ST0244 - Programming Languages Programming

Practice I

School of Applied Sciences and Engineering - EAFIT University

Lecturer Alexander Narváez Berrío.

Feb 2025

PRACTICE I - VALUE: 12% OF THE FINAL GRADE OF THE COURSE.

INSTRUCTIONS:

Develop a Haskell program to manage student registration at a university. The program must allow registering the entry and exit of students, searching for students by their student ID, and calculating the time a student stayed at the university.

Functional Requirements:

- **Check In:** The program must allow registering a student's entry to the university. To do so, the student's ID must be requested, and the current entry time must be recorded.
- **Search by Student ID:** The program must allow searching for a student at the university by their student ID. When the ID is entered, the student's information will be displayed if they are still at the university.
- **Time Calculation:** The program must be able to calculate the time a student has remained at the university, given their entry and exit times.
- **List Students:** Choosing this option should load the student information from a file into a list and display it on the terminal.
- **Check Out:** The program should allow checking out a student from the university. The student's ID will be requested, and the current departure time will be recorded.

Technical Requirements:

- The program must be developed 100% in Haskell.
- **Data Persistence:** The program shall allow saving student information in a text file. At startup, it shall load the information stored in that file into a list for manipulation during execution.
- A list should be used to store the student information.
- Functions must be implemented for each of the above functional requirements.
- File management for data persistence must be implemented.
- **Supporting material:** The lecturer will provide a code base and an explanatory video, from which you must complete what is missing in order to fulfill the practice.

Please share the repository through GitHub, including a README.md file with the names of the members, the platform used, and the file University.txt.

Finally, make a short video presentation explaining and showing how the practice works on your PC with all the described options.

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Assessment:

- Script operation in Haskell (40%)
- Video presentation (60%)