

소프트웨어 테스팅

실습 11#: SikuliX

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설계 목표

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







SikuliX 설치 단계

스크립트를 작성하기 위한 프로그래밍 언어 1. Java



-> 스크립트를 컴파일하고 실행할 환경 🛑 eclipse 2. Eclipse



GUI 테스트 프레임워크 3. SikuliX





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.

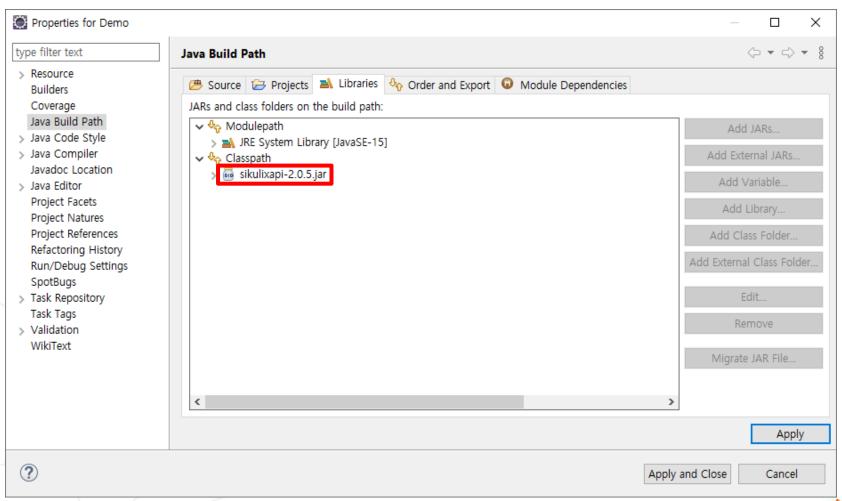
All systems: <u>Download the ready to use sikulixapi-2.0.5.jar (SikuliX IDE for Windows)</u>
Windows: <u>Download the ready to use sikulixapi-2.0.5-win.jar (SikuliX IDE for Windows)</u>
macOS: <u>Download the ready to use sikulixapi-2.0.5-mac.jar (SikuliX IDE for macOS)</u>
Linux: <u>Download the ready to use sikulixapi-2.0.5-lux.jar (SikuliX IDE for Linux)</u>

Maven coordinates for use in Maven aware contexts:

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

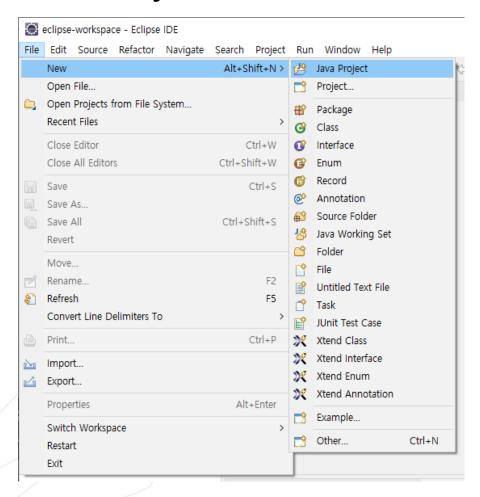


SikuliX 설치 적용



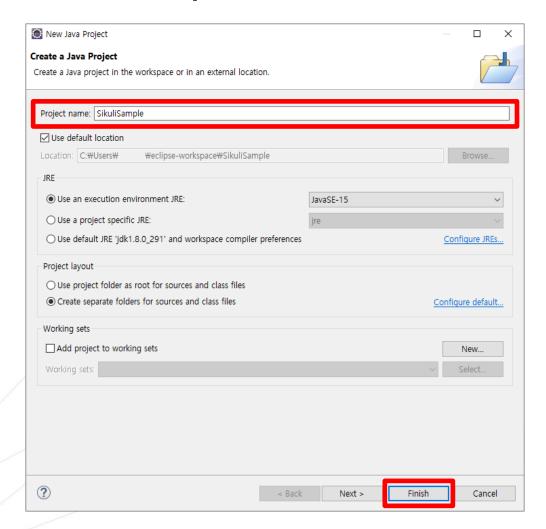


File – New – Java Project - Next



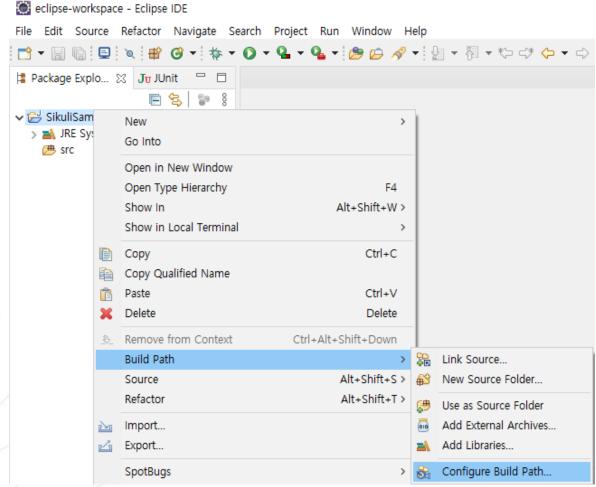


Project name : SikuliSample -> Click Finish



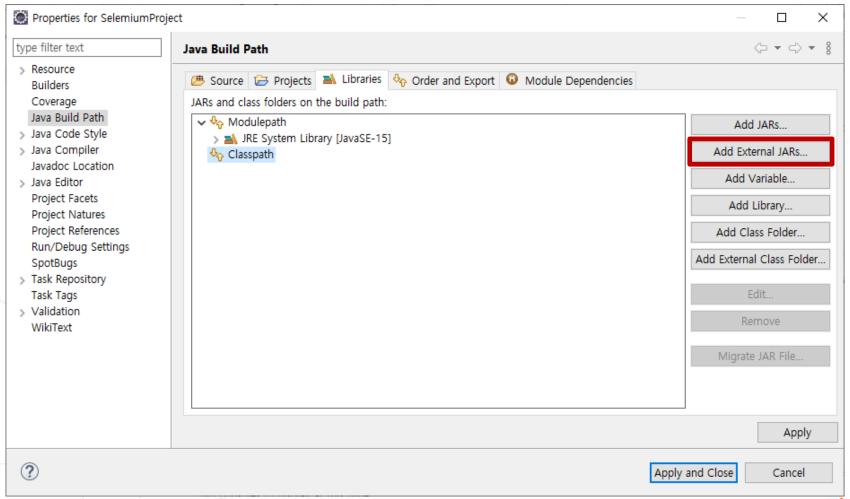


Bulid Path – Configure Build Path



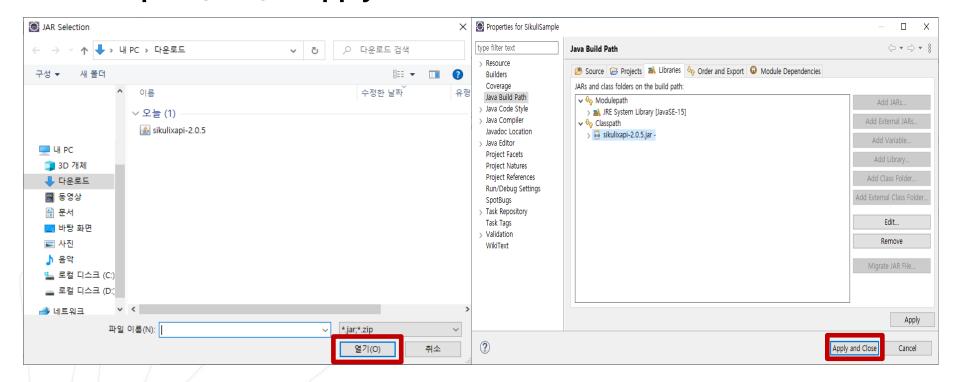


Libraries(Tab) – Classpath(click) – Add External JARs





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





src(right click) – New – Class – Finish

New Java Class			×	
Java Class A The use of the default package is discouraged.				
Source folder:	SikuliSample/src	Brows	ie	
Package:	(default)	Brows	e	
☐ Enclosing type:		Brows	se	
Name: Modifiers:	notepad ● public			
Superclass:	java.lang.Object	Brows	ie	
Interfaces:		Add		
		Remo	ove	
Which method stul				
Do you want to add comments? (Configure templates and default value here) Generate comments				
?	Finish	Cano	el	



• Input Code(notepad.txt 참조)

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



• 실행 시 화면

```
    ★제목 없음 - Windows 메모장
    파일(F) 편집(E) 서식(O) 보기(V) 도움말(H)
    This is Nice Sikuli Tutorial!!!!
```

● 실행 시 Console



src(right click) – New – Class – Finish

New Java Class			×	
Java Class A The use of the default package is discouraged.				
Source folder:	SikuliSample/src	Brows	е	
Package:	(default)	Brows	е	
☐ Enclosing type:		Brows	e	
Name: Modifiers:	CalcTest ● public			
Superclass:	java.lang.Object	Brows	е	
Interfaces:		Add.		
		Remo	ve	
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 <u>here</u>) Generate comments				
?	Finish	Cano	el	



● Input Code(ClacTest.txt 참조)

```
1⊕ import java.awt.Toolkit;
 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
         /* Initialization block */
 26
 27⊖
 28
             calcButtonMap = new HashMap<String, String>();
 29
 30
             String imagePath = "이미지 폴더 절대 경로";
 31
            calcButtonMap.put("0", imagePath + "0.PNG");
 32
            calcButtonMap.put("1", imagePath + "1.PNG");
 33
            calcButtonMap.put("2", imagePath + "2.PNG");
 34
            calcButtonMap.put("3", imagePath + "3.PNG");
 35
            calcButtonMap.put("4", imagePath + "4.PNG");
 36
            calcButtonMap.put("5", imagePath + "5.PNG");
 37
            calcButtonMap.put("6", imagePath + "6.PNG");
 38
            calcButtonMap.put("7", imagePath + "7.PNG");
 39
            calcButtonMap.put("8", imagePath + "8.PNG");
 40
            calcButtonMap.put("9", imagePath + "9.PNG");
 41
 42
 43
            // Operators
            calcButtonMap.put("Add", imagePath + "Add.PNG");
 44
            calcButtonMap.put("Mul", imagePath + "Mul.PNG");
 45
            calcButtonMap.put("Div", imagePath + "Div.PNG");
 46
```



• 실행 시 화면



● 실행 시 Console

