Web Based Automation Framework for Beginners.

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Why do a presentation about automation framework for Beginners?
Automation Backlog
Automation Backlog

- Numbers of test-cases to be automated.
- Consists of different types of test-cases.
  - Short, quick, simple …Single Page
  - Long, slow, complex …End to End.
- Reduce the number of test-cases that still need to be automated.
Why use a Framework at all?
Benefits of Using a Framework

• Easy to use.
• Easy to follow.
• Set coding pattern.
  • Sample test file.
• Tests work right away.
• Beginners confidence will soar.
• Backlog will decrease in size.
How does it work?
Built around the use of Freeware

Freeware Trio
TestNG

• Provides the test structure.
  • Setups and Teardowns of Classes and Methods.
  • Asserts to determine status of each test.
  • Results Information as to Pass or Fail.
• Provides the ability to group sets of test together.
  • Single
  • Group (Small or Large)
  • Whole suite
• Supports both Selenium and Java.
Selenium (Part 1)

- Provides the ability to control the Web Browser through:
  - Navigation
    - Direct URL entry
  - Page Flow
    - Links
    - Popups
  - Data Entry
    - Key Board
    - Mouse
Selenium (Part 2)

• Provides means to validate:
  • Elements
    • Currently present or hidden on page.
    • Any other details like Font, location, Color, …etc.
  • Page Flow
    • Links redirect properly.
    • Back buttons redirect properly.
Java

• Language, that is what test code are written in.
• Tests are executed by Java and in conjunction with Selenium.
• Easy to learn language.
• Internet is filled with examples of Java code snippets.
How do you implement the framework using the Freeware Trio?
Basic Organization Style of Programming

• Constants
• Global and Local Variables
• Methods (Repeatable Code)
• Logic Constructs and Data Types
• Step by Step methodology
What does Our website look like?
We connect lenders, settlement agents, and counties.

Collaboration
Securely share, validate, and collaborate on real estate documents, data, transaction details, and fees.

E-recording
Join the nation’s largest e-recording network and record documents in minutes, saving time and money.

Post Closing
Know what happens to documents after closing, and share recorded documents, final title policy, fee estimates, and more.
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Learn more
What does Our Test Code look like?
If Links are Present

```java
@Test (priority = 4, groups = { "Nav","SAMPLE" })
public void testMainPageLinksRPresent()
{
    //validate that links are present
    assertTrue(driver.findElements(By.cssSelector("#post-27 > section > div.home-banner > div > div > div > div.home-banner-collaboration.fourcol.first > div.home-banner-person > a > img")).size() > 0);
    assertTrue(driver.findElements(By.cssSelector("#post-27 > section > div.home-banner > div > div > div > div.home-banner-erecording.fourcol > div.home-banner-person > a > img")).size()>0);
}
```
If Links are Present

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}
```

TestNG > @Test, priority, groups, assertTrue
Selenium > driver, findElements, By.cssSelector, size
Java > Encompassed by!
If Link Redirects Work (1)

@Test (groups = { "Nav" })
public void testProducts()
{
    //validate that links go to correct location
    goToPage("#menu-item-34 > a", HTTPS_SIMPLIFILE_COM_E_RECORDING);
    goToPage("#menu-item-135365 > a", HTTPS_SIMPLIFILE_COM_COLLABORATION);
    goToPage("#menu-item-135364 > a", HTTPS_SIMPLIFILE_COM_POST_CLOSING);
}
If Link Redirects Work (1)

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public void testProducts(){
    //validate that links go to correct location
    goToPage("#menu-item-34 > a", HTTPS_SIMPLIFILE_COM_E_RECORDING);
    goToPage("#menu-item-135365 > a", HTTPS_SIMPLIFILE_COM_COLLABORATION);
    goToPage("#menu-item-135364 > a", HTTPS_SIMPLIFILE_COM_POST_CLOSING);
}
```

- Java
  - Method > goToPage
  - Constant > HTTPS_SIMPLIFILE_COM_POST_CLOSING
private void goToPage(String link, String newURL) {
    assertTrue(driver.findElements(By.cssSelector(link)).size()>0);
    driver.findElement(By.cssSelector(link)).click();
    assertEquals(driver.getCurrentUrl(), newURL, driver.getCurrentUrl() + " vs. " + newURL);
    home();
}
private void goToPage(String link, String newURL) {
    driver.findElements(By.cssSelector(link)).size() > 0;
    driver.findElement(By.cssSelector(link)).click();
    driver.getCurrentUrl();
    assertEquals(driver.getCurrentUrl(), newURL, driver.getCurrentUrl() + " vs. " + newURL);
}

TestNG > assertEquals
Selenium > getCurrentUrl()
Java > link, newURL
private void home(){
    if(!driver.getCurrentUrl().equals(HTTPS_SIMPLIFILE_COM_SF_LOGIN)) {
        driver.findElement(By.cssSelector("#logo > a > img")).click();
    } else if (!driver.getCurrentUrl().equals(HTTPS_SIMPLIFILE_COM)) {
        driver.get(HTTPS_SIMPLIFILE_COM);
    }
}
Thank You for attending!
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Questions: