

Software Testing

There is a package named **tires** with 2 classes: **CarTire.java** and **TireShop.java**

For the following classes create:

- **CarTire.java**

Test this class with unit tests so that class – level test coverage is 100%.

For methods that throw an exception do the following:

- *setDiameter* - apply the annotation for exceptions,
- *setWidth* – apply the JUnit rule for exceptions,
- *setHeight* – dynamically skip exceptions.

If multiple errors occur during the test execution, all errors should be recorded/noted.

- **TireShop.java**

Create parameterized tests for methods within this class.

- Methods coverage using parameterized tests should be 100%,
- The minimum number of parameters for the test is 4,
- Apply next annotations: @Before, @After

All tests:

- Should be run on a Windows operating system,
- Must have a suffixed or prefixed “Test” for methods and test class names.
- The execution time per test must not exceed 5 seconds.

Tests created for the AutoTire.java class combine into one collection, while the parameterized tests for TireShop.java class combine into another test collection. Both test collections run using **TestRunner**. In TestRunner using **Logger** class log the following data:

- Description of all errors,
- Time and Number of performed tests,
- How many tests are: successful, failed, skipped, dynamically skipped,
- Are the all tests have been successfully executed or not.