

소프트웨어 테스트

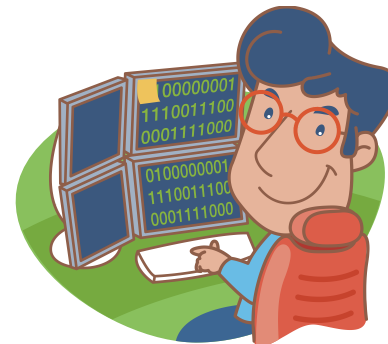
실습 08#: GUI Testing(SikuliX)

CSE4061

2023

설계 목표

- SikuliX 설치
- SikuliX 실행
- 설계 문제
 - GUI 테스트 과제 등 파일 참고



SikuliX 설치

- SikuliX 설치 단계

1. Java → 스크립트를 작성하기 위한 프로그래밍 언어



2. Eclipse → 스크립트를 컴파일하고 실행할 환경



3. SikuliX → GUI 테스트 프레임워크



- SikuliX 설치 방법
- 링크로 들어가 SikuliX를 다운로드
<https://raiman.github.io/SikuliX1/downloads.html>

SikuliX Downloads

[\[home\]](#) [\[sikulix.com\]](#) [\[RaiMan@GitHub\]](#) [\[Nightly Builds\]](#) [\[Disclaimer\]](#)

Version 2.0.5 (latest stable version)

Recommended for all --- [Be sure you had a look at this information about major changes/issues/recommendations](#)

Things that have been fixed [in version 2.0.x+](#)

SikuliX IDE: Edit and run Jython/Python/Ruby scripts on all systems

[Download the ready to use sikulixide-2.0.5.jar \(SikuliX IDE for all systems\)](#)

This artefact runs on Windows, macOS and Linux. For systemspecific slightly smaller packs see below.

- SikuliX 설치 방법

- 링크 밑으로 내려가

SikuliX API: Use the SikuliX in Java programming 에서 본인 운영체제에 맞게 설치

SikuliX API: Use the SikuliX features in Java programming or Java aware environments

Download the ready to use sikulixapi-2.0.5.jar

These artefacts are for use on a Java classpath or for Java programming in mature IDEs as library jar.

All systems: [Download the ready to use sikulixapi-2.0.5.jar \(SikuliX IDE for Windows\)](#)

Windows: [Download the ready to use sikulixapi-2.0.5-win.jar \(SikuliX IDE for Windows\)](#)

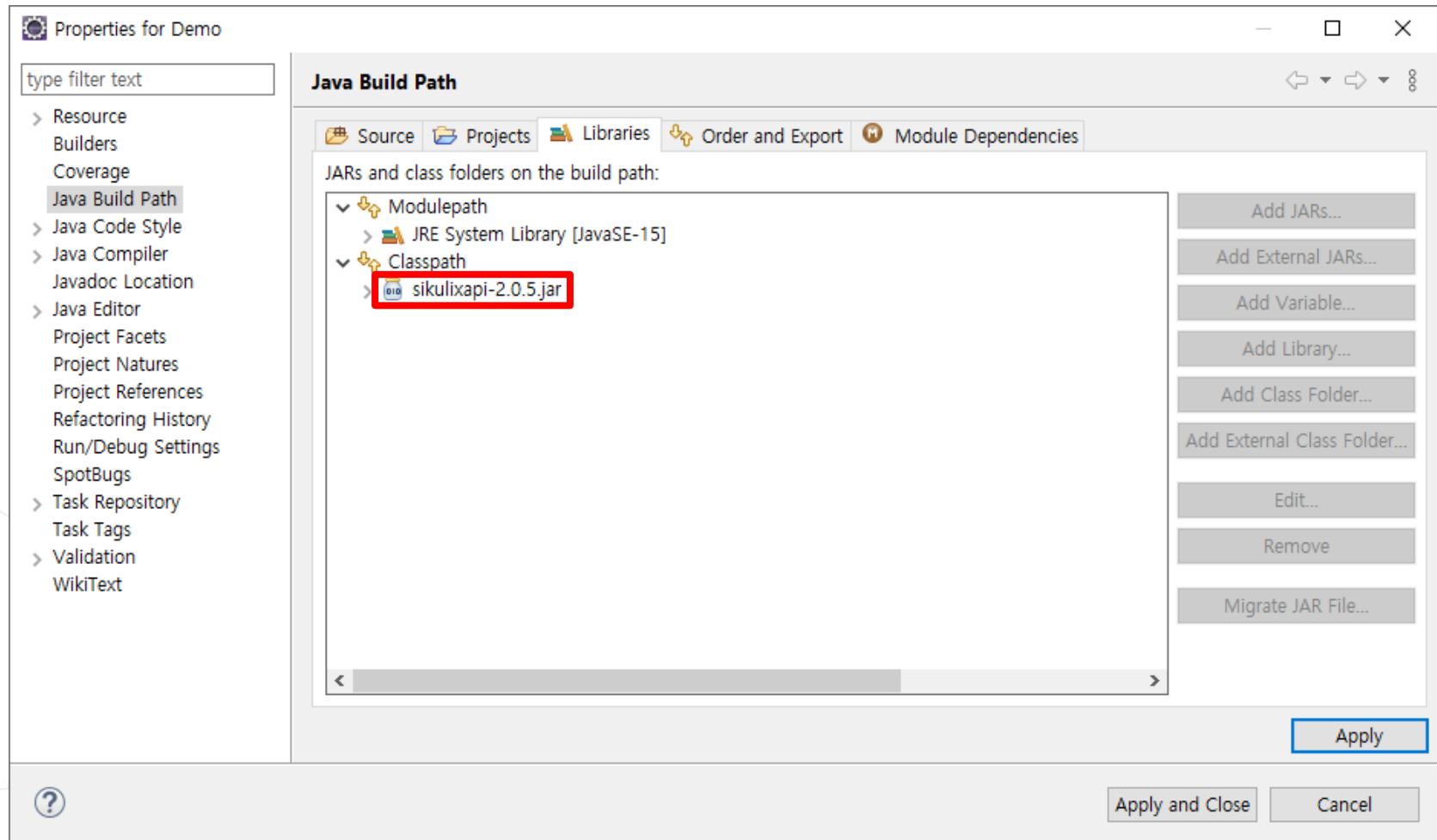
macOS: [Download the ready to use sikulixapi-2.0.5-mac.jar \(SikuliX IDE for macOS\)](#)

Linux: [Download the ready to use sikulixapi-2.0.5-lux.jar \(SikuliX IDE for Linux\)](#)

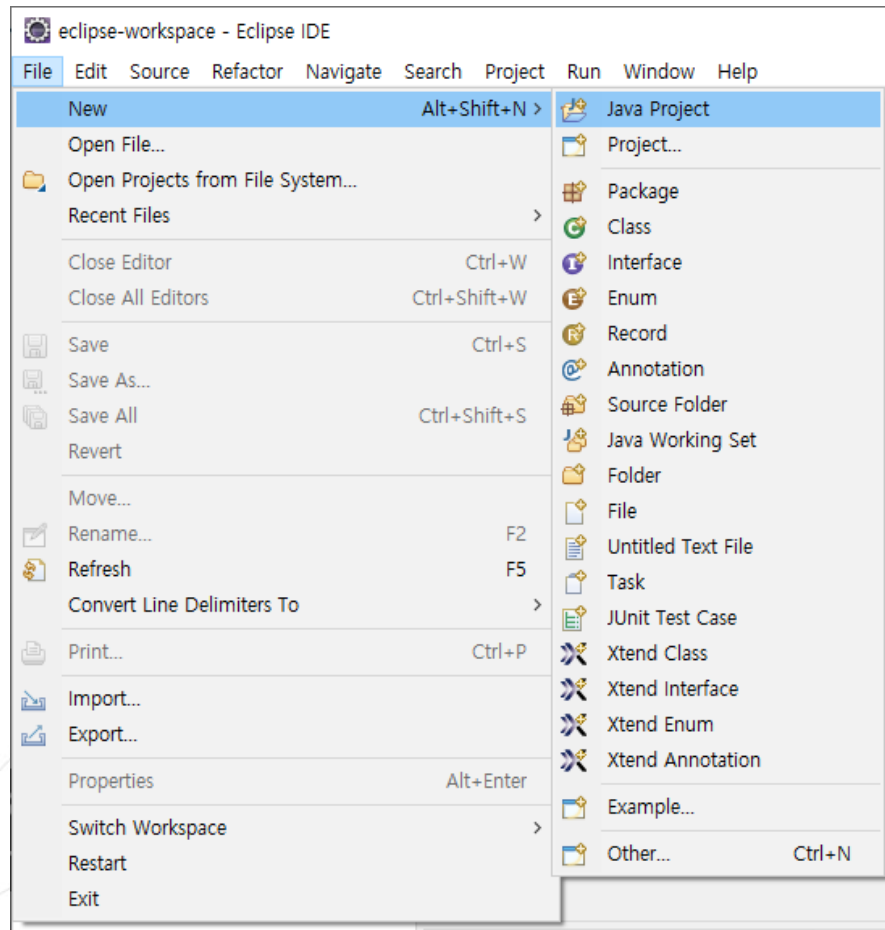
Maven coordinates for use in Maven aware contexts:

```
<dependency>
  <groupId>com.sikulix</groupId>
  <artifactId>sikulixapi</artifactId>
  <version>2.0.5</version>
</dependency>
```

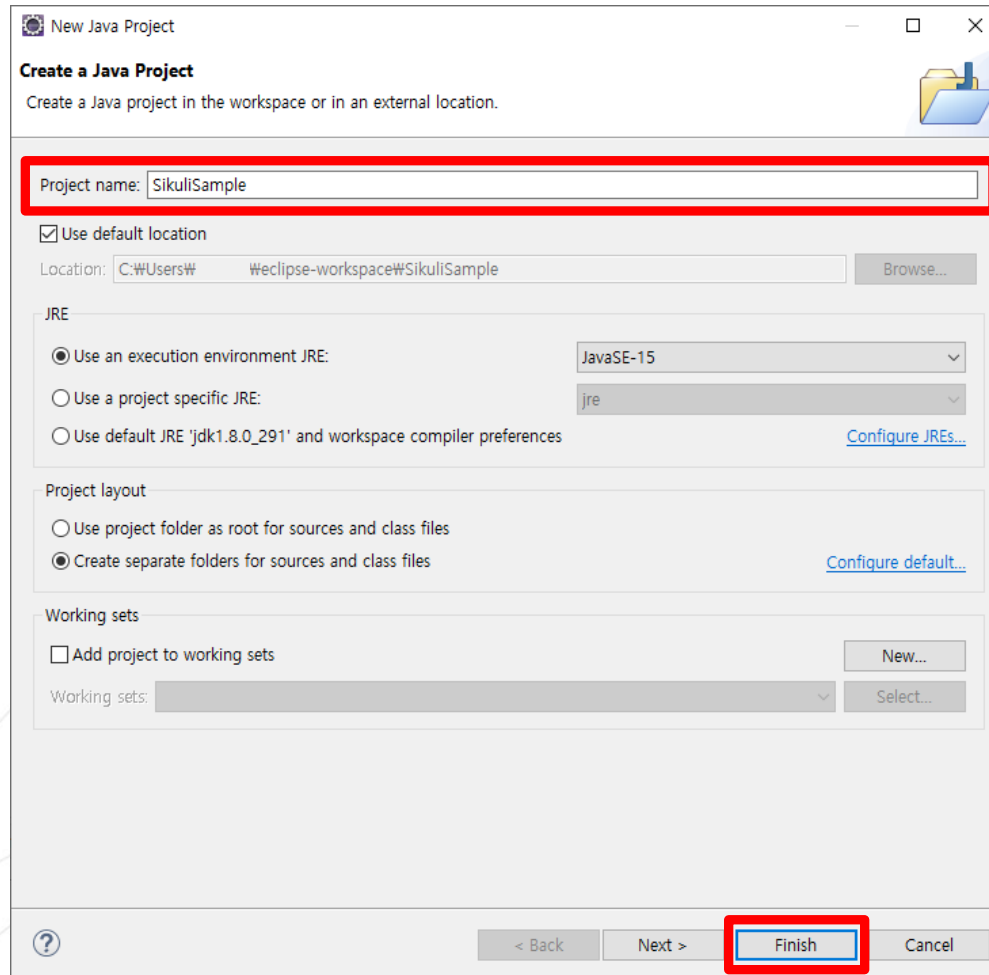
● SikuliX 설치 적용



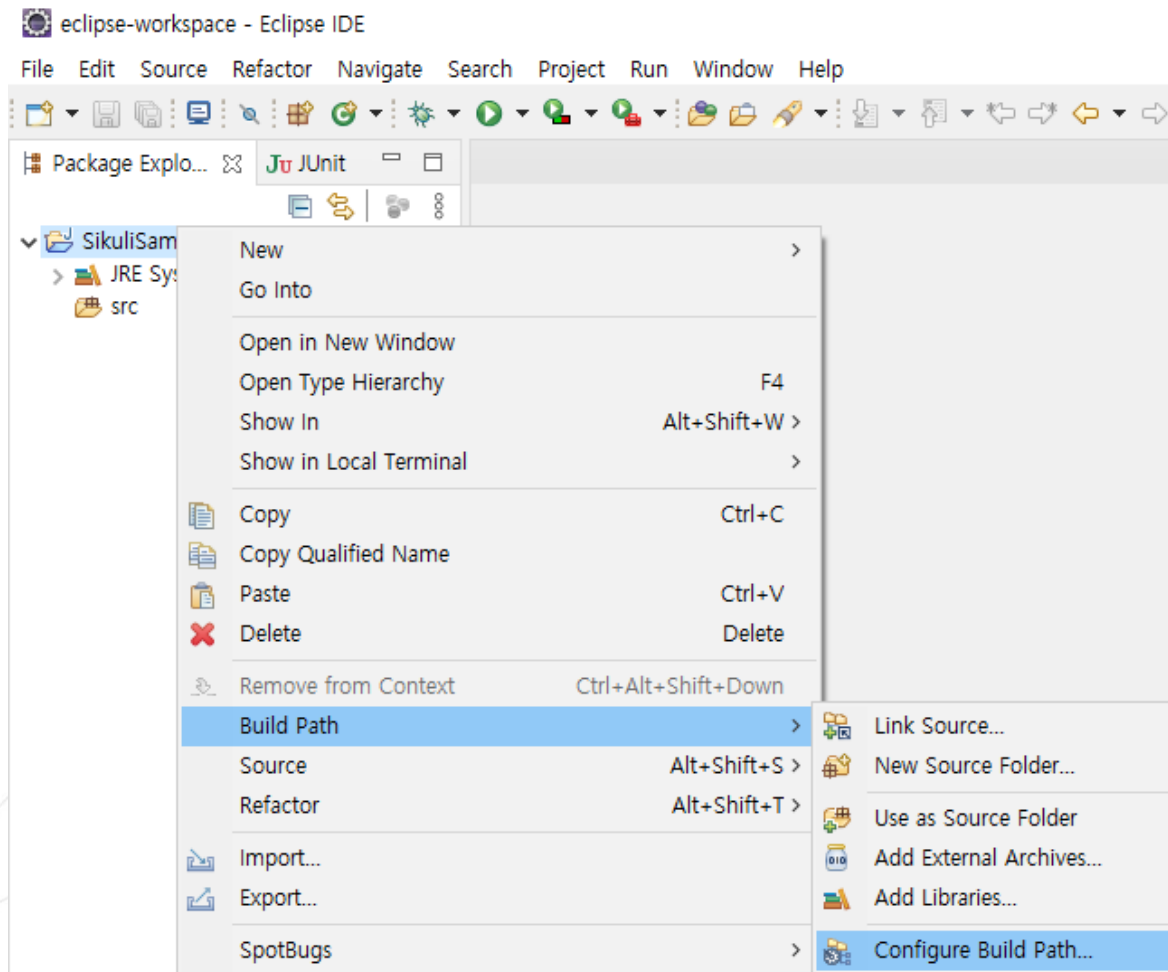
- File – New – Java Project - Next



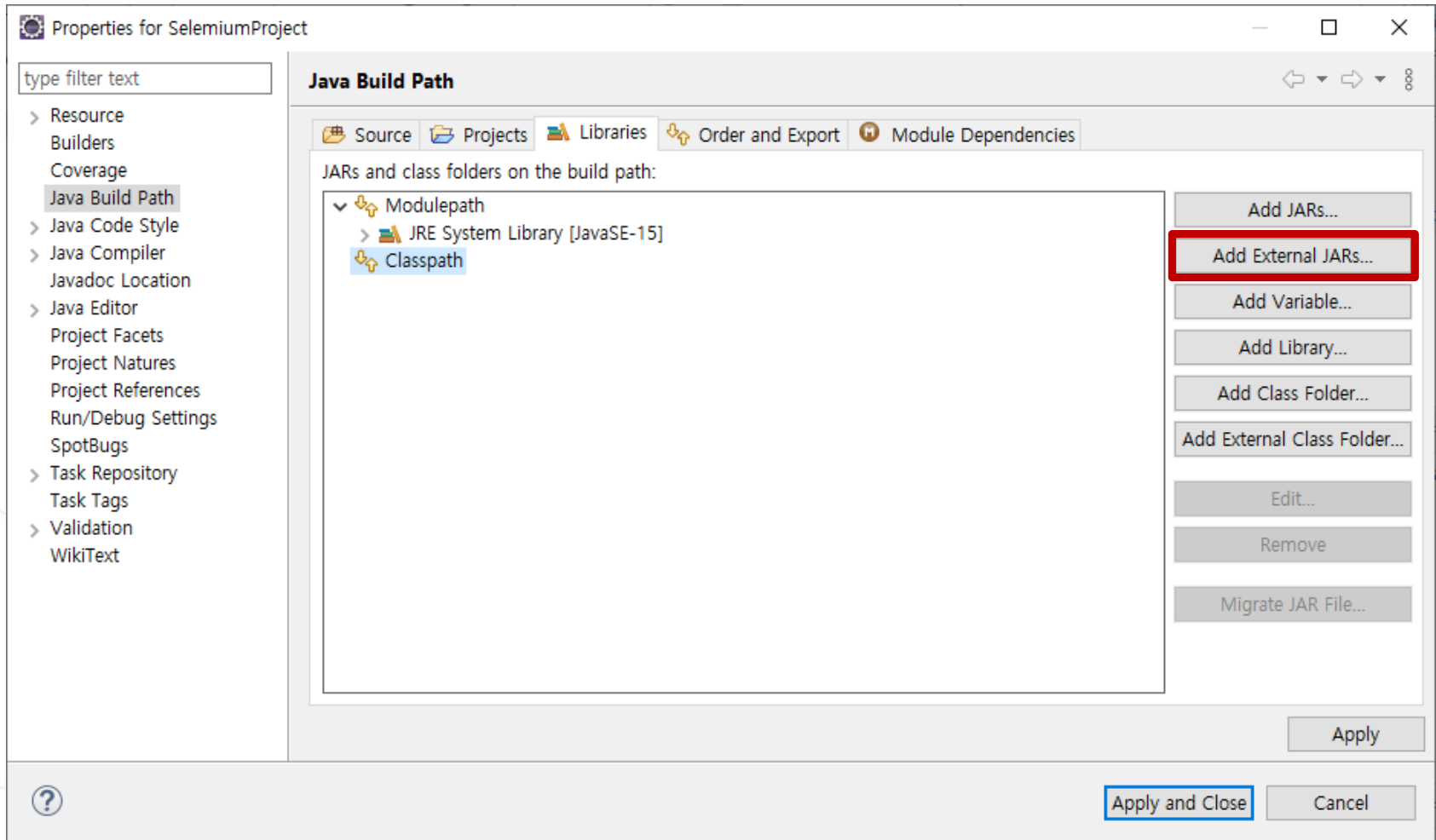
- Project name : SikuliSample -> Click Finish



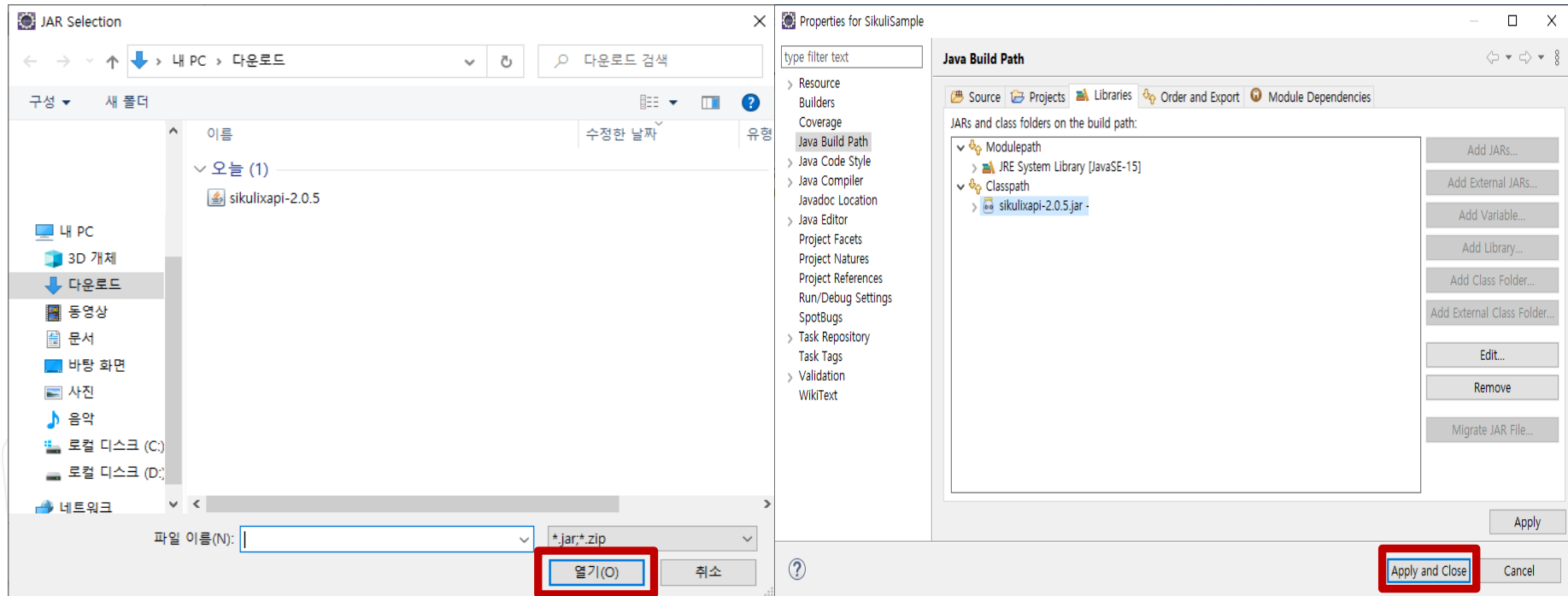
- Build Path – Configure Build Path



- Libraries(Tab) – Classpath(click) – Add External JARs



- JAR File(select) – 열기(click)
- Classpath(확인) – Apply and Close



- src(right click) – New – Class – Finish

New Java Class

Java Class

⚠ The use of the default package is discouraged.

Source folder:

Package:

☐ Enclosing type:

Name:

Modifiers: ☒ public ☐ package ☐ private ☐ protected
☐ abstract ☐ final ☐ static

Superclass:

Interfaces:

Which method stubs would you like to create?

☒ public static void main(String[] args)

☐ Constructors from superclass

☐ Inherited abstract methods

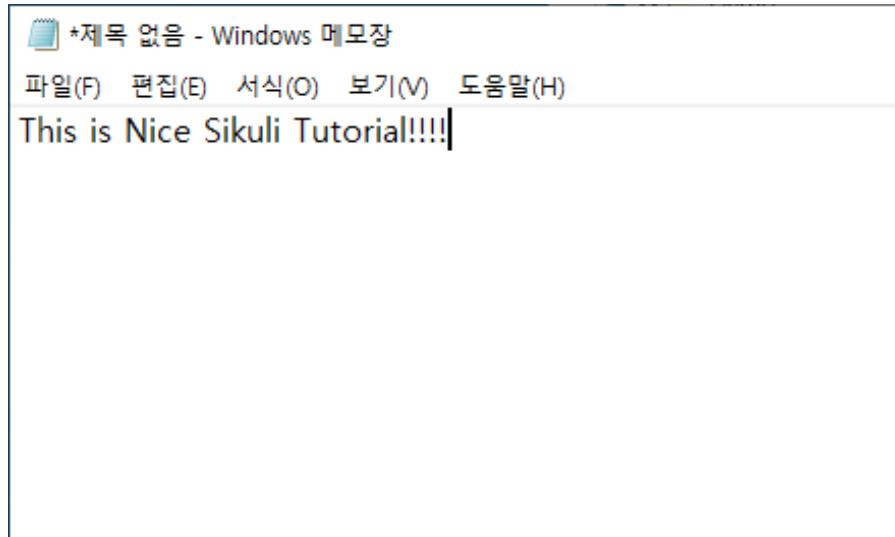
Do you want to add comments? (Configure templates and default value [here](#))

☐ Generate comments

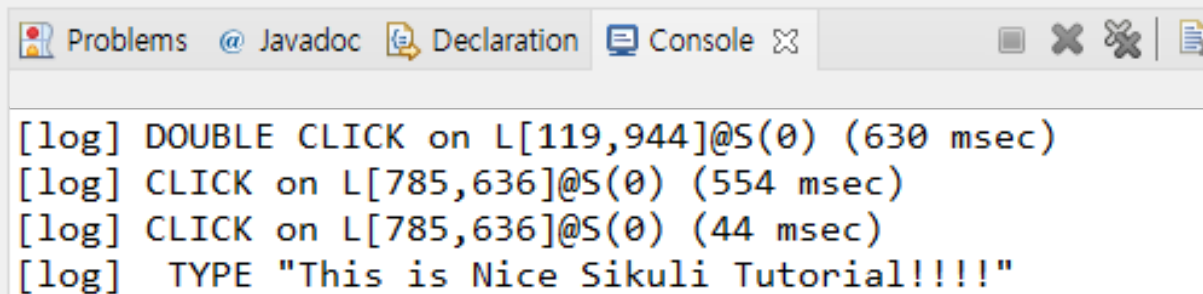
- Input Code(notepad.txt 참조)

```
notepad.java
1 import org.sikuli.script.FindFailed;
2 import org.sikuli.script.Screen;
3
4 public class notepad {
5     public static void main(String[] args) throws FindFailed, InterruptedException {
6         String icon = "노트패드 아이콘 절대 경로";
7         String note = "노트패드 사진 절대 경로";
8
9         Screen s=new Screen();
10        s.find(icon);
11        s.doubleClick();
12        s.click(note);
13        s.type(note,"This is Nice Sikuli Tutorial!!!!");
14    }
15 }
16
```

- 실행 시 화면



- 실행 시 Console



- src(right click) – New – Class – Finish

New Java Class

Java Class

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Which method stubs would you like to create?

☒ public static void main(String[] args)
☐ Constructors from superclass
☐ Inherited abstract methods

Do you want to add comments? (Configure templates and default value [here](#))
☐ Generate comments

● Input Code(CalcTest.txt 참조)

```

CalcTest.java
1 import java.awt.Toolkit;
17
18 /* Automating Calculator Application. */
19 public class CalcTest {
20     Runtime rs = null;
21     Screen screen = null;
22     static CalcTest ct = null;
23     Map<String, String> calcButtonMap = null;
24     final String APPLICATION = "계산기 설치 폴더 절대 경로";
25
26     /* Initialization block */
27     {
28         calcButtonMap = new HashMap<String, String>();
29
30         String imagePath = "이미지 폴더 절대 경로";
31
32         calcButtonMap.put("0", imagePath + "0.PNG");
33         calcButtonMap.put("1", imagePath + "1.PNG");
34         calcButtonMap.put("2", imagePath + "2.PNG");
35         calcButtonMap.put("3", imagePath + "3.PNG");
36         calcButtonMap.put("4", imagePath + "4.PNG");
37         calcButtonMap.put("5", imagePath + "5.PNG");
38         calcButtonMap.put("6", imagePath + "6.PNG");
39         calcButtonMap.put("7", imagePath + "7.PNG");
40         calcButtonMap.put("8", imagePath + "8.PNG");
41         calcButtonMap.put("9", imagePath + "9.PNG");
42
43         // Operators
44         calcButtonMap.put("Add", imagePath + "Add.PNG");
45         calcButtonMap.put("Mul", imagePath + "Mul.PNG");
46         calcButtonMap.put("Div", imagePath + "Div.PNG");
    
```


- 실행 시 화면



- 실행 시 Console

