# JAVA PROGRAMMING COURSE (SWE2023) FALL SEMESTER 2022

INSTRUCTOR: Prof. TAMER ABUHMED COLLEGE OF SOFTWARE

## **Final Project**

Project Type: Individual Project [only one student]

Project Topic: Free topic!

**Ex**: Game, chatting program, library management, point of sale, etc.

- Choose what you can do your best

#### **Program Requirements:**

- GUI [Swing]
- Threads
- Inheritance
- Polymorphism
- File I/O
- Other topics that we have covered so far.

### Points you should consider when you are implementing your project:

- Your project should be complex enough
- Your project should have a good User Interface (GUI).
- Well-formatted OOP design is far better than implementing difficult things.
- Your software is reliable and cannot crash easily, where you will check all users' possible input and generate messages for unsuitable input.

- Please follow Coding Convention (clean coding):
  - File organization
  - Indentation
  - Comments
  - Declarations
  - Naming

#### **Detailed factors for project evaluation:**

**Total Score: 100 points** 

- Report 10 points
- Demonstration (video with voice!) 15 points
- Source Code **70** points
  - Correctness of the implementation **30** points
  - \*Complexity of the project 15 points
  - User Interface (UI) **15** points
  - Coding Convention **15** points

Deadline for optional proposal: November 23, 2022, 23:59:59

Deadline for final project submission: December 11, 2022, 23:59:59

\* Complexity of the project - Check the attached file for project examples from last semester's final projects ("Final Project Examples.pdf")

Last year's projects' statistics to let you know about the size of the project:

The average number of defined classes: 9~11 classes

Average Source code length: 800 ~ 900 lines / 1 person

Note: To get a full score, you must follow last year's statistics.

**Project Submission:** Submit the following files:

- Source code (all .java files)
- Executable jar file (important)
- Project Report
- **Video** (minimum 4 mins). In the video, you should run the code and explain all the steps

All the files and the video should be submitted as a zip file

Name of zip file: {student ID}\_{Student name}\_final\_project.zip

**Example:** 2020712837\_Frank\_Thomas\_final\_project.zip

NOTE: Plagiarism is strictly prohibited. If there is any plagiarism found in the code, you will be given an "F" for the final project evaluation.

If you have any questions about the final project, you can send an email to the following email: f.i.juraev@gmail.com Good luck!

Remember: Any late submission will not be accepted after the deadline.