

Programming Exercises - SDJ - Session 04

Exercise 4.01 For each of the three classes (Person, MyDate and Payroll) that you created in the exercises from our last session (Exercise 3.01, 3.02 and 3.03) do the following:

- a) Create a constructor with the necessary parameters to initialize the instance fields in the classes.
- b) Create a no-argument constructor to initialize the instance fields to default values of your choice.
- c) Create a toString() method, returning a meaningful representation of objects from the class.
- d) Add the constructors and new methods to your UML class diagrams
- e) Add the necessary changes to your existing test classes, to test the new functionality.

Exercise 4.02 Create a UML class diagram for a class Book. Then implement it in Java and test it. The Book class should have the following fields: author (String), title (String), price (double), and pages (int).

- a) Create a 4-argument constructor initializing all fields.
- b) Create get methods for all fields.
- c) Create a set method for price.
- d) Write a test program that creates two Book objects based on user input (use a Scanner object to input author, title, price, and pages), then lowers the price on both books by 20%, and finally prints out the information about the two books.

Exercise 4.03 [Gaddis] Programming Challenge 2, p. 166

Exercise 4.04 [Gaddis] Programming Challenge 7, p. 168