



AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

**dDept. of Computer Science
Faculty of Science and Technology**

CSC2210: OBJECT ORIENTED PROGRAMMING 2

Summer 2024-2025

Section: [R]

Group No: 06

Project Report On

Human Resource Management System

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CO2: Display and verify the mean of a real-life Project using the concepts of C# Graphical User Interface based environment with database integration to depict a desktop-based application.

Assessment Criteria	Not Attended/ Incorrect (0)	Inadequate (1-2)	Average (3)	Good (4)	Excellent (5)
Evaluation Criteria	Evaluation Definition				Total =
Requirement fulfillment	Properly demonstrate a real-life scenario-based project with proper functional requirement identification for the Object-Oriented Programming project development activities.				
Validation	Ensuring the ability of students' proper demonstration on validation forms in their system in terms of dealing with the data.				
Verification	Identifying if the students can verify the system data along with proper functional requirements in terms of data flow.				

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Chapter: 01 (Introduction)

The **Human Resource (HR) Management System** is a database-driven application developed to automate and streamline HR operations within an organization. It manages employee information, payroll, salary details, education, work experience, department, and designation records efficiently.

The system includes three user roles: **Admin**, **HR**, and **Employee**. Admin and HR users have full access to manage, view, edit and delete all employee data, while Employees can only view their own information, ensuring data privacy and security.

Key features include:

- **Employee Information Management**
- **Payroll and Salary Processing**
- **Department and Designation Tracking**
- **Education and Work Experience Records**
- **Salary Slip Generation**

Developed using **C#** and **SQL Server**, the system ensures data accuracy, integrity, and easy access. It provides a reliable and efficient solution for managing organizational human resource activities.

Chapter: 02 (User Story)

Admin User Story

- **As an Admin**, I want to have full control over the HR Management System so that I can manage all employee records, departments, designations, salary and payroll information.
- **I can** create, update, and delete new and existing employee profiles.
- **I can** manage user accounts, including HR and Employee access.
- **I can** add new employees, assign departments and designations, and record educational and work experience details.
- **I can** view and generate reports related to employee performance, salary, and department statistics.
- **I can** ensure the system runs smoothly and securely by maintaining database integrity and overseeing all HR operations.

HR User Story

- **As an HR user**, I want to manage and update employee-related information so that I can maintain accurate and up-to-date records for the organization.
- **I can** add new employees, assign departments and designations, and record educational and work experience details.
- **I can** process payroll, update salary information, and generate payslips for employees.
- **I can** view all employee data.
- **I can** ensure that employee and organizational data remain organized and easily retrievable.

Employee User Story

- **As an Employee**, I want to log in to the system to view my personal and professional details so that I can stay informed about my information.
- **I can** view and edit my personal profile, only view salary details, and generate payslips.
- **I cannot** view or edit other employees' information.
- **I can** ensure my own data remains accurate and keep my profile updated.
- **I can** securely access the system to check my salary history, payslips and employment records.

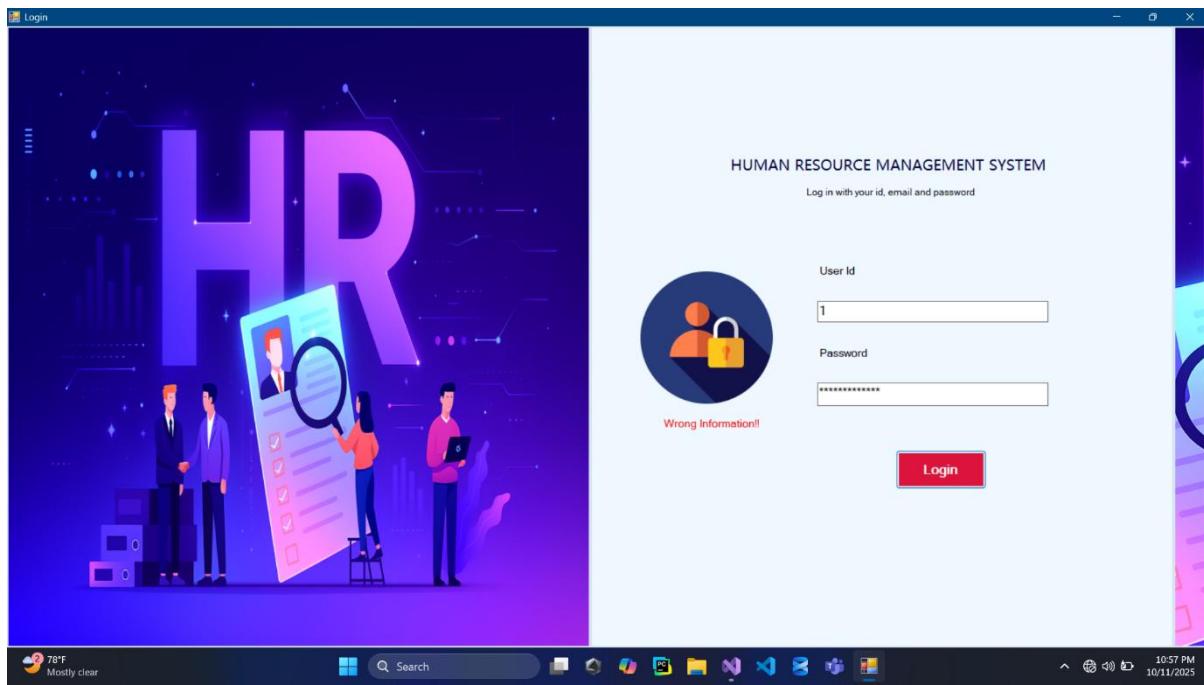
Chapter: 03 (ER Diagram)



Chapter: 04 (SQL Quarries)

1. "insert into edepartment Values(" + TITLE + ")";
2. "Update edepartment set TITLE=" + TITLE + " Where DEPTID=" + txtdeptid.Text;
3. "delete from edepartment where DEPTID=" + txtdeptid.Text;
4. "insert into edesignation Values(" +DESIGNATION+ ")";
5. "Update edesignation set DESIGNATION=" + DESIGNATION + " Where DID=" + txtdid.Text;
6. "delete from edesignation where DID=" + txtdid.Text;
7. "select eeducation.* , einformation.NAME from eeducation inner join einformation on einformation.ID = eeducation.ID ";
8. "insert into eeducation Values("+ID+",",TYPE + ")";
9. "Update eeducation set ID=" +ID+",TYPE=" + TYPE + " Where EID=" + txteid.Text;
10. "delete from eeducation where EID=" + txteid.Text;
11. "insert into einformation Values(" + NAME + ",",GENDER + ",",DOB + ",",BLOOD + ",",ADDRESS + ",",EMAIL + ",",PHONE + ",",PASSWORD + ")";
12. "Update einformation set NAME=" + NAME + ",GENDER=" + GENDER + ",DOB=" + DOB + ",BLOOD=" + BLOOD + ",ADDRESS=" + ADDRESS + ",EMAIL=" + EMAIL + ",PHONE=" + PHONE + ",PASSWORD= " + PASSWORD + " Where ID=" +txtid.Text;
13. "delete from einformation where ID=" +txtid.Text;
14. "select epayroll.* , einformation.NAME from epayroll inner join einformation on einformation.ID = epayroll.ID ";
15. "insert into epayroll Values(" + ID + ",",MONTH + ",",GDATE + ",",STATUS + ")";
16. "Update epayroll set ID=" + ID + ", MONTH=" + MONTH + ",GDATE=" + GDATE + ", STATUS=" + STATUS + " Where PID=" + txtpid.Text;
17. "delete from epayroll where PID=" + txtpid.Text;
18. "insert into eslip Values(" + ID + ",",PID + ",",ISSUE + ")";
19. "Update eslip set ID=" + ID + ", PID=" + PID + ",ISSUE=" + ISSUE + " Where SID=" + txtslip.Text;
20. "delete from eslip where SID=" + txtslip.Text;

Chapter: 05 (Screenshots)



Login Page

The screenshot shows a Windows desktop environment. On the left is a sidebar menu with various options: Home, Refresh, Search, Welcome KANE, Information, Work, Education, Department, Records, Designation, Salary, Payroll, Slip, Log out. The 'Information' option is highlighted. The main area displays a table titled 'Information View' with columns: ID, NAME, DOB, BLOOD, GENDER, ADDRESS, EMAIL ID, and PHONE. The table contains 14 rows of data. To the right of the table is a form for adding or editing new information. The form includes fields for NAME (text input), ID (text input, labeled 'Auto Generated'), GENDER (radio buttons for MALE and FEMALE), DOB (date picker set to Saturday, October 11, 2025), BLOOD (text input), ADDRESS (text input), EMAIL (text input), PHONE (text input), and PASSWORD (text input). The Windows taskbar at the bottom shows various pinned icons and the system tray on the left.

ID	NAME	DOB	BLOOD	GENDER	ADDRESS	EMAIL ID	PHONE
1	KANE	1/10/1990 3:32 AM	A+	MALE	LONDON	kane@email.com	03457845
2	PEDRO	6/13/1989 6:14 AM	A+	MALE	MADRID	pedro@email.com	882480746
4	TOM	8/15/2000 11:28 AM	A+	MALE	KURIL, DHAKA	tom@email.com	034250223
8	BEAN	10/27/1998 5:43 AM	O+	MALE	DUBLIN	bean@email.com	083022033
10	ANINDO	4/10/2003 12:48 PM	B+	MALE	ISHWARDI	anindomahmood1@gmail.c...	08549234
12	ARABI	2/15/2000 10:50 AM	A+	MALE	SAUDI ARABIA	arabi59@gmail.com	0883023329
14	SOHAN	12/26/2002 10:52 AM	B+	MALE	NOTUNBAZAR	sohan1234@gmail.com	120203020

Information View

Home

Welcome KANE

Refresh Search Reset Save Delete

ID	NAME	Experience ID	FROM	TILL	STATUS
1	KANE	.. 1	3/19/2010		ACTIVE
2	PEDRO	.. 2	4/9/2013		ACTIVE
4	TOM	.. 4	3/11/2015		ACTIVE
8	BEAN	.. 12	6/9/2020 6:05 AM	6/9/2020 6:05 AM	DEACTIVATE
12	ARABI	.. 16	5/15/2023 10:51 AM	5/15/2023 10:51 AM	DEACTIVATE
14	SOHAN	.. 17	10/7/2025 10:54 AM	10/7/2025 10:54 AM	DEACTIVATE

Information Work Education Department Records Designation Salary Payroll Slip Log out

78°F Mostly clear 10:58 PM 10/11/2025

Work View

Home

Welcome KANE

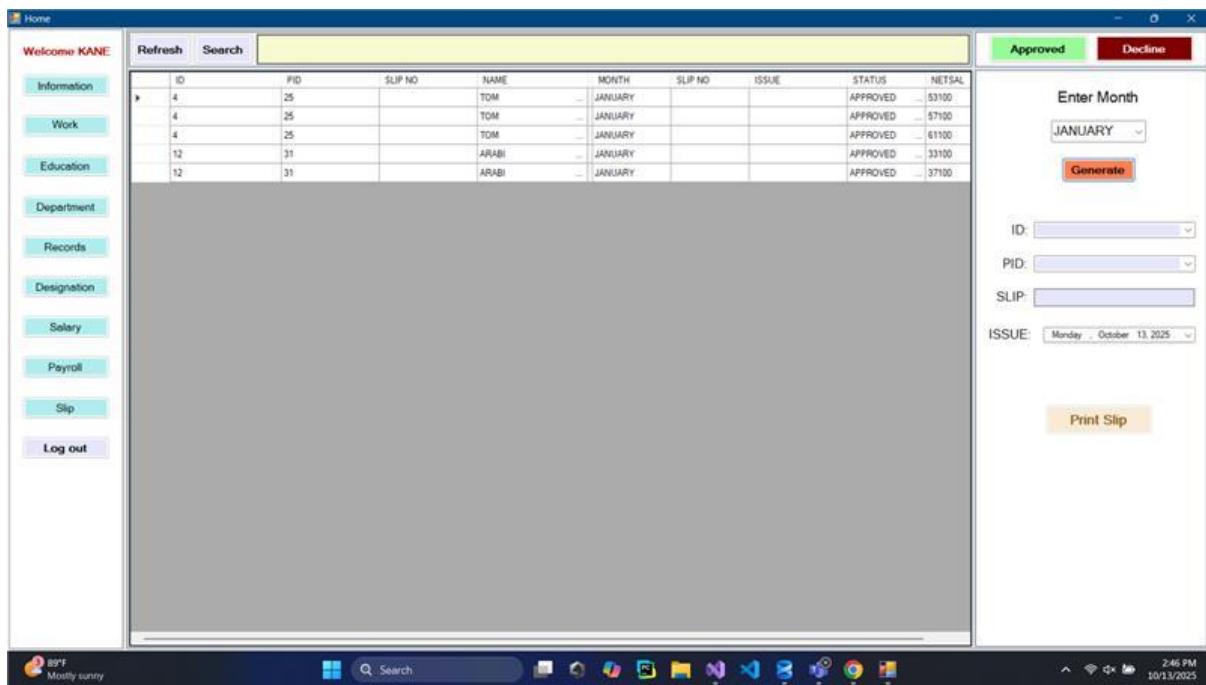
Refresh Search Reset Save Delete

ID	NAME	DEPARTMENT	DESIGNATION	RecordsID	From Date	Till Date
1	KANE	.. AUDIT	ADMIN	1952	10/20/2088 1:34 AM	9/28/2025 1:34 AM
2	PEDRO	.. AUDIT	MANAGER	1954	10/3/2025 8:56 AM	10/3/2025 8:56 AM
4	TOM	.. AUDIT	EMPLOYEE	1955	10/3/2025 8:56 AM	10/3/2025 8:56 AM
8	BEAN	.. AUDIT	EMPLOYEE	1956	3/11/2021 11:44 AM	10/3/2025 11:44 AM
10	ANINDO	.. HR	ADMIN	1957	10/4/2025 4:31 AM	10/4/2025 4:31 AM
12	ARABI	.. HR	EMPLOYEE	1959	10/5/2025 10:52 AM	10/5/2025 10:52 AM
14	SOHAN	.. HR	EMPLOYEE	1960	10/7/2025 10:56 AM	10/7/2025 10:56 AM

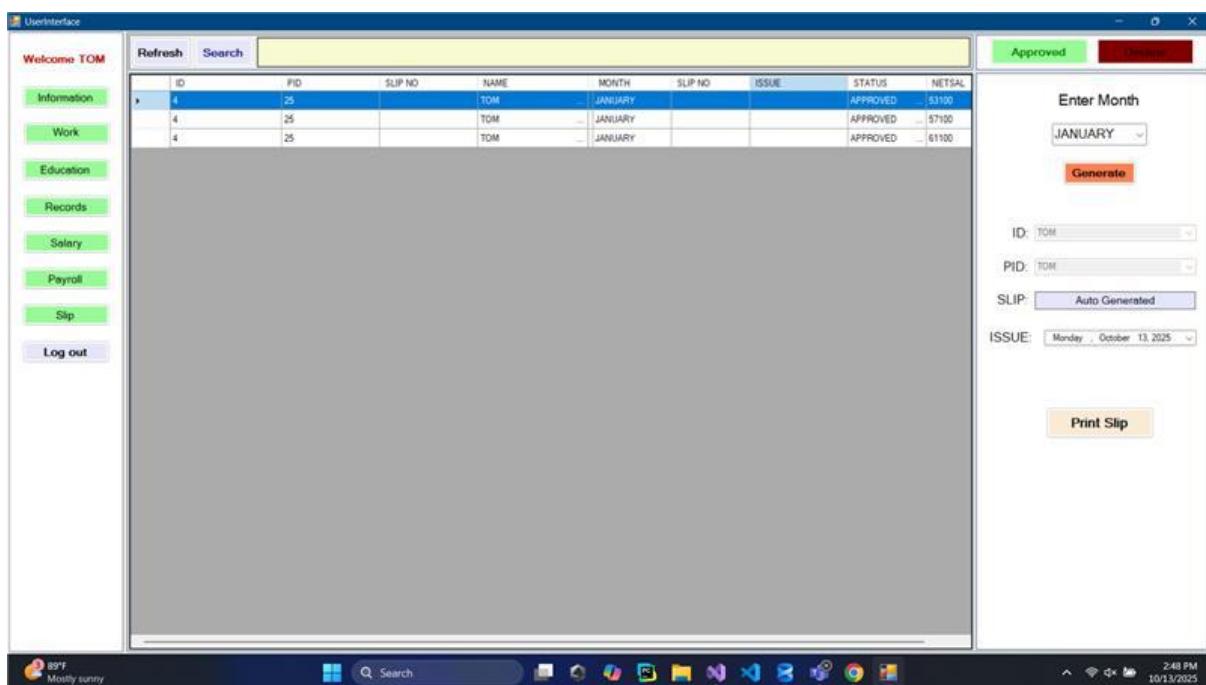
Information Work Education Department Records Designation Salary Payroll Slip Log out

78°F Mostly clear 10:59 PM 10/11/2025

Records View



Slip View



User Interface Slip View