BIRZEIT UNIVERSITY

COMP242 – Project# 1: Java revision

In this project, you will implement a list structure that represents a list of Employee records and perform various operations on these records. The inputs for the project will be an employee file (`employee.txt`). Each line in this file contains an employee record with the following details: `EmployeeID, Name, Age, Department, Date of Joining, and Gender.`

For this project, you will use `ArrayList` to manage the records. Additionally, you will incorporate a `TableView` to display information and add functionality to read from and write to text files.

Requirements:

1. **File Handling**:
   - Implement functionality to read data from a text file (`employee.txt`) and write data to a text file called (`updatedEmployee.txt`).
   - The initial file data is **attached**.

2. **List Structure:**

   - Use ArrayList to store and manage the employee records.

3. **Graphical User Interface (GUI):**Create a GUI using JavaFX (Scene Builder is not allowed in this course).
   - Implement the following features in the GUI:
     o A `file chooser` to select the employee file and fill the `ArrayList` with its data.
     o An option to `insert` a new employee record into the `ArrayList`.

- An option to `delete` an employee record from the `ArrayList` using the `EmployeeID`.
- An option to `search` for a specific employee record by `EmployeeID`.
- An option to display the number of employees grouped by `age, gender, and department`.
- An option to `save` the updated data to the `updatedEmployee.txt` file.

4. **Table View:**
   - Use `TableView` to display the employee records in a user-friendly format.

Good Luck!