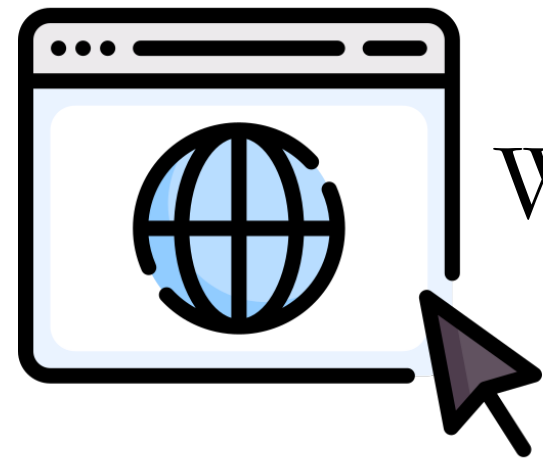# Week 8: Web Testing with Selenium

Dr Gunel Jahangirova

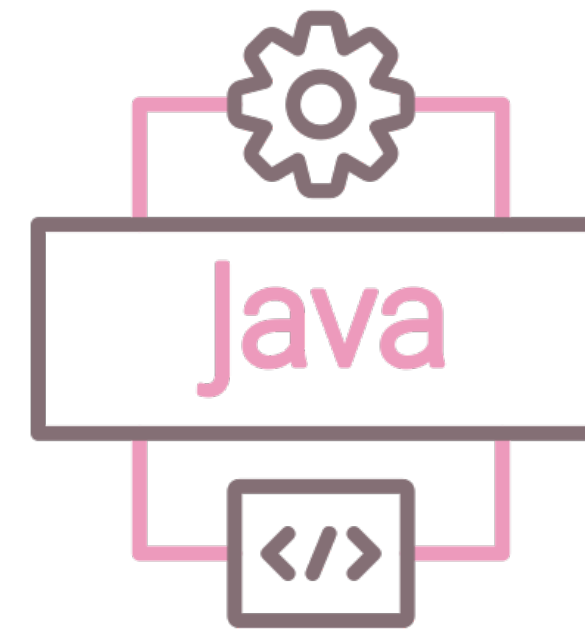6CCS3SMT/7CCSMASE Software Measurement and Testing

Faculty of Natural, Mathematical & Engineering Sciences
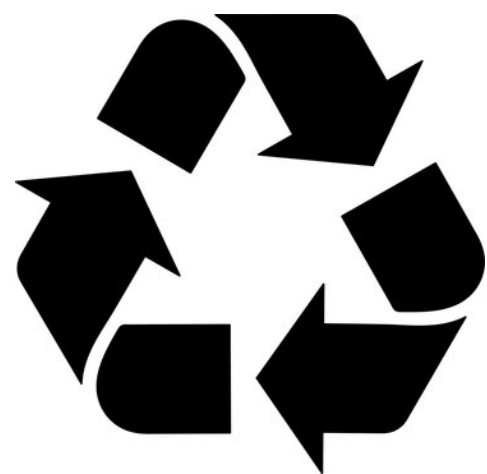Department of Informatics

Selenium

Selenium is an open-source framework used for automating web browser actions, primarily for testing purposes. It allows developers and testers to create automated scripts that simulate user interactions with web applications, such as clicking buttons, entering text, navigating pages, and verifying content.
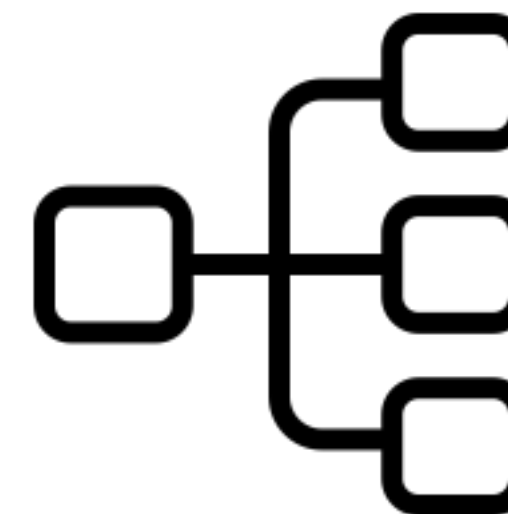
Works with major web browsers

Support multiple programming languages
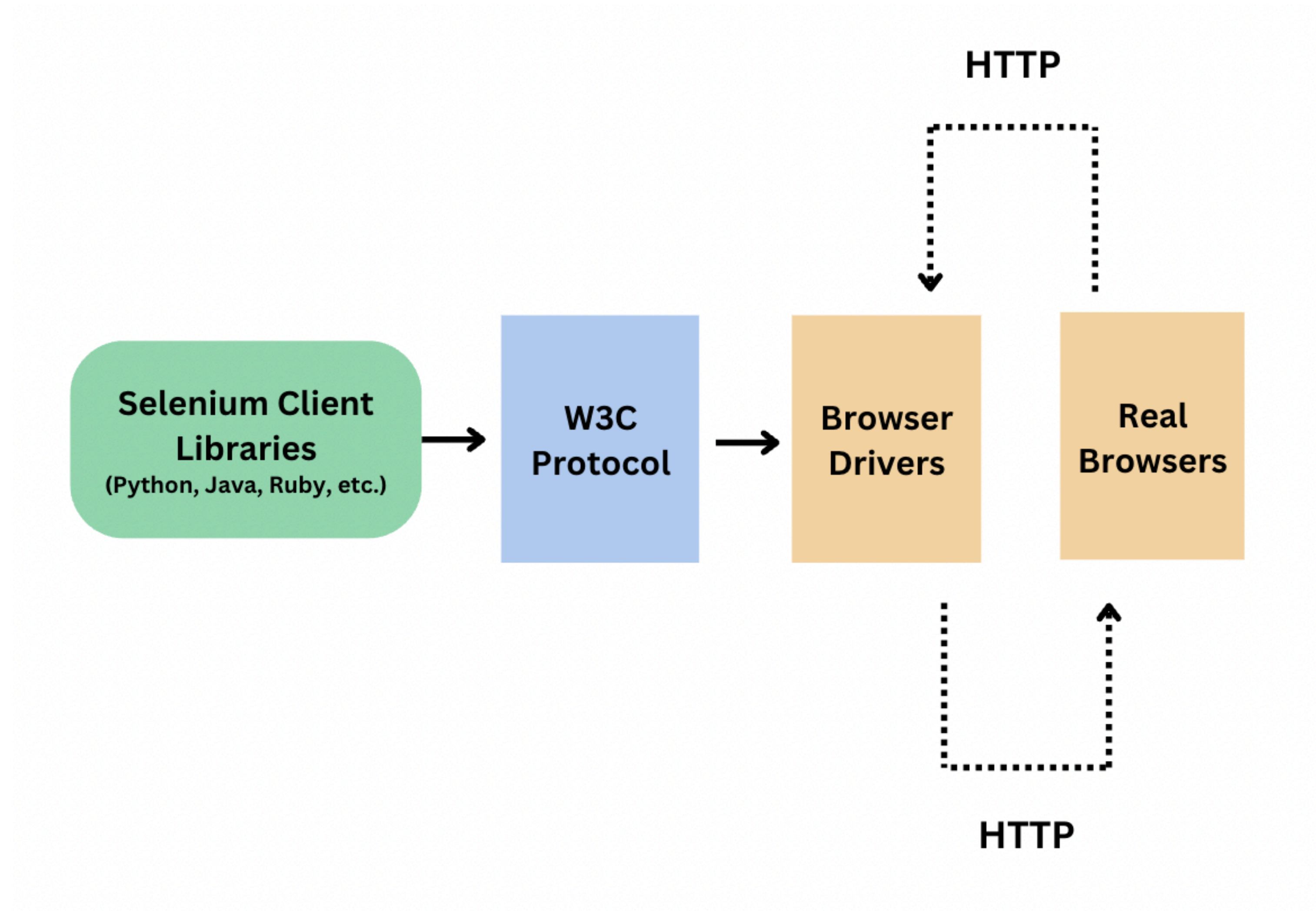
Allows for reusability of test scripts

Supports parallel test execution

Easy to integrate into CI/CD pipelines

Selenium WebDriver

Source: https://www.browserstack.com/guide/architecture-of-selenium-webdriver

Selenium WebDriver

Package org.openqa.selenium

Interface WebDriver

All Known Implementing Classes:

ChromeDriver, ChromiumDriver, EdgeDriver, FirefoxDriver, InternetExplorerDriver, RemoteWebDriver, SafariDriver

```java
WebDriver driver = new ChromeDriver();
driver.get("https://www.example.com");
String pageTitle = driver.getTitle();
System.out.println("Page Title: " + pageTitle);
```

void	get(String url)	Load a new web page in the current browser window.
@Nullable String	getCurrentUrl()	Get a string representing the current URL that the browser is looking at.
@Nullable String	getPageSource()	Get the source of the last loaded page.
@Nullable String	getTitle()	Get the title of the current page.