CS570 – Software Testing

**HOP03 – Introduction to Selenium and Selenium IDE**

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**Caution**

* If you already finished this module through any CityU Technology Institute (TI) courses,  
  just skim this module and skip it.
* Some version numbers may not match with the newly released ones.  
  If so, stay with the most recent ones.
* We target Windows OS. So, Mac may have different options.
* We cannot explain every step. This cookbook always needs your own creative judgement.

**Learning Outcomes**

* Understand basic concepts of Selenium and Web App testing
* Install Selenium as Chrome browser extension
* Perform tests on websites using Selenium IDE

**What is Selenium?**

Selenium is an umbrella project for a range of tools and libraries that enable and support the automation of web browsers. In simple words, Selenium is basically used to automate the testing across various web browsers, like Chrome, Mozilla, Firefox, Safari, etc.

There are several options to automate testing using Selenium, such as: Selenium WebDriver, Selenium IDE and Selenium Grid.

In this HOP, we will use Selenium IDE, to create simple record-and-playback of interactions with the browser.

More about Selenium: <https://www.selenium.dev/documentation/en/>

1. **Add Selenium as Chrome browser Extension**

In your machine, open Google Chrome browser (if you do not have Chrome, please install before proceeding). Paste the following URL into your browser to search for Selenium IDE:

<https://chrome.google.com/webstore/detail/selenium-ide/mooikfkahbdckldjjndioackbalphokd?hl=en>

Click “Add to Chrome” button:

Graphical user interface, application

Description automatically generated

On the pop-up window, click “Add extension”:

Graphical user interface, text, application, email

Description automatically generated

You should see a similar pop up window in the corner of your Chrome browser:

Graphical user interface, text, application, email

Description automatically generated

1. **Testing with Selenium IDE – using Record function**

Follow along the below video instruction to create tests for <https://www.cityu.edu/>

**Instruction**: <https://youtu.be/19adE4G1GDo>

**Submission**:

Provide a screenshot of the Log window showing all test cases have passed.

1. **Testing with Selenium IDE – using Command**

This time, we will add a couple more tests by typing directly into the Command box, instead of using the Recording function. Please follow the below video instruction to do so:

**Instruction**: <https://youtu.be/eIc_tzyeuT4>

**Submission**:

Provide a screenshot of the Log window showing new test cases add have passed.

**Challenge**:

1. Add the following actions:
   1. Click on the CityU Logo (on the top left corner of the website) to return to the main page.
   2. Click on the Chat box to start a chat.
   3. Type in your Name, email address and a message of “MSCS degree”
   4. Hit submit.
2. Run the test

Expected behavior: <https://youtu.be/LEszH5hca7E>

**Submission**:

Provide a screenshot of the Log window showing the tests added from this Challenge have passed.

Expected result to be similar as following:

![Graphical user interface, text, application, email

Description automatically generated]()

**4. Save the project**

In Selenium IDE window, click the “Save” icon, to download this test into your local computer. Please save this file under this week’s HOP folder.

For example: CS570/CS570-hop-hands-on-practice/Module 3

Graphical user interface, text, application

Description automatically generated

Next week, we will continue to explore Selenium IDE and other Selenium options.

**Submit your work:**

**MAKE SURE YOU INCLUDED:**

* **Required screenshots into this document. Then save this document as PDF in the same location**
* **The project file downloaded from Selenium IDE**

Once you completed the Hands-on practice, do the following to push your work to GitHub

Open the terminal from the VSCode by hitting the control + ~ key, make sure you are in the right path, for example: KimNguyen/Desktop/CS570/CS570-HOP-Hands-On-Practice-KimNguyenMai/Module 3

Type the following command:

* git add . (to copy all changes you have made)
* git commit -m “Submission for Module 3 – Your Name” (To add a message to your submission)
* git push origin master (to upload your work to Github)