



# Software Testing and Quality Assurance - 2025

## Assignment 1 Unit Testing

### Deadline & Submission:

1. **Teams:** Form a team of 2-3 students from the same group or the same TA.
2. Upload it on Classroom with file named:  
**A1\_student1ID\_student2ID\_student3ID\_GroupName.zip**  
e.g., A1\_20130001\_20130002\_S1\_S2.zip
3. **Cheating** could lead to serious consequences.

*JFreeChart is an open source Java framework for chart calculation, creation and display. This framework supports many different (graphical) chart types, including pie charts, bar charts, line charts, histograms, and several other chart types.*

### **you will be provided with**

*IntelliJ Java project for JFreeChart. The project includes:*

- a. A set of needed libraries for JFreeChart jar file to compile properly.*
- b. A sample test file YearTest.java provides a sample test case. This test case passes.*
- c. A sample test file DiscountCalculatorTest.java to test all of the DiscountCalculator class functions*
- d. A sample test file DiscountManagerTest.java to test all of the DiscountManager class functions without depending on other classes*
- e. A Modified JavaDocs zip file including the Java Docs for the JFreeChart application, a documentation for DiscountCalculator and DiscountManagerTest classes.*

### **Classes to be tested**

- *org.jfree.data.time.Year (test All constructors and Methods)*
- *DiscountCalculator*
- *DiscountManager*

### **Deliverables**

- *Submit the three test files.*
- *Bugs Report contains the method to be tested, test cases and status (Passed, Failed) and any additional notes if you have.*