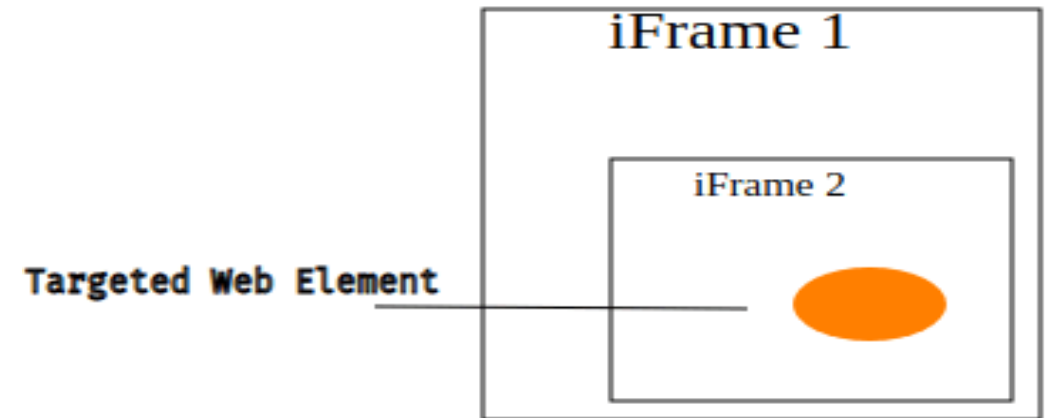
Using WebElement

- `driver.switchTo().frame(driver.findElement(WebElement))`

Nested Frames



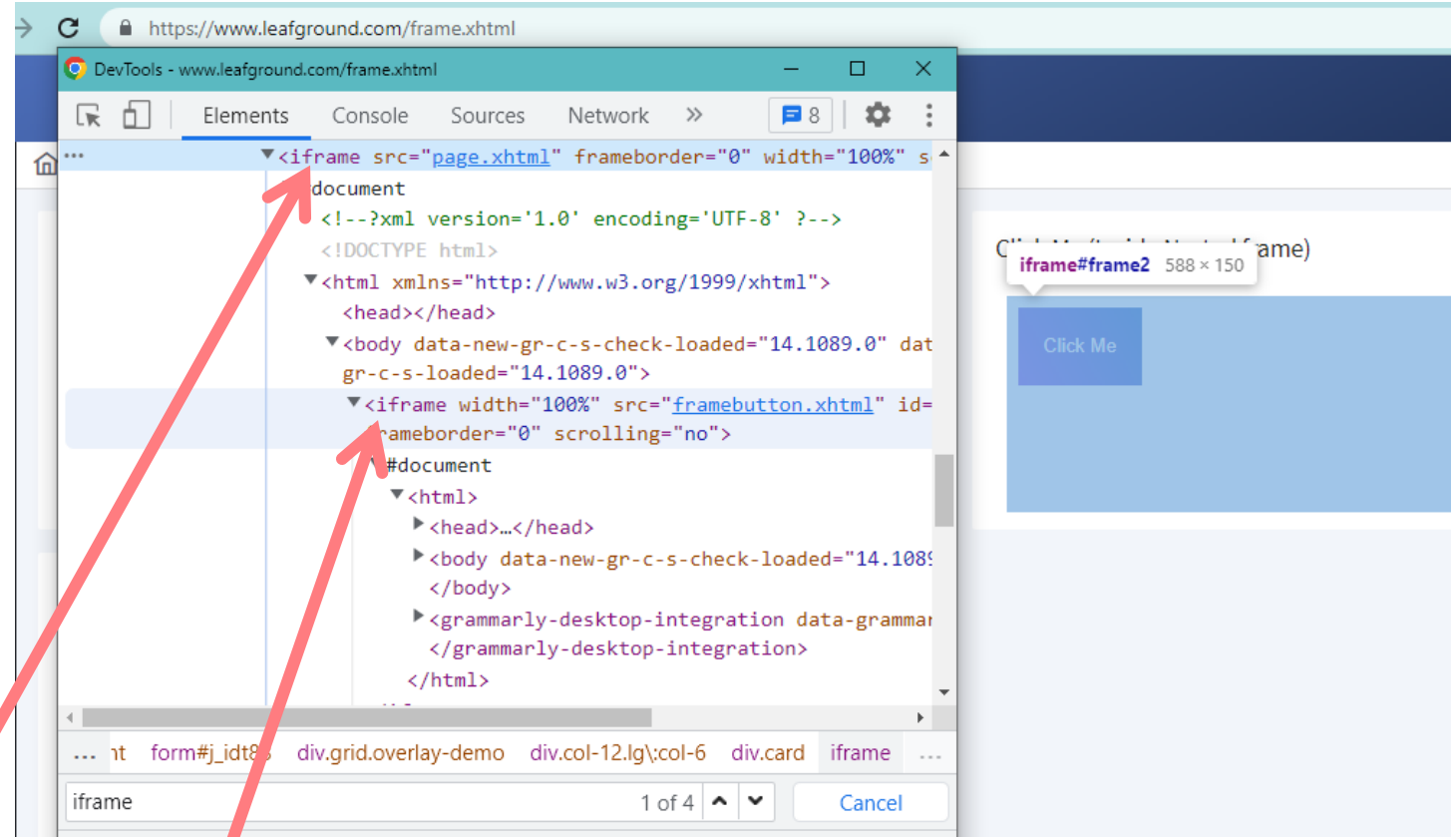
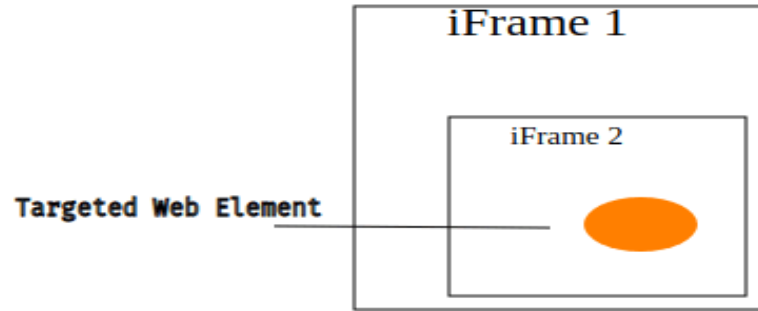
Parent Web Page



Frame inside another frame

Nested Frames

Parent Web Page



Frame inside another frame

How to handle nested frame

- possible to switch between the frames using index, String id/name or WebElement

- take the driver focus to the main content of Webpage

driver.switchTo().defaultContent();

```
WebDriver frame = driver.switchTo().frame(0);
WebElement firframe = driver.findElement(By.id("Click"));
firframe.click();
System.out.println(firframe.getText());
//to return to the main content of the page
driver.switchTo().defaultContent();
```

- take the driver focus to the immediate parent frame

driver.switchTo().parentFrame();

Classroom

Launch the url:

https://www.w3schools.com/js/tryit.asp?file=tryjs_confirm

Click Try It Button

Click OK/Cancel in the alert

Confirm the action is performed correctly by verifying the text !!

Hint

Switch to the frame

Then click Try It with xpath

Switch to the alert and Enter your name in alert box

Then perform accept / dismiss

Get the text using id

Verify the text based on the action

Summary

- Iframe-> inline frame → dom inside other dom
- To handled by switching the driver control into the frame
- 3 ways -> by index, by frame id/name , by frame as web element

Mind Map

