

# **Web Test Automation with Selenium 2 ( WebDriver )**

by  
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# Sourcecode

[https://github.  
com/up1/Selenium\\_webdriver\\_java\\_template](https://github.com/up1/Selenium_webdriver_java_template)

# Software Required

- Java 1.6+
- Apache Maven
- Eclipse IDE
- Firebug for Firefox browser

# Installation

```
>git clone https://github.  
com/up1/Selenium_webdriver_java_template.  
git
```

```
>cd Selenium_webdriver_java_template
```

```
>mvn clean install
```

# What is Selenium ?

- Web testing tool
- JavaScript based
- Support multiple platforms
- Support multiple browsers
- Support many languages
- Opensource
- Original develop by Thoughtwork

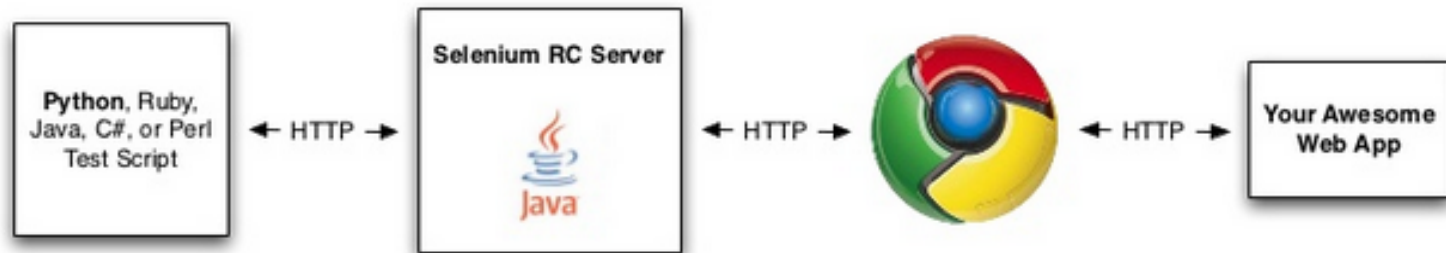
# Support many language

- Java
- Ruby
- PHP
- Python
- C#
- Perl
- JavaScript

# What is Selenium ?

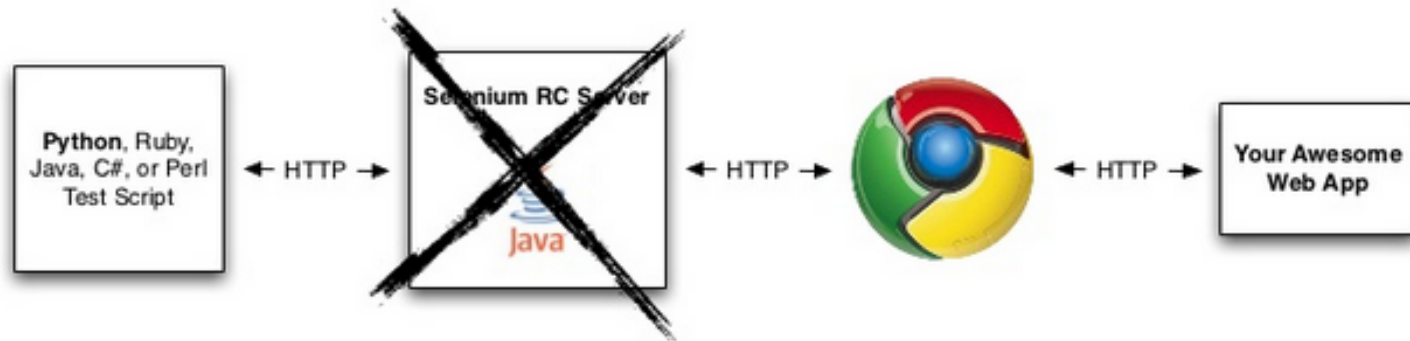


# Selenium 1





# Selenium 2 (WebDriver)



# Selenium with IE



<http://code.google.com/p/selenium/wiki/InternetExplorerDriver>

# Structure of Project :: JUnit

```
public class MyTest {  
    @Before  
    public void setup() {  
    }  
  
    ... test case ...  
  
    @After  
    public void tearDown() {  
    }  
}
```

# Getting Start :: WebDriver

```
WebDriver driver = new ChromeDriver();
```

```
WebDriver driver = new FirefoxDriver();
```

```
WebDriver driver = new InternetExplorerDriver();
```

```
WebDriver driver = new RemoteWebDriver();
```

# Locate Elements

`driver.findElement()`

`driver.findElements()`

# Locate Elements

- id
- name
- tagName
- CSS Selector
- XPath

# Control Test Flow

- Synchronize with implicit wait
- Synchronize with explicit wait

# Implicit wait time

```
driver.manage().timeouts().implicitlyWait  
    ( 10,  
      TimeUnit.SECONDS  
    );
```



# Explicit wait time

```
WebDriverWait wait = new WebDriverWait(driver, 10);  
wait.until(ExpectedConditions.titleContains("selenium"));
```

# Data Driven Testing

- JUnit 4 with Parameterized
- CSV
- Excel
- Database

# JUnit 4 with Parameterized

**@RunWith(value = Parameterized.class)**

public class MyTest {

**@Parameters**

public static Collection testData() {  
}

}