**Code Kata-Java**

**2019-04-18**

**Prerequisites**

1. Download and install Java OpenJDK (e.g., D:\Java\jdk-11.0.2)
2. OpenJDK: <http://jdk.java.net/11/>
3. Set CLASSPATH=D:\Java\jdk-11.0.2\lib; PATH+=D:\Java\jdk-11.0.2\bin
4. Download and install Apache Maven (e.g., D:\Apache\apache-maven-3.6.0)
5. Apache Maven: <https://maven.apache.org/index.html>
6. Set PATH +=D:\Apache\apache-maven-3.6.0\bin
7. Download and install IntelliJ Community Edition (e.g., D:\JetBrains\IntelliJ IDEA Community Edition 2018.3.4)
8. JetBrains IntelliJ (Community): <http://www.jetbrains.com/idea/download/#section=windows>

**Bowling Game**

1. Unzip bowlingGame-Java-1stTest.zip under D:\workspace\github.com\$(UserId)\java
2. Start IntelliJ
3. Import Maven project from D:\workspace\github.com\$(UserId)\java\bowlingGame (Maven friendly directory structure, bowlingGame-pom.xml, JUnit 5 friendly First Test files are in place)
4. Follow Bowling Game code kata with “package com.company.bowlingGame”
5. Build commands are:
6. Clean: mvn -f bowlingGame-pom.xml clean
7. Install: mvn -f bowlingGame-pom.xml install

**JUnit4 -> JUnit5 Modifications**

1. See “bowlingGame-pom.xml” for the JUnit5 dependencies to include in “pom.xml”
2. import junit.framework.TestCase; -> import org.junit.jupiter.api.Test;
3. public class BowlingGameTest extends TestCase -> public class BowlingGameTest, **@Test directive**
4. Add import static org.junit.jupiter.api.Assertions.assertEquals; in order to use assertEquals()
5. Add import org.junit.jupiter.api.BeforeEach; in order to use @BeforeEach directive

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**bowlingGame-pom.xml**

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<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.company</groupId>

<artifactId>bowlingGame</artifactId>

<version>1.0-SNAPSHOT</version>

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

<maven.compiler.source>1.8</maven.compiler.source>

<maven.compiler.target>${maven.compiler.source}</maven.compiler.target>

<junit.jupiter.version>5.3.2</junit.jupiter.version>

</properties>

<dependencies>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-api</artifactId>

<version>${junit.jupiter.version}</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-params</artifactId>

<version>${junit.jupiter.version}</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-engine</artifactId>

<version>${junit.jupiter.version}</version>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<plugins>

<!-- JUnit 5 requires Surefire version 2.22.1 or higher -->

<plugin>

<artifactId>maven-surefire-plugin</artifactId>

<version>2.22.1</version>

</plugin>

</plugins>

</build>

</project>

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