Lab 2.1

(February 8, 2023)

Please see the README file to import Java project folders into your Eclipse workspace.

1. In the first part of the exercise, you will continue working on the source code you modified during the previous week's lab session on February 1. Alternatively, you can work on the Java project Lab1-final provided under folder Q1-Source Code

Control coupling is a specialised form of coupling where one of the parameters to a method is a control variable which decides what the method does. The disadvantage of ***control coupling*** is that the code-user has to know the different values the control variable can take and what these variables mean.

In the source code you will work on there is ***control coupling:*** The type parameter controls how the Person object behaves.

In this exercise, you asked to remove control coupling by **inheritance** as follows:

- Create two child classes Worker and Boss so that Person is the parent class of these two classes

Make necessary modifications in the source code so that the code can work.

2. In this exercise, you will create your own Java project from scratch (i.e., There is **no** source code provided for you to work on). Name your Java project as **Lab2.2**

Define a Date class with the following methods:

- A constructor that takes a day, a month, and a year as integers.
- A print method that takes a Printstream as a parameter.
- Three methods, getDay, getMonth and getYear that return the integer day, month and year.
- A method called diffInYears that takes a Date object as a parameter and returns the difference in years between the Date parameter and itself as an integer.

Write a program to test this class, making sure all the methods are tested.

Important: Please save and keep this Java Project, since you will keep on working on this source code during next week's lab session on February 15.