Reflection

Create a project that can test some criteria about a class.

1. Download the two sample projects from the page of the class and import them to NetBeans.

2. Create a new project. The name is Lesson3b and the name of the Main class is `ClassChecker`. Add the before downloaded two projects to the Libraries of the Project. (Right click on Libraries->Add project.)

3. In the main method read the name of a class to be tested and create a `Class` object. If the user gives a name that does not exist read a new class name.

4. Test if all the fields of the class in question has exactly 3 fields and none of them is public. Print out the result.

5. Print out how many constructors does the class have. (2 is OK)

   • Check if the class has a default constructor or not. (Print out the result.)

   • Check if the class has a constructor, that has exactly the same amount of parameters, as the number of fields in the class.

6. Check if there are getters for all the fields or not. (Print out if there is or not.) Be careful with boolean fields.

7. Check if there are setter methods for all the fields of the class.

8. Print out the names of those methods of the class that are marked by the `@MarkSg` marker annotation. (This annotation has to be present in package that also contained the checked class itself.)