Introduction

The objective of the project is design and implementation of an interactive "Leave Management System" for the Human Resources Department at Pretoria, Belgium Campus. The Leave Management System automates the process of managing and tracking multiple types of employee leaves. Employees can submit the leave form, cancel previously submitted leave requests, check the status of leave requests and view completed leave transactions. The Leave Management System maintains a database to keep a running balance of each employees account, accumulates employee vacation and sick credits and provides individual reports on employees leave accumulations.

You have completed phase 1 and 2 in projects 1 and 2 respectively.

Third phase will form project 3.

Outline

"Leave Management" should be a Graphic User Interface (GUI) system. There are registered employees in the system. Some are approvers. An approver can also be a requestor. The hierarchy could be Lecturer/Dean/ HR etc. Lecturers must send leave request/s to dean. The dean has the rights to approve/decline the leave. If the dean approves the leave, the leave request must be sent to the HR department. Once the HR department receives the confirmed leave request, will calculate the leave pending leave based on the type of the leave and will send notification to dean and employee. Dean can directly send leave request to HR.

Your system must have four functionalities such as **Administration, Employee, Dean and HR.**

 Administration, Employee and Dean functionalities are completed now.

In project 3 you should develop **HR functionalities.**

Project 3 Functional Requirements:

- HR must be able to view receive confirmed leave request from dean.
- HR must be able to calculate leave balance and send notification to the requested employee.

- **Request:**
    - Using a distributed system, the employee can query about the leave e.g. leave balance query to HR in the form of sending a request to HR department.
- **Response:**
    - HR can check the leave based on the request and send the response.

- You must make sure that your system is performing the functional requirements which are mentioned in project 1 and 2.

Technical requirements

- Database design must be in 3rd Normal Form
- Use Object Oriented Principles to model your classes and class libraries to reuse your code.
- Multiple employee should be able to send leave application at the same time.

Mark Allocation

Criteria	Weight
Project Analysis	3
Module Creation	2
Form Design/Styling	3
Classes and Interfaces usage	5
Fields and methods	2
Custom Exception Handling and usage	5
Collections	3
Leave Calculation	2
Search	3
Populating data	3
HR : Requirements Functional	10
Additional functionalities e.g. chatting, file downloading in etc.	5
Implementation of RMI and functional	5
Implementing/ Successful use of design patterns	4
Programming standard/Packages/Import	4
Display report	3
Project 1 functionality	5
Project 2 functionality	5
Project coding standard	3
Total	**75**

Additional Information

- All work must be done on your own.
- Belgium Campus have software that can **scan for plagiarism** and a student caught doing this will get 0 for this assignment.
- Late assignments will not be accepted; missing the deadline is an automatic 0.