

GIT Department of Computer Engineering
CSE 222/505 - Spring 2015
Homework 01
Due date: Mart 25 2016 – 08:00 AM

SCENARIO:

Design and implement course automation system. The system has users like administrators, teachers, tutors and students. **Administrators** manage the system by **adding, removing users and courses**. **Teachers** who manage courses can **add and remove users, tutors and documents to a course**. The document can be in different formats like books, files, slides, urls and whiteboard descriptions. **Teachers can give assignments**. Assignments can be in different formats like quiz, homework or group project. An important part of the assignment is that every assignment has a deadline and a late deadline. A teacher **can manage multiple course in a course term**. **Teachers and tutors** can **view older courses but cannot make any changes**. **Tutors** only can **view their course materials and assignments**. A tutor can be a student in a different course. **Students** can **register into system and can upload assignments**. **She/he can view grades and lecture notes**.

OBJECTIVES:

- Preparing object oriented design for the problem
- Creating interfaces
- Applying polymorphism
- Applying method overriding
- Applying error handling
- Applying inheritance
- Applying code documentation
- Applying clean code standards
- Creating javadoc documentation

RESTRICTIONS:

- Use maven standard Project template
- Use only ArrayList data structure
- Can be only one main class in project
- Don't use any other third part library

GENERAL RULES:

- For any question firstly use course news forum in moodle, and then the contact TA.
- Use [maven project management tool](#). And upload maven project into moodle.
- Code the Project in Java programming language. Java must be 1.8.* or bigger version.
- Any java IDE can be used in coding process.
- Implement all interfaces class

- Add all [javadoc](#) documentations for classes, methods, variables ...etc. All explanation must be meaningful and understandable.
- Implement [clean code standarts](#) in your code;
 - o Classes, methods and variables names must be meaningful and related with the functionality.
 - o Your functions and classes must be simple, general, reusable and focus on one topic.
 - o Use standart [java code name conventions](#).
- Register [github student pack](#) and create private project and upload your projects into github.
- Your appeals are considered over your github project process.
- You can submitting assignment one day late and will be evaluated over forty percent (%40).
- Create report which include;
 - o Your name, surname, studentid
 - o Detailed system requirements
 - o The Project usecase diagrams (extra points)
 - o Class diagrams
 - o Problem solutions approach
 - o Test cases
 - o Running command and results

GRADING :

- No OOP design : -100
- No maven Project : -100
- No interface : -95
- No method overriding : -95
- No error handling : -95
- No inheritance : -95
- No polymorphism : -95
- No javadoc documentation : -95
- No clean code standard : -95
- No report : -95
- Disobey restrictions : -99
- Your solution is evaluated over 100 as your performance. Don't forget this is performance project.

CONTACT :

- Teacher Assistant : Necmeddin Çarkacı
- Information and Security Lab – 122 – ncarkaci@bilmuh.gyt.edu.tr