RAPPORT - APPLICATION JFX

ACTIVITY:

Code a JFX UI in the context of school administration

NAME:

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DESIGN:

Similar to TP4, with some added functionalities.

LINKED DATABASE:

Realised on MySQL, with sql requests pulled from jfx where required.

FEATURES TO IMPLEMENT:

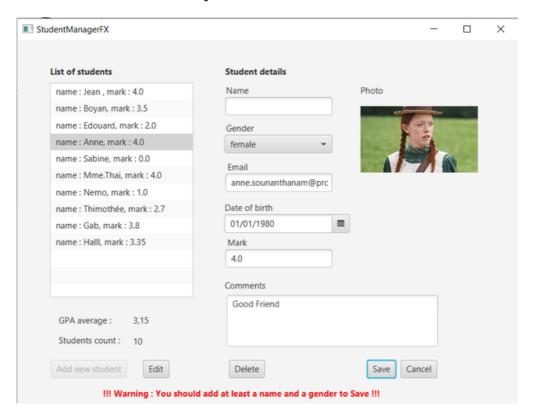
- 1. Retrieve and display a list of students from database in studentView. ☑
- 2. Display details of a student when selected. \square
- 3. Edit an existing student . ☑
- 4. Add a new student with at least the name and gender. \square
- 5. Delete a student. ☑
- 6. Display the average of all students grades. ☑
- 7. Validate data entry and display messages when errors are detected. \square

UI DISPLAY: Here is the window the user is presented with: StudentManagerFX Student details 2. List of students Name Photo name: Jean, mark: 4.0 name: Boyan, mark: 3.5 Mme.Thai name: Edouard, mark: 2.0 Gender name: Anne, mark: 4.0 female name : Sahine mark : 0.0 noemie.thai@edu.devinci. name: Nemo, mark: 1.0 name: Thimothée, mark: 2.7 Date of birth m 01/01/1992 name: Gab, mark: 3.8 name: Halll, mark: 3.35 Mark 4.0 Comments GPA average: Students count: 10 Save Cancel Add new student Delete

UI DESCRIPTION:

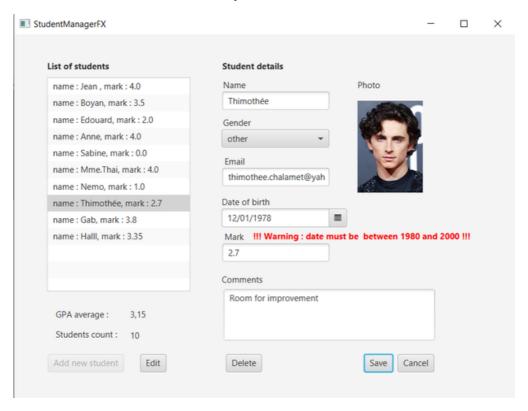
In the initial state of the application, no field can be edited. This is called the view mode, as it is used to review students details. The user can interact with the following elements:

- 1. listView: Display the list of students and their grades. On selection of a student, their informations appear in Student details.
- 2. Student details: List the informations on selected student. In the initial state of the application, no field can be edited. They appear grey to show that they are locked. In order to unlock them, the user needs to press "Edit".
- 3. Add new student: Activates new student entry mode. All student details are flushed to provide a blank slate on which the new student can be entered. "Save" and "Cancel" buttons are enabled, so that the new student can be saved, or the user can return to initial mode without saving.
- 4. Edit: Activates student edition mode. All student details are ungreyed and writable. "Save", "Delete" and "Cancel" buttons are enabled, so that the modifications can be saved, a student can be deleted or the user can return to initial mode without saving.
- 5. Delete: Remove the student selected from the database. Only enabled while in edition mode, to reduce the risk of accidental deletion.
- 6. Save: Add the new student to the database, or modify the fields of an existing student if in edition mode. Only enabled in new student entry and edition modes. If the fields "Name" and "Gender" are empty when saving, a warning is issued and the user cannot save until they fill in those fields. See below.



UI DESCRIPTION:

Similarly, if the date is not within the allowed timeframe, namely 1980-2000, a warning is issued and the user cannot save until they correct the date. See below.



8. Cancel: Aborts the ongoing action and resumes the view mode of the application. Disabled if the application is already in view mode.

Additionally, a count of all registered students and their global average GPA are presented below the list of Students. Those values are updated whenever a student is added or deleted from the database.