

PIT

MutationMate

Team

Software Developers



Liam



Tim



Brianne



Lennart



Nikolaos



Luca

Product Owners



Emmanuel



Felix

Scrum Master




Olivia

What's mutation testing?

"Testing your test to test that they test what you think they test."


- assess the efficacy of your test suite
- identify how you can improve your tests

```
public static boolean isPositive(int n){
    if(n > 0){
        return true;
    }
    else {
        return false;
    }
}
```



```
@Test
public void testIsPositiveWithPositive(){
    assertTrue(Compare.isPositive(n: 5));
}

@Test
public void testIsPositiveWithNegative(){
    assertFalse(Compare.isPositive(n: -3));
}
```



What's mutation testing?

"Testing your test to test that they test what you think they test."

- assess the efficacy of your test suite
- identify how you can improve your tests

```
public static boolean isPositive(int n){
    if(n >= 0){
        return true;
    }
    else {
        return false;
    }
}
```

```
@Test
public void testIsPositiveWithPositive(){
    assertTrue(Compare.isPositive(n: 5));
}

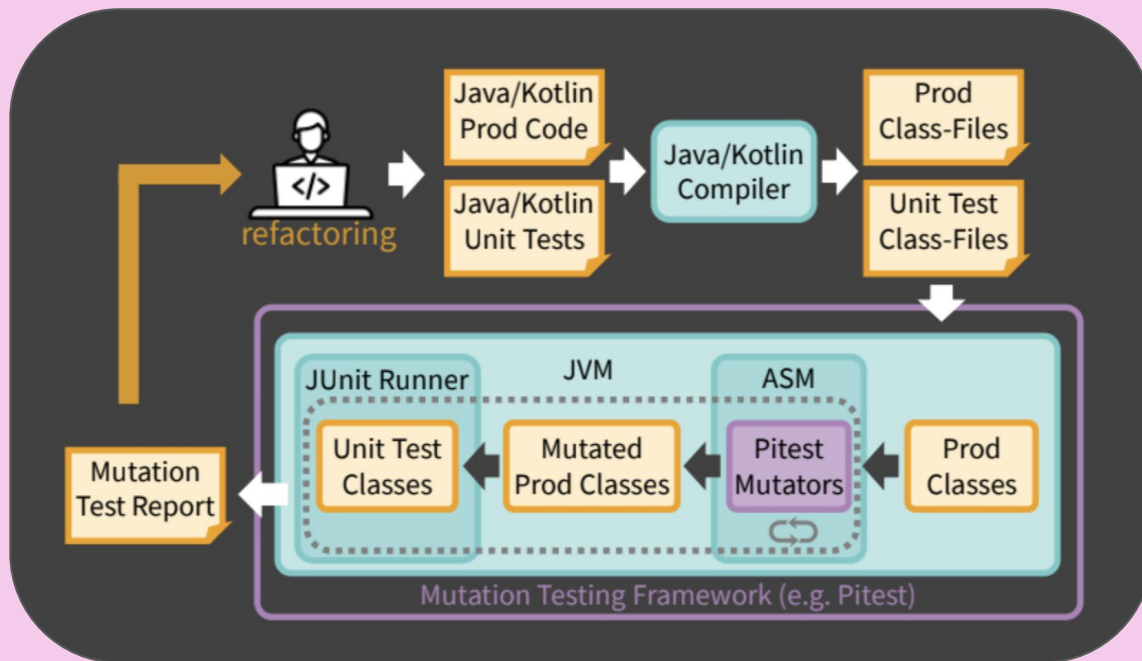
@Test
public void testIsPositiveWithNegative(){
    assertFalse(Compare.isPositive(n: -3));
}
```

What's mutation testing?

Mutation testing is less about testing
the quality of your code.
It's for checking the quality of your tests.

Pitest

A popular mutation testing system for Java/JVM languages



Source: esolutions

Workflow without our plugin

1. Run Pitest from command line
2. Locate generated report file
3. Open and view HTML report

Problem: developer is forced to switch contexts

What's our use case?

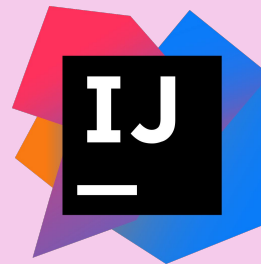
→ Enabling easier mutation testing when using Pitest



pitest.org



Our plugin



IntelliJ IDE

Live presentation of plugin

Thank you for
your attention!

