

SE 433/333 Software Testing & Quality Assurance

Assignment 3: Using JUnit and Eclipse

Due Date: January 24, 2018, 5:45pm (in class and on-line students)

Objective

The objective of this assignment is to develop a simple unit test using JUnit and run JUnit tests in Eclipse IDE.

Requirements

1. Write a simple class named `LengthConverter` which converts kilometers to miles and *vice versa* (1 kilometer = 0.621371192 miles). It has the following two methods

```
public double kmToMile(double km)

public double mileToKm(double mile)
```

If the argument is negative, an `IllegalArgumentException` should be thrown.

2. Write a JUnit test named `LengthConverterTest` to test both methods of `LengthConverter`. Results within 0.0001 (km or mile) of the expected results will be accepted. You should include test cases that test both valid and invalid input conditions.
3. Use Eclipse IDE to compile and run the JUnit test.

Deliverables

1. The source code of the `LengthConverter` class.
2. The source code of the JUnit test `LengthConverterTest`.

You should submit a single ZIP archive file that contains the contents of your Eclipse project, with all the sub-folder structure preserved. In this assignment, only the `src` folder is important. No other format, such as RAR, is accepted.