

Software Engineering

- Se 4 for JUnit testing -

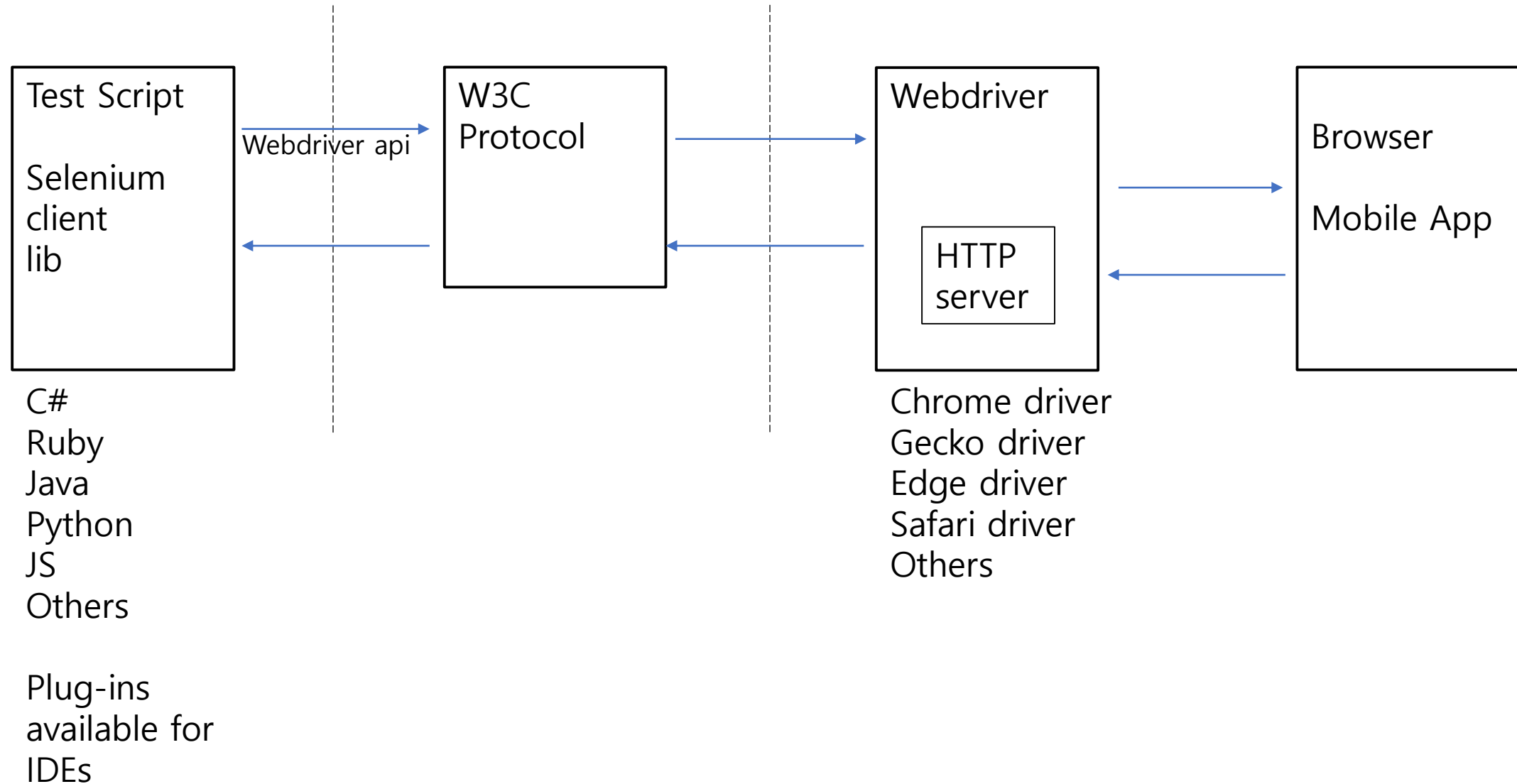
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Selenium architecture

- 4 major components (Selenium 4)

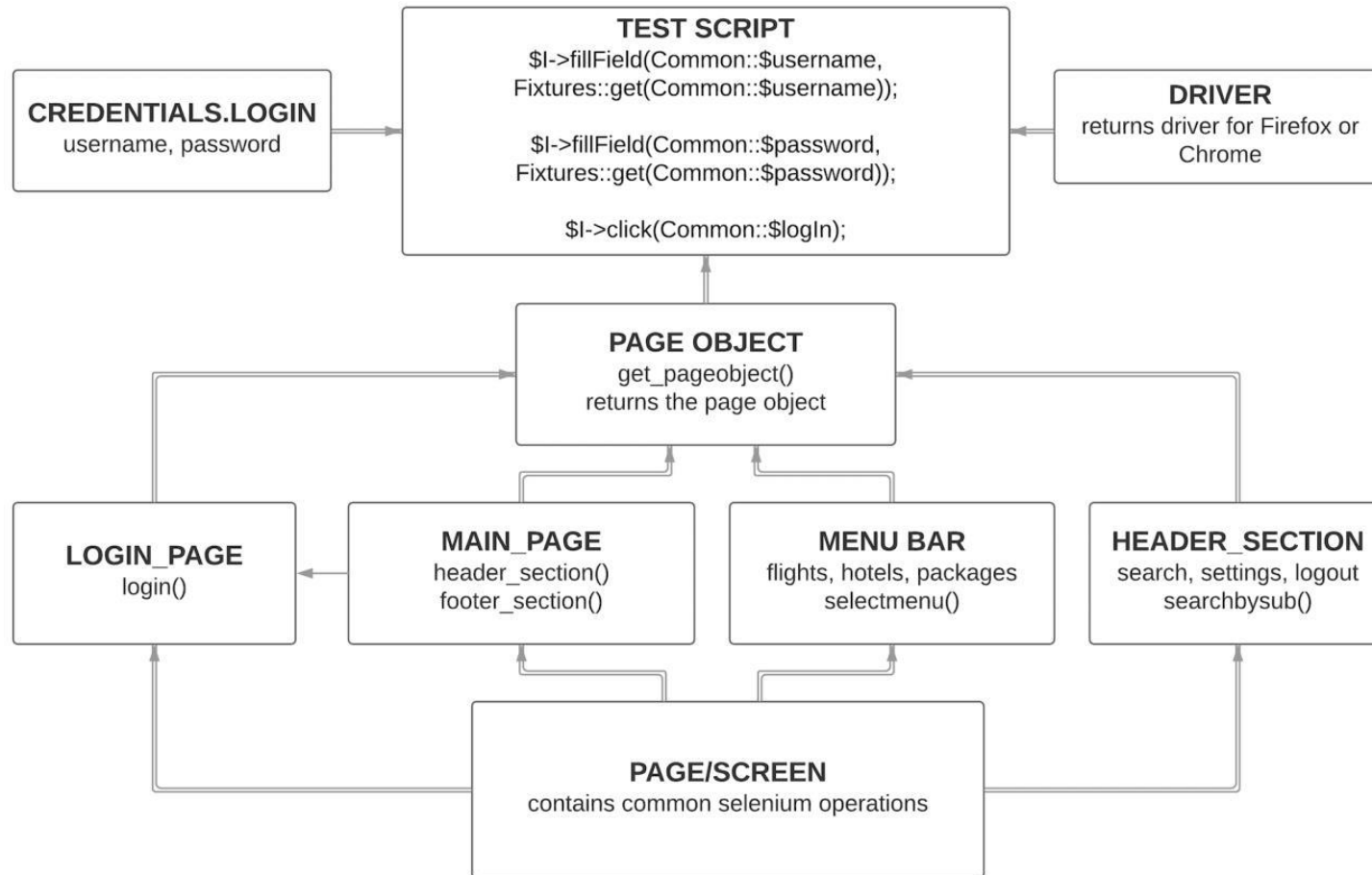


Webdriver

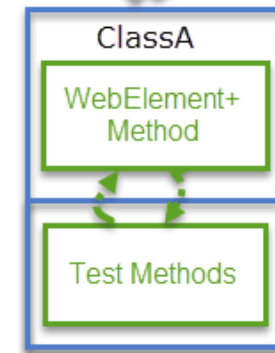
- 테스트 케이스를 생성하고 실행하는 API
 - <https://webdriver.io/docs/api.html>
- Provides a set of methods
- Uses DOM locators to i/o or manipulate the document objects
- 각 브라우저 별 webdriver
 - 테스트 스크립트를 작성할 여러 언어 별 method 제공
 - Java, C#, PHP, Python, Perl, Ruby
- POM(page object model) 기반 Webdriver scripting
 - Form/Click activity 기반
- Selenium RC (remote control)와 합쳐 짐 (Selenium 3)
- 빠른 execution time
 - Remote machine 에서 web 테스트할 때는 RC 사용 (느림)
- 상세한 테스트 결과보고는 (아직) 생성할 수 없음

POM – page object model

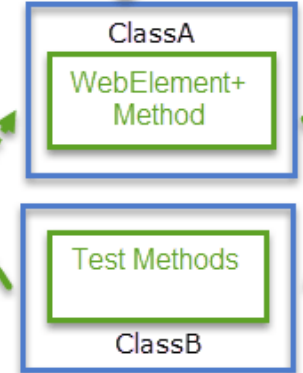
PAGE OBJECT MODEL



Non POM Structure



POM Based Structure



JUnit Testing with Selenium

Install Java & Eclipse IDE

- Install JDK & Set up env. Variables
 - <https://www.oracle.com/java/technologies/javase/jdk18-archive-downloads.html>
 - jdk-18 download & install for windows
 - Download or save the appropriate JDK version for Windows.
 - Right-click the Computer icon on your desktop and select Properties.
 - Click Advanced system settings.
 - Click Environment variables.
 - Under User variables(사용자 변수), click New.
 - Enter JAVA_HOME as the variable name.
 - Enter the path to the JDK as the variable value. For example, C:\Program Files\Java\jdk-18.0.1\bin
 - Click OK.
 - Locate the PATH variable.
 - Append the path to the JDK (up to the bin folder) as the PATH value. For example, C:\Program Files\Java\jdk-18.0.1\bin
 - Repeat the same for System variables.
 - Click OK.
 - https://mkyong.com/java/how-to-set-java_home-environment-variable-on-mac-os-x/ for MacOS
- Install Eclipse IDE

Maven Repository

- <https://mvnrepository.com/>
- Build dependencies
 - 1) Selenium java
 - 2) Webdrivermanager
 - 3) JUnit