Save Copy to Evernote

Last updated: Feb 12, 2022

Handling Frames and iFrames - Covers new commands introduced in Selenium 4 (Selenium 4 - Session 20)

- What are iframes?
  - iframe is one of the tags available in HTML
  - Using iframe we can embed another HTML page in a HTML page.
  - Practical Demonstration
  - Examples of applications using iframe:
    - W3Schools
- Difference between frame and iframe
  - frames divide the web page into multiple sections, where each section can load a separate HTML document.
    - Example of applications using frames:
      - Java 8 API pages
  - iframes are used in HTML pages, to embed other HTML pages anywhere in the HTML document.
- We get NoSuchElementException, if we don't switch to iFrames/frames and perform operations on any UI element inside an iframe.
  - Practical Demonstration - https://the-internet.herokuapp.com/iframe
  - How to find-out whether the required UI element is inside a frame
  - Different possible reasons for getting a NoSuchElementException
  - Switch to a frame and performing operation on any UI element inside the frame
  - switchTo().frame()
- Different ways we can switch to the frames
  - Using id locator of frame
    - Practical Demonstration - https://the-internet.herokuapp.com/iframe
  - Using name locator of frame
    - Practical Demonstration - https://docs.oracle.com/javase/8/docs/api/
  - Using WebElement of a frame
    - Example: https://blogpendingtasks.blogspot.com/p/switchtoframeusingwebelement.html
  - Using index of a frame
    - Finding number of frames on the page
      - https://the-internet.herokuapp.com/iframe
      - driver.findElements(By.tagName("iframe")).size()
    - Switching to a frame using index 0 when there is only one frame on the page
      - https://the-internet.herokuapp.com/iframe

- Nested Frames
    - Frame inside another frame
    - Example: https://letcode.in/frame
- Parent, Child and Sibling Frames
    - https://the-internet.herokuapp.com/nested_frames
    - driver.switchTo().parentFrame();
- Switching to the frame using index when there are multiple frames available on the page
    - Finding number of frames on the page
        - https://docs.oracle.com/javase/8/docs/api/
        - driver.findElements(By.tagName("iframe")).size()
    - Finding the index of the frame in which the required UI element is available