Automation

- Manual
  - Time consuming
  - Boring

- Programmable Keyboard or Lua
  - No feedback – not sure if task was actually done
Possible Selenium IDE Demo – Registering for Classes
You have made too many attempts to register this term. Contact your registrar for assistance.
What is Selenium?

- Selenium automates browsers
- Set of different software tools used to automate browsers
Brief History

- Developed by Jason Huggins in 2004
- Joined by other programmers and testers at ThoughtWorks
- Name started off as a joke to mock a competitor named Mercury
- Apparently mercury poisoning can be cured by taking Selenium supplements
Selenium Applications

- Test Automation
- Boring and Tedious Administrative Tasks
- Exporting and Importing Data To/From Online Database
- Many Different Random Personal Uses
Selenium IDE
(Demonstrated earlier)

- **Selenium IDE**
  - Firefox add-on
  - Simple record-and-playback of interactions with browser

**Screenshot of Selenium IDE**

<table>
<thead>
<tr>
<th>Command</th>
<th>Target</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>open</td>
<td>/</td>
<td></td>
</tr>
<tr>
<td>type</td>
<td>q</td>
<td>selenium IDE rocks!</td>
</tr>
<tr>
<td>clickAndWait</td>
<td>btnG</td>
<td></td>
</tr>
<tr>
<td>clickAndWait</td>
<td>link=Antony Marcan...</td>
<td></td>
</tr>
<tr>
<td>clickAndWait</td>
<td>link=5 comments</td>
<td></td>
</tr>
<tr>
<td>assertTextPresent</td>
<td></td>
<td>I think record playback is a wonderful thing</td>
</tr>
</tbody>
</table>

Log Console

- [Find]
Selenium WebDriver

- Selenium WebDriver and Selenium Remote Control
- Collection of libraries that drive a browser

Browsers
- Chrome, Firefox, Internet Explorer, Safari, and etc.

Programming Languages
- C#, Java, JavaScript, Python, Ruby, and etc.
Selenium Web Driver Automation Demo
Source Code

Selenium Web Browser Automation’s relationship to Programming Languages

N Tiers

Looking for WebElements using xPath is Analogous to looking for data using SQL

Controlling WebElements is the other end of creating GUI elements in homework assignments
• d1.get("https://my.uic.edu/common/");
• click("//span[text()='login']");
• sendKeys("//input[@id='UserIDInput']", netID);
• click("//input[@value='Enter']");
click("//span[text()='Academics']");

click("//a[text()='Student Self Service Login - Registration and Records Menu']");

click("//a[text()='Look-up or Select Classes']");
For more information and downloads:

http://docs.seleniumhq.org/