- **Description:**

Developing graphical user interface java application using JavaFX with the help of scene builder. You are required to cover all practical topics (listed below) in your project:
- Encapsulation.
- Polymorphism.
- Exceptions.
- Storage on (Files/Database)
- Use of JavaFX visual components and applying layout managers.
- GUI Events.
- Multithreading.

- **Requirements:**

In short, you are supposed to design a high-quality GUI software with the minimal functionalities that proves your understanding of aforementioned topics and solves a real-world problem that currently exists. Follow the **guideline** below to complete your project:

1- **Obtain** idea for the project (Grading System, Tickets System, Timetable management system, etc.) must be unique compared to your colleagues.
2- **Define** number of screens and their functionality with the **minimum of 4** screens plus (login and register screens).
3- **Design** UML class diagram for the project.
4- **Code** your idea based on UML design and your defined screens applying and covering all the previously mentioned practical topics and Java naming conventions.

The number of classes/interfaces per project **must be 6** at least (FXML and controller classes are not counted).

- **Rubric:**

Grades will be distributed as follow:

Object-oriented design, Polymorphism and interfaces, Overloading and Overriding.	10
User friendly UI/UX	4
Data Storage (files/database)	3
Comments and correct convention	3
Database JDBC	+5

- **Submission files:**
  - UML file/Screenshot.
  - Project folder compressed in [*.rar].
  - FXML files/screens compressed in [*.rar].

- **Rules:**
  - Fully understanding your work and being ready to discuss.
  - Any violated part in the requirements or submission files sections will make you lose marks.
  - **Your work must be your own work or you will receive <u>zero</u>.**