

SEMINAR 6

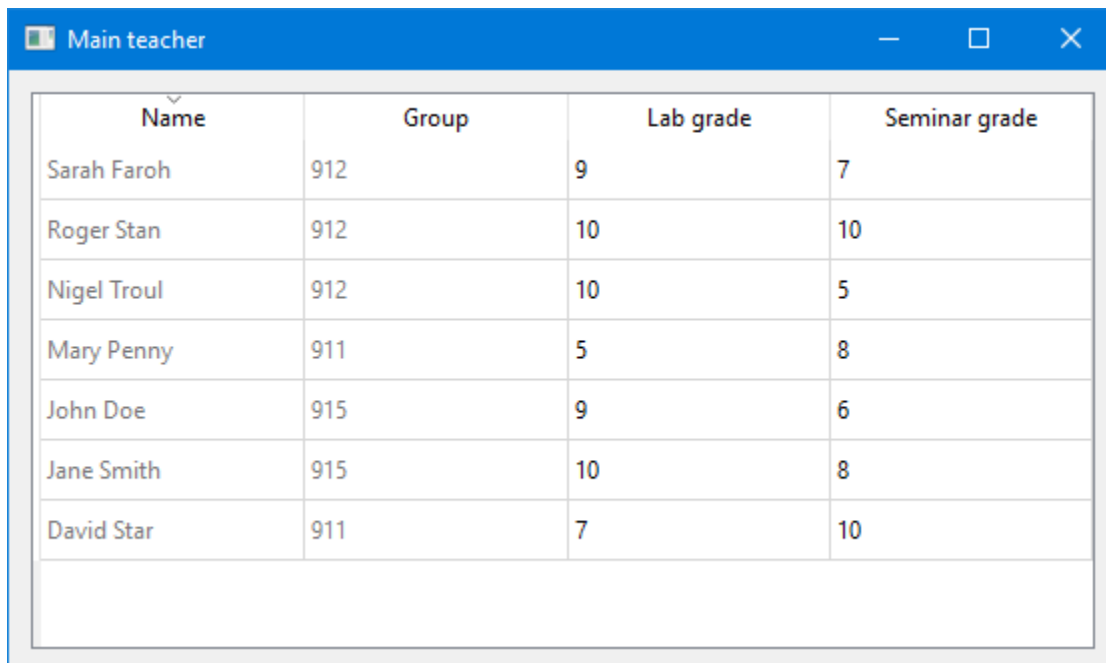
1. OBJECTIVES

- Design graphical user interfaces (GUI), using the Qt framework.
- Understand and use the model/view architecture: separate the data from the way it is presented to the user. Define custom models.

2. PROBLEM STATEMENT

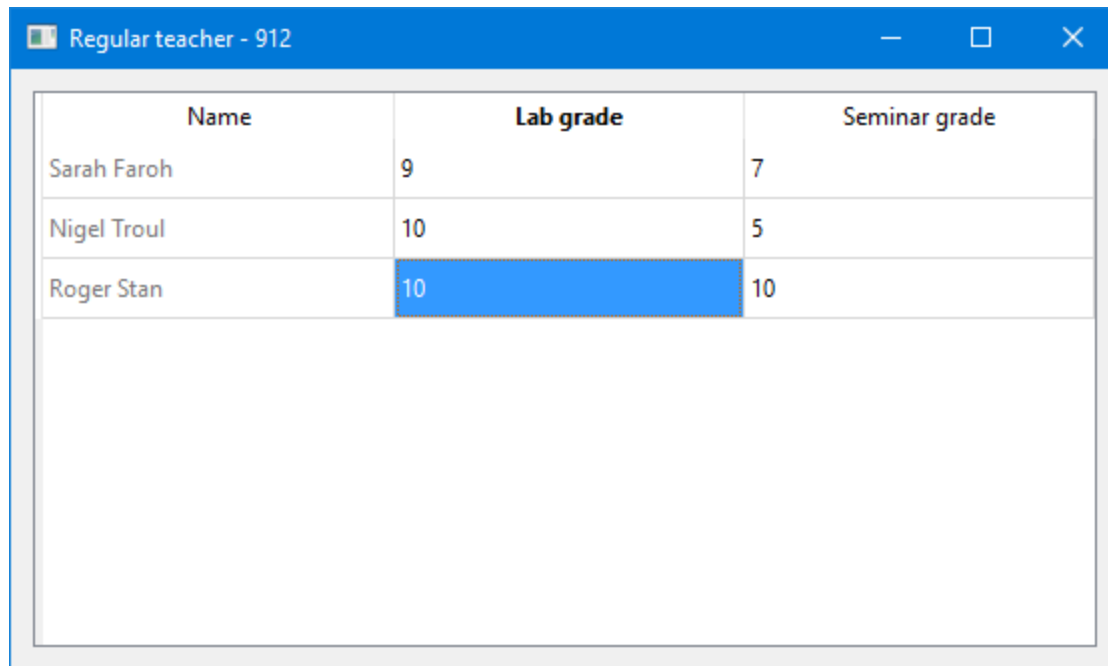
Use the Qt model/view architecture to design an application for collaborative editing of students grades. Each student has *a name*, *a group*, *a laboratory grade* and *a seminar grade*. The application can have two types of teachers: main teachers (who can see the entire list of students) and regular teachers, who can see only those students belonging to the group they are teaching to. Whenever any teacher edits the grades, all the other teachers should be able to see the modifications. The main teacher can sort the students by any of their specific fields (name, group, lab grade, seminar grade).

An example is provided below:



The screenshot shows a Qt application window titled "Main teacher". Inside the window is a table with four columns: "Name", "Group", "Lab grade", and "Seminar grade". The table contains seven rows of student data. Below the table is an empty rectangular area.

Name	Group	Lab grade	Seminar grade
Sarah Faroh	912	9	7
Roger Stan	912	10	10
Nigel Troul	912	10	5
Mary Penny	911	5	8
John Doe	915	9	6
Jane Smith	915	10	8
David Star	911	7	10



A screenshot of a Java Swing window titled "Regular teacher - 912". The window contains a table with three columns: "Name", "Lab grade", and "Seminar grade". The table has three rows of data. The first row shows Sarah Faroh with a Lab grade of 9 and a Seminar grade of 7. The second row shows Nigel Troul with a Lab grade of 10 and a Seminar grade of 5. The third row shows Roger Stan with a Lab grade of 10 and a Seminar grade of 10. The cell containing the value "10" in the Lab grade column for Roger Stan is highlighted in blue. Below the table, there is a large empty rectangular area.

Name	Lab grade	Seminar grade
Sarah Faroh	9	7
Nigel Troul	10	5
Roger Stan	10	10

3. IMPLEMENTATION

Please see the tutorials and implementation at: <https://www.youtube.com/watch?v=ziKj8FE7OaA>