

Junit Tutorial

Build Team

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The word "ARENA" is rendered in large, bold, 3D metallic letters with a dark grey and black gradient. The letters are set against a background of a sandy, textured surface that appears to be a beach or a desert landscape, with some faint, concentric circular patterns in the sand. The lighting creates shadows and highlights on the letters, giving them a three-dimensional appearance.

ARENA

- Framework for automated tests
- Integrated in Together
- Write as little code as possible
- Assure that a program works in the future
- Retain value over time
- Reuse

- Test classes

```
src/classes/org/./Class
```

```
src/test/org/./TestClass
```

- Test methods

```
method( )
```

```
testMethod( )
```

- simple test example

- fixture

- run tests

Example for class to test

```
public class Mathvector{  
    public MathVector(double _x, double _y, double _z)  
    {  
        x = _x;  
        y = _y;  
        z = _z;  
    }  
  
    public equals(){  
        ..  
    }  
}
```

Example for simple test

```
public class TestMathVector extends Testcase {
    MathVector vector1 = new MathVector(12, 12, 13);
    MathVector vector2 = new MathVector(12, 12, 12);

    public void testEquals(){
        Assert.assertTrue(!vector1.equals(vector2));
        Assert.assertEquals(vector1, vector2);
    }
}
```

Example for test fixture

```
public class TestMathVector extends Testcase {
    private MathVector vector1;
    private MathVector vector2;

    protected (!) void setUp(){
        vector1= new MathVector(12, 12, 13);
        vector2= new MathVector(12, 12, 12);
    }

    public void testEquals(){
        ..
    }
}
```

Static

```
TestCase test TestMathVector("equals") {  
    public void runTest() {  
        testEquals()  
    }  
}
```

Dynamic

```
TestCase test TestMathVector("testEquals");
```

- Dynamic

```
public static Test suite(){  
    return new TestSuite(TestMathVector.class)  
}
```

```
public static void main(String args[]){  
    junit.textui.TestRunner.run(suite());  
}
```

- Together does not generate these methods
- Nevertheless, we need them for automated testing
- Create main method for every test class

Thank you for your attention