



King Fahd University of Petroleum & Minerals
College of Computing and Mathematics
Information and Computer Science Department
SWE 206: Introduction to Software Engineering (2-3-3)
Second Semester 2023-2024 (232)
Lab12: Unit Testing and JUnit

Objectives:

To gain experience with:

- Unit Testing
- Automate Unit Testing

Task:

A Library loans a book for its visitor and takes a fee of the loan based in the following criteria

- If the `loanPeriod` \leq `allowedLoanPeriod`, there is no fine on the book.
- If `loanPeriod` $>$ `allowedLoanPeriod`
 - The fine is SR 5.00 per late day.
 - If the subject of the book is "CS" the fine is increased by 20%.
 - If the subject of the book is "Physics", the fine reduced by 20%.
- The maximum price of the fee is SAR 500.00

1. Define the test cases that covers all the cases of the problem above
2. Write a method that solves the problem above
3. Write the Junit Module that automate the test cases for you

Submission:

Individually, submit the following (in Blackboard):

- a. A Pdf file where the
 - Cover page contains your name
 - a table that contains the test cases you designed
 - a page/pages of your code
- b. A java file named "Lab12Code[your id].java" that has the method
- c. A java file named "Lab12TestModule[your id].java" that has the Junit Test cases