

2CSDE80 Software Testing and Quality Assurance

Lab-9 Task

Submitted by: Labdhi Sheth 18BCE101

Aim: To demonstrate a regression-based testing experiment

Tasks:

- Understand the Watir functionalities
- Create a Watir test for Radiobutton by referring the textbox tutorial.
- Create a Watir test for Checkbox by referring the textbox tutorial.

Methodology:

Watir (Web Application Testing in Ruby) pronounced as “Water” is an open source tool developed using Ruby which helps in automating web application no matter which language the application is written.

Watir comes with a rich set of APIs which helps us interact with the browser, locate

page elements, take screenshots, work with alerts, file downloads, *window.open* popup windows, headless testing, etc. Using Watir webdriver, you can test your websites and UI applications.

Regression testing is testing existing software applications to make sure that a change or addition hasn't broken any existing functionality. Its purpose is to catch bugs that may have been accidentally introduced into a new build or release candidate, and to ensure that previously eradicated bugs continue to stay dead.



Webpage used:

MUN registration

File | D:/nirma/4th%20sem/Web%20technologies/prac%208/prac8c/prac8c.html

4. Public Speaking
5. Leadership Skills

Registration Form

Registration form for upcoming MUN, interested students kindly fill this form.

First name :

Last name :

Date of birth :

Phone Number :

E-mail :

Committee preference :

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Any past MUN experience ?

Enter your password :

Confirm password :

Radio button testing:

```
Select Command Prompt - irb

C:\Users\labdh>irb
irb(main):001:0> require 'watir'
=> true
irb(main):002:0> b = Watir::Browser.new

DevTools listening on ws://127.0.0.1:57052/devtools/browser/637b87c3-3d5b-4771-8553-495822d97051
=> #<Watir::Browser:0x...f61077ba url="data:," title="">
irb(main):003:0> [12144:16816:1110/111234.892:ERROR:chrome_browser_main_extra_parts_metrics.cc(230)] cdebug.com/1216328:
Checking Bluetooth availability started. Please report if there is no report that this ends.
[12144:16816:1110/111234.894:ERROR:chrome_browser_main_extra_parts_metrics.cc(233)] cdebug.com/1216328: Checking Bluetooth
h availability ended.
[12144:16816:1110/111234.895:ERROR:chrome_browser_main_extra_parts_metrics.cc(236)] cdebug.com/1216328: Checking default
browser status started. Please report if there is no report that this ends.
[12144:16816:1110/111235.022:ERROR:chrome_browser_main_extra_parts_metrics.cc(240)] cdebug.com/1216328: Checking default
browser status ended.
irb(main):003:0> b.goto('file:///D:/nirma/4th%20sem/Web%20technologies/prac%208/prac8c/prac8c.html')
=> "file:///D:/nirma/4th%20sem/Web%20technologies/prac%208/prac8c/prac8c.html"
irb(main):004:0> t = b.radio value: 'UNCSW'
=> #<Watir::Radio: located: false; {:value=>"UNCSW", :tag_name=>"input", :type=>"radio">
irb(main):005:0> t.exists?[11036:19628:1110/111432.196:ERROR:gpu_init.cc(453)] Passthrough is not supported, GL is disab
led, ANGLE is
irb(main):005:0> t.exists?
=> true
irb(main):006:0> t.set
=> nil
irb(main):007:0> b.screenshot.save 'prac9.png'
=> #<File:prac9.png (closed)>
irb(main):008:0>
```

Screen shot taken:

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 ☐ Spain
 ☐ Kuwait

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Confirm password :

Checkbox testing:

```

Select Command Prompt - irb
=> #<Watir::Browser:0x...f61077ba url="data:", title="">
irb(main):003:0> [12144:16816:1110/111234.892:ERROR:chrome_browser_main_extra_parts_metrics.cc(230)] crbug.com/1216328:
Checking Bluetooth availability started. Please report if there is no report that this ends.
[12144:16816:1110/111234.894:ERROR:chrome_browser_main_extra_parts_metrics.cc(233)] crbug.com/1216328: Checking Bluetoot
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[12144:16816:1110/111235.022:ERROR:chrome_browser_main_extra_parts_metrics.cc(240)] crbug.com/1216328: Checking default
browser status ended.
irb(main):003:0> b.goto('file:///D:/nirma/4th%20sem/Web%20technologies/prac%208/prac8c/prac8c.html')
=> "file:///D:/nirma/4th%20sem/Web%20technologies/prac%208/prac8c/prac8c.html"
irb(main):004:0> t = b.radio value: 'UNCSW'
=> #<Watir::Radio: located: false; {:value=>"UNCSW", :tag_name=>"input", :type=>"radio"}>
irb(main):005:0> t.exists?[11036:19628:1110/111432.196:ERROR:gpu_init.cc(453)] Passthrough is not supported, GL is disab
led, ANGLE is
irb(main):005:0> t.exists?
=> true
irb(main):006:0> t.set
=> nil
irb(main):007:0> b.screenshot.save 'prac9.png'
=> #<File:prac9.png (closed)>
irb(main):008:0> x = b.checkbox value: 'India'
=> #<Watir::CheckBox: located: false; {:value=>"India", :tag_name=>"input", :type=>"checkbox"}>
irb(main):009:0> x.exists?
=> true
irb(main):010:0> x.set
=> nil
irb(main):011:0> b.screenshot.save 'prac9(2).png'
=> #<File:prac9(2).png (closed)>
irb(main):012:0>
  
```

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Conclusion:

The test scripts are written in Ruby language. It supports multiple domains and has a test recorder. It can find elements by its name, index, ID or value.

WatirWebDriver supports browsers like Chrome, Firefox and Safari with help of ChromeWatir, FirefoxWatir and SafariWatir respectively. It is very easy to learn. It is very easy to debug. To use Watir you need to learn Ruby language because it supports no other language. While Selenium supports multiple languages, Watir supports only Ruby language.