



Semester Project Documentation

Semester Project Title: HR Management System

Student Details

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MAIN FEATURES

- 1: Hire new employee
- 2: View details
- 3: Terminate employee
- 4: Change Password

Types of Users

HR Department

Requirements Breakdown

Feature 1: Employee Management

1.1 Requirement: Hire a new employee
1.1.1 The system should prompt the user to enter the name, email, address, and role of the new employee.
1.1.2 The system should validate and store

the employee details. 1.1.3 If the role is "Developer," the system should prompt the user to enter the number of hours worked and calculate the salary as $\text{hours} * 1000$. 1.1.4 If the role is "Manager," the system should prompt the user to enter the number of hours worked and calculate the salary as $\text{hours} * 2000$. 1.1.5 If the role is "Accountant," the system should prompt the user to enter the number of hours worked and calculate the salary as $\text{hours} * 3000$. 1.1.6 The system should assign a unique ID to each new employee. 1.1.7 The system should display the details of the newly hired employee, including their name, email, address, role, and salary.

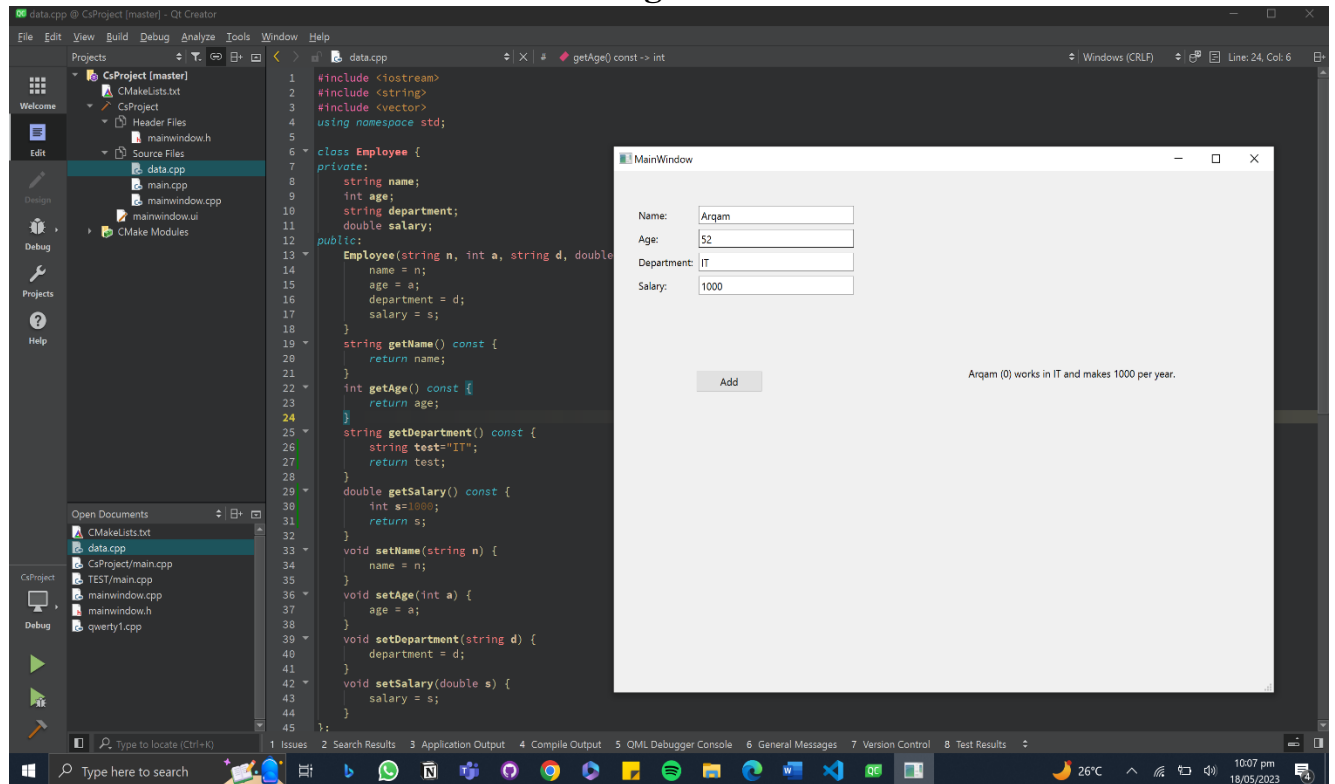
1.2 Requirement: Terminate an existing employee 1.2.1 The system should prompt the user to enter the ID of the employee to be terminated. 1.2.2 The system should search for the employee with the given ID and remove them from the system. 1.2.3 The system should display a confirmation message indicating that the employee has been terminated.

1.3 Requirement: View details of currently working employees 1.3.1 The system should prompt the user to enter the ID of the employee whose details they want to view. 1.3.2 The system should search for the employee with the given ID and display their name, email, address, role, and salary.

Feature 2: Password Management

2.1 Requirement: Change password 2.1.1 The system should prompt the user to enter the current password. 2.1.2 The system should compare the entered password with the existing password for verification. 2.1.3 If the entered password matches the existing password, the system should prompt the user to enter a new password. 2.1.4 The system should update the password with the new value. 2.1.5 If the entered password does not match the existing password, the system should display an error message.

GUI Screens / Design / Wireframes



Features to Coding Matrix

(In the following table you will mention the following items for each feature, mention the items in each column for each feature of your application)

Sr no.	Feature Name	OOP Type Used	Functions Created	Variables / Obj Created	Line of Code Written
1.	employee, add-employee, modify_employee ,fire_employee	class		name email address role salary id hours	10-58, 60-153, 154-184, 185-209
2.	get_name get_email get_role get_adress get_salary set_name set_id return_id show_details	functions			37-40, 41-44, 4548, 49-51

3.	set_employee, fire_employee show_details (pure virtual)	polymorphism	virtual functions		54,55,56
4.			main funciton	Employee *obj1, Modify employee obj2, add employee obj3 , fire employee obj4 Id String main pass String pass Int d	212-314
5.					