

# Krzysztof Owsiany

Twitter: [@k\\_owsiany](https://twitter.com/k_owsiany)

Blog: [MrDev.pl](https://MrDev.pl)

Podcast: [After.conf](https://After.conf)

# Agenda

- Testy automatyczne
- TDD
- GIT Flow
- Warsztaty
- Do kodu!

# Testy automatyczne

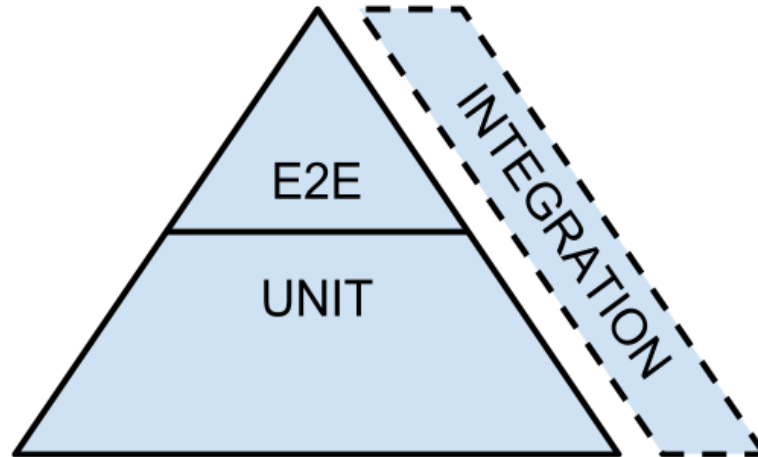
**program** sprawdza **program**

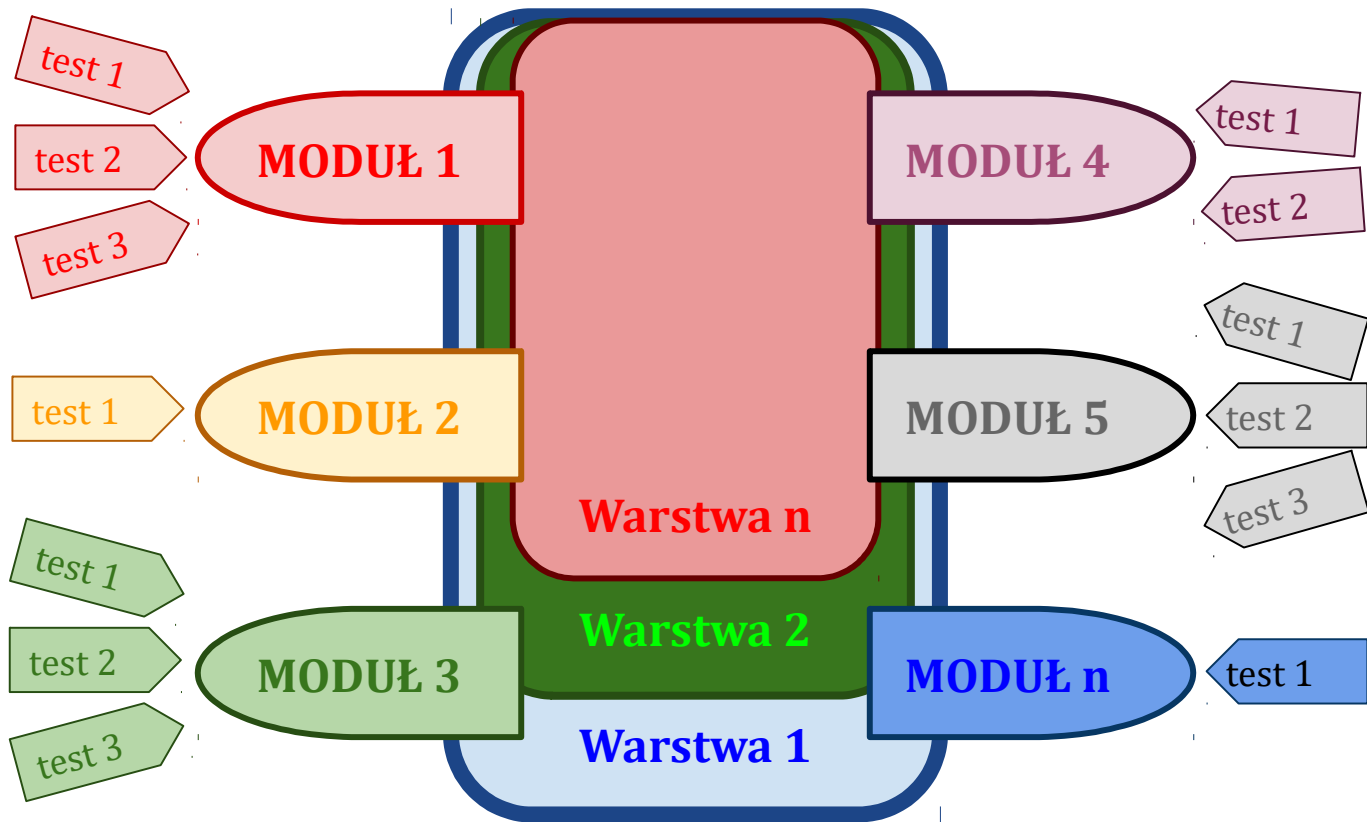
**test** sprawdza **funkcjonalność**

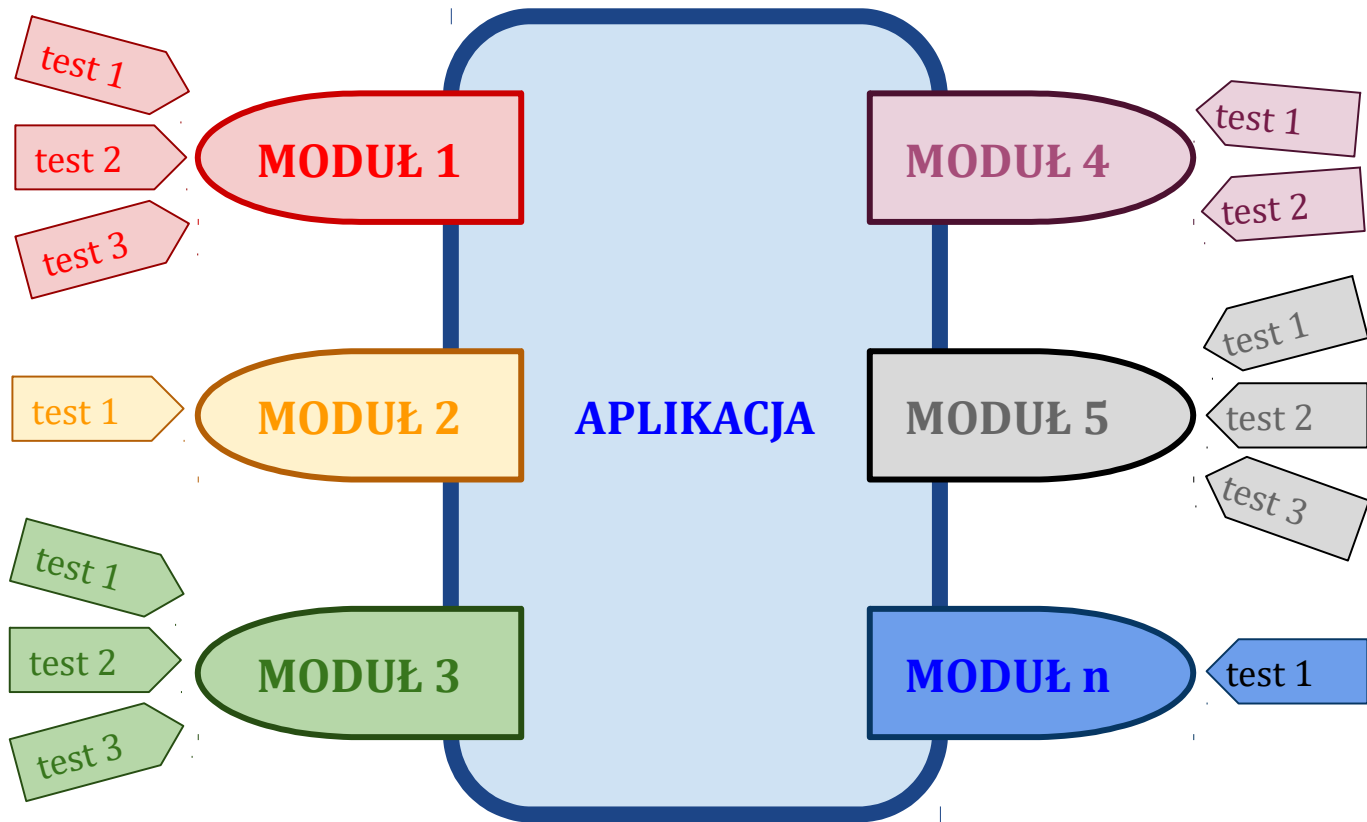
# jednostkowe(**unit**)

użytkownika  
(**end to end**)

integracyjne  
(**integration**)

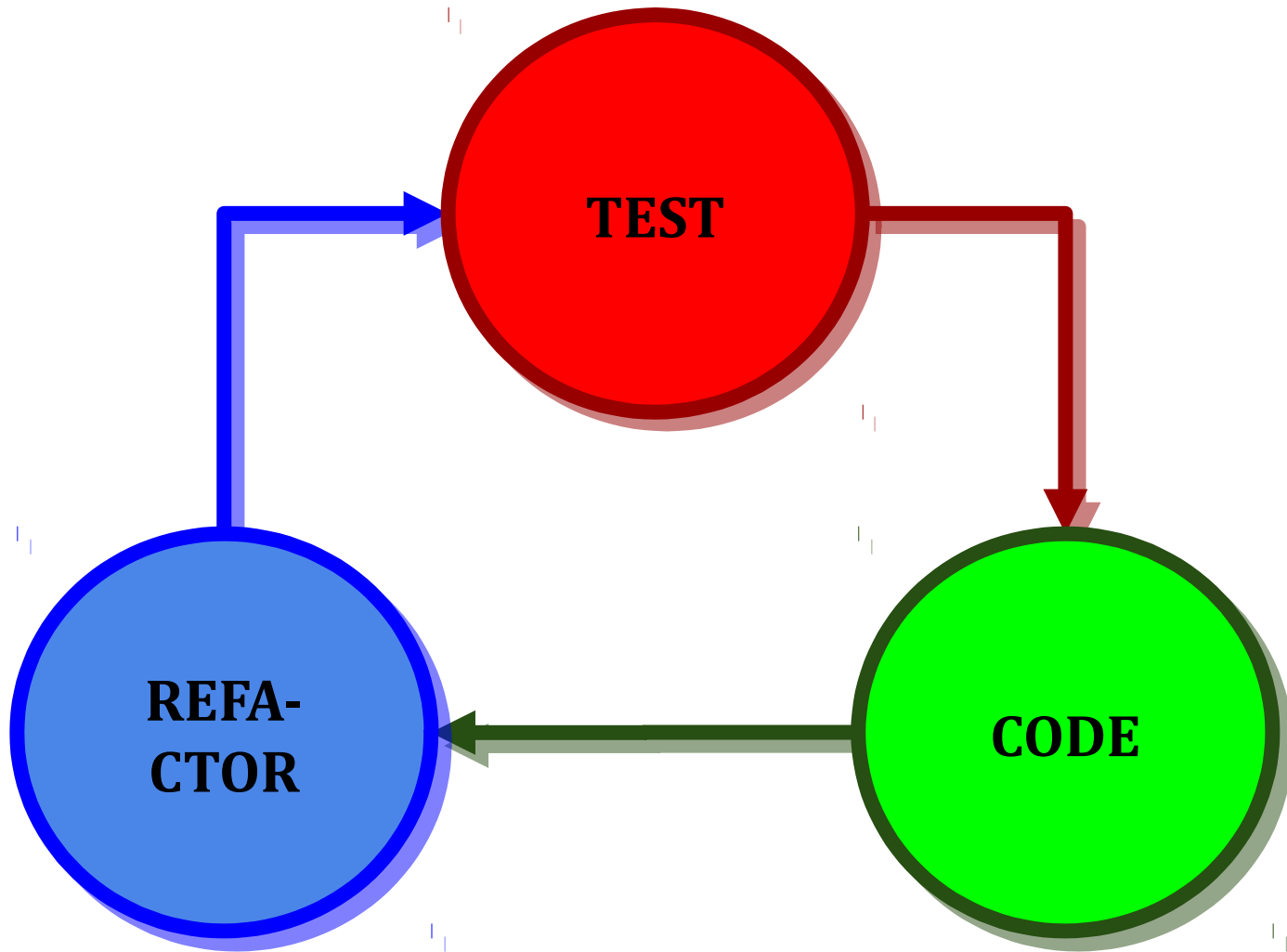






# Test-Driven Development

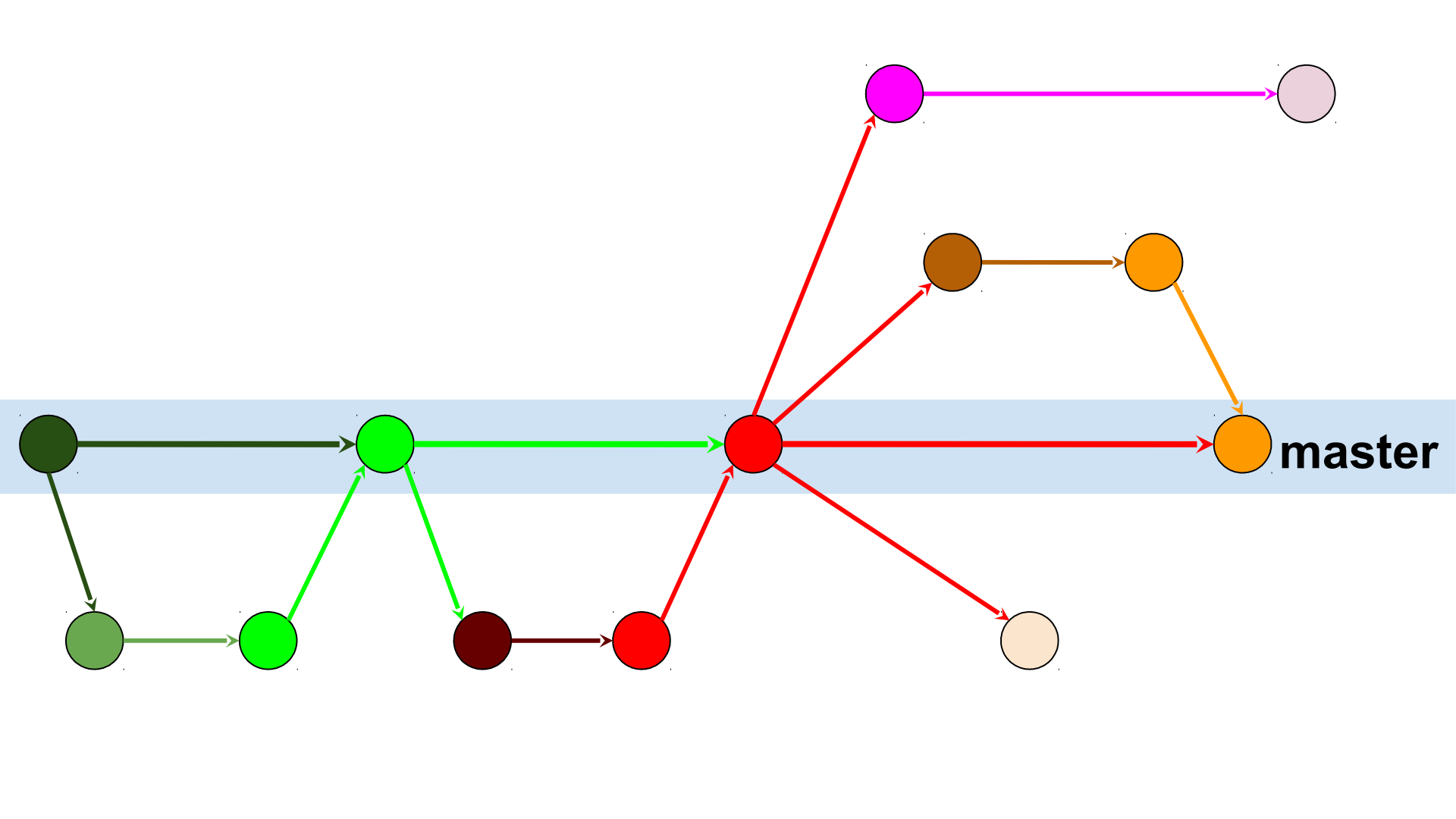




Git, Git Flow, GitHub

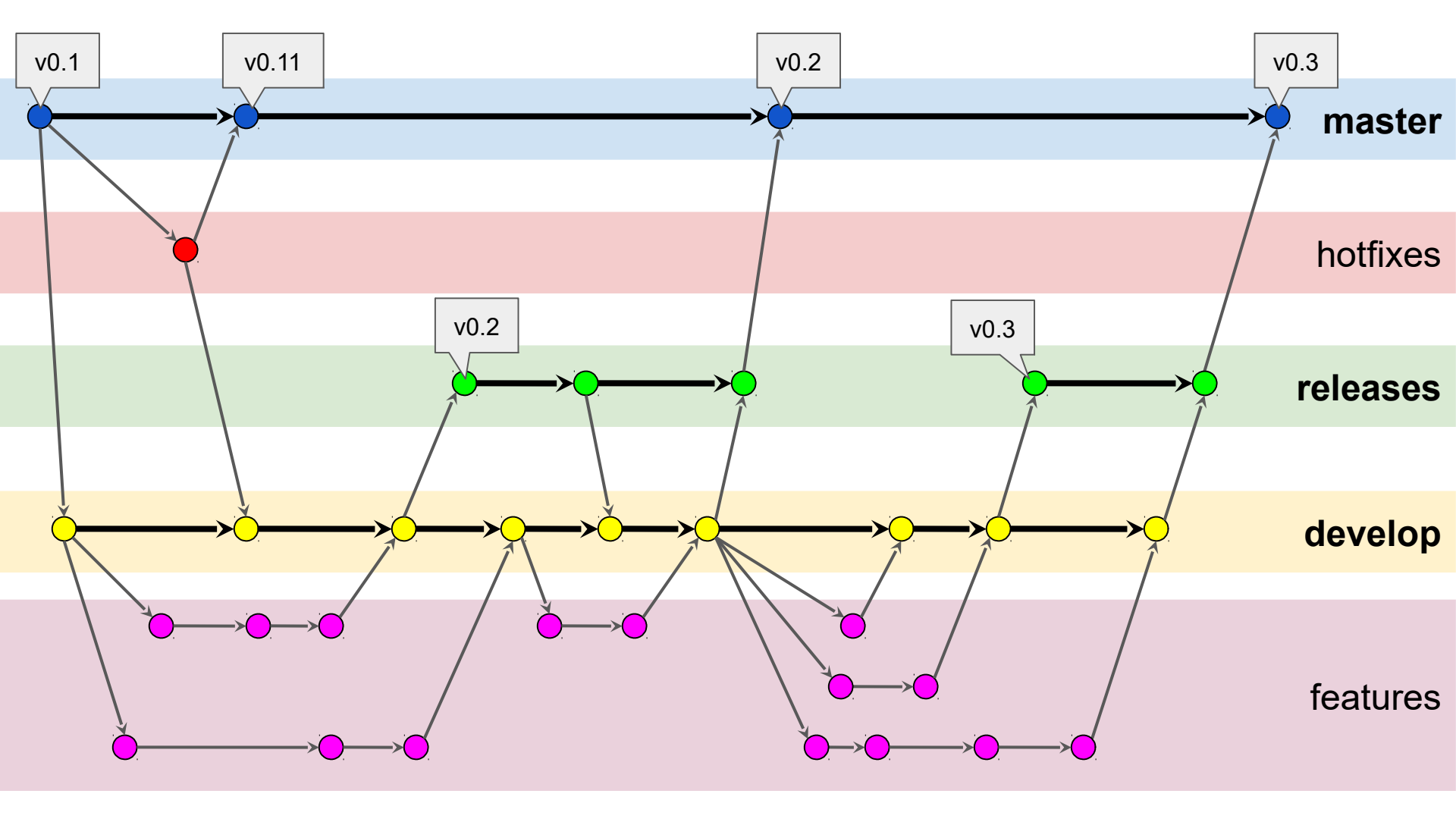


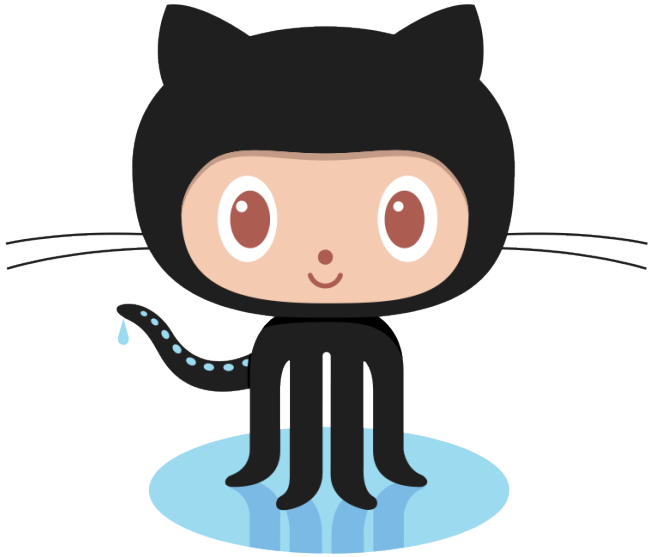
**git**





**git**  
**flow**





**GitHub**

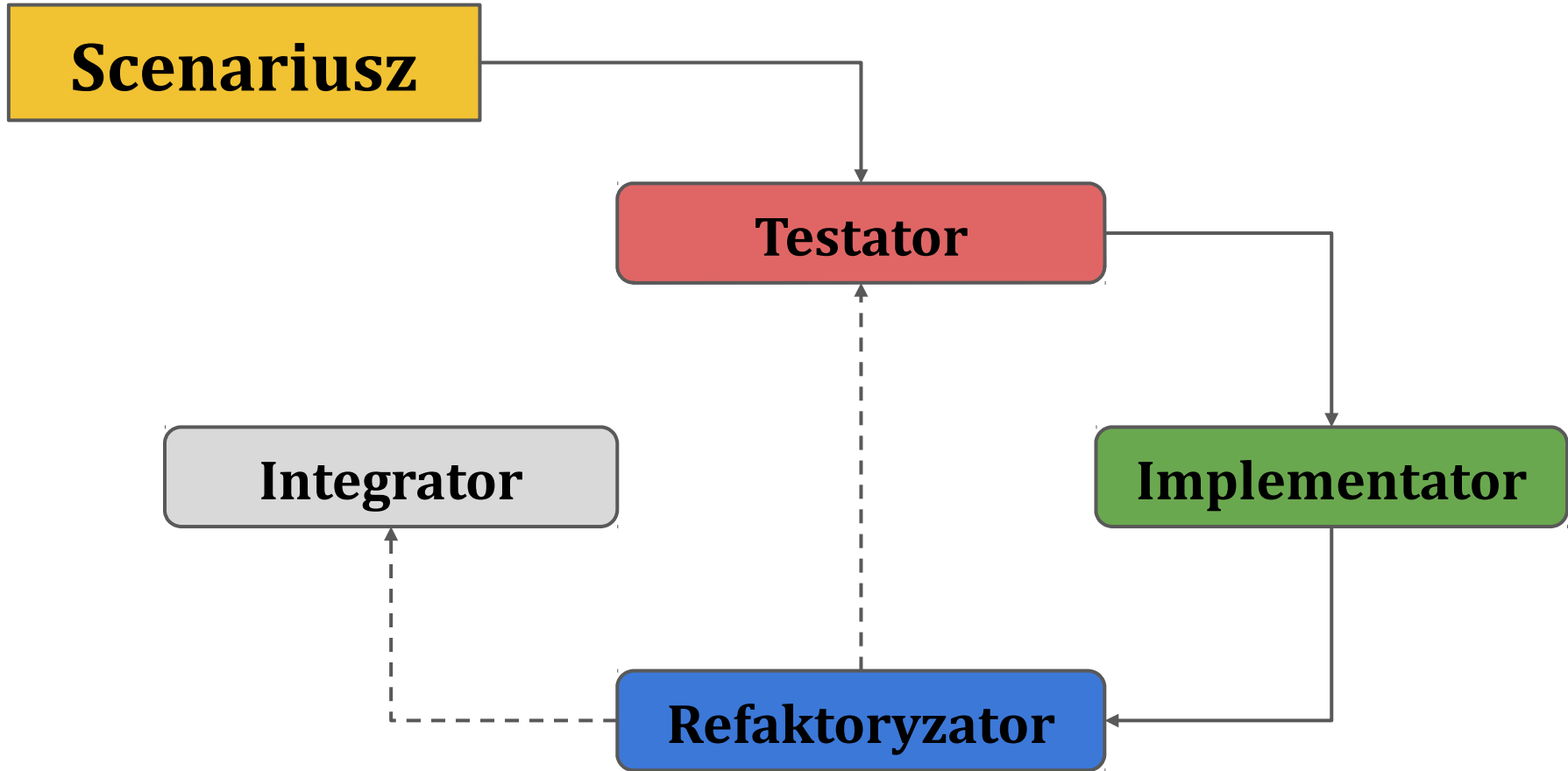
Warsztaty



<b>G I</b>	<b>T</b>
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<b>D</b>
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<b>D</b>	<b>O J O</b>
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```
public class OperationTest{
    [Fact] lub [Theory][InlineData(var1,var2)]
    public void nazwa_testu()    {
        //arrange
        _fixture.arrange_operation();

        act();

        //assert
        _fixture.assert();
    }

    private void act() {
        _fixture.act();
    }

    public OperationText(){
        _fixture = OperationFixture.Create();
    }

    private readonly OperationFixture _fixture;
}
```

```
public class OperationFixture{
    private Operation _operation;

    public OperationFixture() {
        _operation = new Operation();
    }

    public void arrange_operation() {
        _operation.Set(0);
    }

    private void act() {
        _operation.Run();
    }

    public void assert() {
        _operation.Result
            .ShouldBe(0);
    }
}
```

```

public class OperationTest{
    [Fact] lub [Theory][InlineData(var1,var2)]
    public void nazwa_testu()    {
        //arrange
        _fixture.arrange_operation();

        act();

        //assert
        _fixture.assert_throw_exception();
    }

    private void act() {
        _fixture.act();
    }

    public OperationText(){
        _fixture = OperationFixture.Create();
    }

    private readonly OperationFixture _fixture;
}

```

```

public class OperationFixture{
    private Operation _operation;
    private Action _act;

    public OperationFixture() {
        _operation = new Operation();
    }

    public void arrange_operation()    {
        _operation.Set(0);
    }

    private void act() {
        _act = () => operation.Run();
    }

    public void assert_throw_exception()    {
        _act
        .ShouldThrow<Exception>()
        .WithMessage("xyz");
    }
}

```

**nazwa\_testu**

**fakt\_\_scenariusz\_jaki\_testuje**

**oczekiwane\_zachowanie\_\_rezultat\_\_uzasadnienie**

**poprawny\_wynik\_dodawania\_\_gdy\_liczba\_a\_i\_liczba\_b\_są\_całkowite**

**nazwa\_asercji**

**asercja**

**co\_weryfikuje**

asercja\_\_poprawny\_wynik\_dodawania

Do kodu!