SELENIUM - AUTOMATION

Well in this automated world with full of artificial intelligence around, with full of machines around , **SELENIUM** has its own importance. First I want everyone to think of why do we use a COMPUTER?

- Was it because it makes our work easier?
- Was it because it makes most of the work automated?
- Was it because it reduces human labour?

Yes , for all the above questions the answer is probably YES!

And Selenium is the one that we, majorly the programmers are in need of now a days.

Automation : Making a task perform itself automatically without manual work or human involvement.

What actually selenium is ?? It is an automated software that runs with a code and performs particular task described in the program. Of course, there were many automated software's available in the market, but selenium has the major demand because of its easy usage, platform independence, browser support.

A brief : Suppose you are to perform a task daily and the task has its same boring process to do without any changes except the input parameters. Of course any human being feel it as a tedious task , boring and time consuming, and this can be solved by selenium automation.

Let's take a real life example where a staff member of a college from examination dept. has to collect all the marks details of students of the college. Now suppose there were 5000 students in that college and all the details are available in the college website or server and he has to separate them in documents dept wise, class wise provided reg. no of all the students. One thing he can do is go through website for each student and list the details. But if I were in his place I would have used automation with selenium and write simple code to import details of each student into required documents form with minimum human effort.

Automation is supported not in all languages but few major languages such as java and python. And we know that python is now in rising demand due to its easy usage and inbuilt packages. And even I prefer python due to its beauty of minimum lines with maximum output.

Major usage of selenium in present world:

- Software Testing
- Automate web applications/browsers

Complete reference :

Click here for : https://www.google.com/amp/s/www.geeksforgeeks.org/applications-and-uses-of-selenium-webdriver/amp/

Career opportunities :

- Testing job: front end , web applications, backend- python (4.1L to 15.8L - average : 7.5L) packages

References:

- https://www.monsterindia.com/search/selenium-jobs

- **BY : SRIHARI MADDINENI**

Y20AIT507

SAMPLE CODE REPRESENTING AUTOMATION WITH SELENIUM USING PYTHON

```
import time
from selenium import webdriver

reg="y20ait" #reg no
noi=401

time.sleep(0.5)
for i in range(noi,406,1):
    try:
        browser = webdriver.Chrome()
        browser.get("http://becbapatla.ac.in:8080/STUDENTINFO/index_r20.html") #site
        hbox =
browser.find_element_by_xpath("/html/body/div/div[1]/div[5]/div/div/form/center/font
/input[1]") #place where we enter regno
        hbox.send_keys(reg+str(i)) #give input automatically
        submit =
browser.find_element_by_xpath("/html/body/div/div[1]/div[5]/div/div/form/center/font
/input[2]") #path of submit button
        submit.click()  #click the submit button
        regn=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/ta
ble[1]/tbody/tr[1]/td[1]")#regietration no
        name=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/ta
ble[1]/tbody/tr[2]/td")  #name
        fname=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/t
able[1]/tbody/tr[3]/td")#father name
#s1t = sem 1 total, s2t = sem 2 total
        s1t=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/tab
le[2]/tbody/tr[9]/td[4]")
        s2t=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/tab
le[3]/tbody/tr[10]/td[4]")
        s1g=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/tab
le[2]/tbody/tr[9]/td[6]")
        s2g=browser.find_element_by_xpath("/html/body/div/div/div[5]/div/div/div/tab
le[3]/tbody/tr[10]/td[6]")
#file input files
#reg    name    father  s1t s2t s1g s2g
        f=open("reg.txt","at")
        f.write(reg+str(i)+"\t"+name.text+"\t"+fname.text+"\t"+s1t.text+"\t"+s2t.tex
t+"\t"+s1g.text+"\t"+s2g.text+"\n")
        f.close()
    except:
        pass
```