



JUNIT 1

What we'll cover

- What is testing?
- What is JUnit?
- Working with JUnit in eclipse.

Scenario tests

- Test the entire application based on a set of scenarios

Function tests

- Test carried out from user perspective
- Test a group of methods that produce a certain functionality.

Unit test

- Unit testing is the testing of a single entity (Class or method).
- A unit test is carried out from a programmers perspective.

JUNIT

- JUnit is a unit testing framework for the Java platform.
- It is part of a family of unit test frameworks that follow the same design philosophy and implementation known as xUnit. We earlier briefly looked at JUnit.

JUnit

- Is not included in the JDK
- It is integrated with eclipse.

Annotation

Annotation	Description
@Test	The public void method should be run as a test case.
@Before	The public void method should be run before each Test method.
@After	The public void method should be run after each Test method.
@BeforeClass	The public static void method is executed ONCE before any Test methods.
@AfterClass	The public static void method is executed ONCE after all tests have been completed.
@Ignore	The test will not be executed.

Fixtures

- @Before, @After, @BeforeClass, @AfterClass methods are often referred to as fixtures.
- Fixtures are used to build up and tear down a test environment.

Assertion Methods

`assertEquals(expected, actual)`

`assertTrue(boolean condition)`

`assertFalse(boolean condition)`

`assertNotNull(Object object)`

`assertNull(Object object)`

`assertSame(Object expected, Object actual)`

`assertNotSame(Object expected, Object actual)`

`assertArrayEquals(expectedArray, actualArray)`

`fail()`

Assertion Methods

- All methods can take a string message as their first parameter. For custom error messages.