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Selenium Java Training - Session 18 - Handling Frames, Lightbox, Actions class and Keys class

Handling Frames

- Demonstrate the problem statement
  - 'NoSuchElementException' will be displayed on trying to find the web element which is displayed in an iframe
  - Enter text into a text field inside the iframe page
- Frame is a web page which is embedded in another web page, and is used to display multiple pages inside a single web page.
  - Developers can also embedded a document to be scrolled inside a frame
- In HTML, <iframe> is the tag used by the Web Developers to display any Frame on the Page.
- View the iframes in www.omayo.blogspot.com page - Right click on the frames and observe that 'This Frame' option will be displayed
- Switch to the required frame and perform operations (View code here)
  - First switch to a frame and enter text into text field inside frame - Using **switchTo().frame(WebElementOfFrame)**
  - Switch back to the main page using **switchTo().defaultContent()** and type text into the 'Search' text box field
- Finding the number of frames available on the page
  - System.out.println(driver.findElements(By.tagName("iframe")).size());
- We can switch to the frames using id locator or name locator also
  - driver.switchTo().frame("idvalue");
  - driver.switchTo().frame("namevalue");

Handling Light-box

- Unlike alerts, frames or windows, we need not switch to Lightbox for performing operations.
  - http://omayo.blogspot.com/p/lightbox.html
- Light boxes are part of the same HTML web page only.
- Demonstrate a program which handles the light box - Demonstrate here
  - Hence it is not required to switch to the lightbox for performing operations on it.
- Real time examples for Light-box
  - https://www.flipkart.com/

- **Actions** is a predefined Class of Selenium WebDriver
- Actions class contain various predefined methods which can simulate Mouse and Keyboard Events
- The below are the different methods of Actions class which we can use in automation for handing Mouse and keyboard actions:
    - **moveToElement(), click(), perform() and build() methods**
        - Demonstrate moving the mouse to Blogs menu, followed by Selenium143 menu option and clicking it using mouse - Demonstrate here
        - Optimizing the above program using build().perform() - Demonstrate here
        - Dont huddle the mouse while handing the mouse actions using Actions class
    - **dragAndDropBy()**
        - Demonstrate dragging and dropping the startButton horizontal to the right - Demonstrate here
            - `Application URL: http://omayo.blogspot.com/p/page3.html`
        - Demonstrate dragging and dropping the startButton horizontal to the left - Demonstrate here
    - **contextClick()**
        - Demonstrate right clicking on Search Box field - Demonstrate here
    - **doubleClick()**
        - Demonstrate double clicking on double click text in the omayo blog - Demonstrate here
    - **dragAndDrop()**
        - Demonstrate dragging and dropping an element from a location to a different location - Demonstrate here
        - Application URL: http://dhtmlgoodies.com/scripts/drag-drop-custom/demo-drag-drop-3.html
    - **keyDown() and keyUp() methods**
        - Demonstrating opening a link in new tab (Compendium Link on Omayo) - Demonstrate here
    - **sendKeys()**
        - Demonstrate typing username, then press tab key, entering password and then pressing tab key and pressing enter key - Demonstrate here
        - Login functionality available at the end of the omayo blog page

Keys Class

- Login using Enter key on http://tutorialsninja.com/demo/index.php?route=account/login
    - Demonstrate here
- Use Keys.chord for pressing multiple keys together
    - Enter text into the text area field and clearing it using Ctrl + z keys - Demonstrate here

By