DEVOPS FOR AI

SELENIUM INSTALLATION AND EXPLORING

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**Step 1: Install Java Development Kit (JDK)**

**For Windows**

1. **Download JDK**: Go to the [Oracle JDK download page](https://www.oracle.com/java/technologies/javase-jdk11-downloads.html) and download the latest version of JDK.
2. **Run the Installer**: Open the downloaded installer and follow the prompts to complete the installation.
3. **Set Environment Variables** (optional but recommended):
   * Right-click on "This PC" or "Computer" on the desktop or in File Explorer.
   * Select "Properties" and then "Advanced system settings."
   * Click on "Environment Variables."
   * Under "System variables," find the Path variable and click "Edit."
   * Add the path to the bin folder in your JDK installation (e.g., C:\Program Files\Java\jdk-11.0.1\bin).
   * Click "OK" to save your changes.

**Step 2: Install Python**

**For Windows and macOS**

1. **Download Python**: Go to the [official Python website](https://www.python.org/downloads/) and download the latest version.
2. **Run the Installer**: Open the installer and ensure that you check the box to add Python to your system PATH. Follow the prompts to complete the installation.

**For Linux**

* Use your package manager. For example, on Ubuntu:

sudo apt update

sudo apt install python3 python3-pip

**Step 3: Install Selenium WebDriver from Python**

1. **Open Command Prompt or Terminal**:
   * On Windows: Search for cmd in the Start menu.
   * On macOS: Open Terminal from Applications > Utilities.
   * On Linux: Open your terminal emulator.
2. **Install Selenium**: Type the following command and hit Enter:

pip install selenium

**Step 4: Install WebDriver for Your Browser**

**For Chrome**

1. **Download ChromeDriver**: Go to the ChromeDriver download page and download the version that matches your Chrome browser version.
2. **Set Up ChromeDriver**:
   * Extract the downloaded file.
   * Move the chromedriver executable to a location in your system PATH (e.g., C:\Program Files\ on Windows or /usr/local/bin/ on macOS/Linux).

**Step 5: Write a Simple Selenium Test Script**

1. **Open a Text Editor or IDE**: Use any text editor like Notepad, VSCode, or PyCharm to create a new Python file (e.g., test\_script.py).
2. **Write the Script**: Here’s a simple example script that opens a website, searches for a term, and closes the browser:

Python

from selenium import webdriver

from selenium.webdriver.common.by import By

from selenium.webdriver.common.keys import Keys

import time

# Create an instance of the Chrome WebDriver

driver = webdriver.Chrome()

# Navigate to a web page

driver.get('https://www.google.com')

# Find the search box

search\_box = driver.find\_element(By.NAME, 'q') # Using the name attribute

# Type a search query

search\_box.send\_keys('Selenium WebDriver')

# Submit the search form

search\_box.send\_keys(Keys.RETURN)

# Wait for a moment to see the results

time.sleep(5) # Sleep for 5 seconds (just for observation)

# Close the browser

driver.quit()

**Step 6: Run the Script**

1. **Open Command Prompt or Terminal**.
2. **Navigate to the Directory**: Use the cd command to navigate to the folder where you saved your test\_script.py.
3. **Run the Script**: Type the following command and hit Enter:

python test\_script.py