CSE302: Database Systems (Section: 10)
Fall 2025

Project Report

EWU Faculty Information Management

Project URL/Link

Submitted To –
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Submitted by:

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1. Project Description

The East West University Faculty Management System is a system that uses a database to keep track of information about all the faculty members at East West University. This East West University Faculty Management System is, like what happens when the university people do their jobs to keep the faculty records in order.

Real-World Scenario: The system shows how the administrative offices at East West University keep track of faculty information like what department they are, in what their job is and how to get in touch with them.

The main goal of this project is to make a database where we can store faculty information in one place. This database needs to be accurate and easy to use. The idea is to have all the faculty information in one spot so it can be found and updated easily. We want the faculty database to be simple, to access and maintain.

Data Handled: Faculty (Instructor) information and system user data (Admin and Faculty/user).
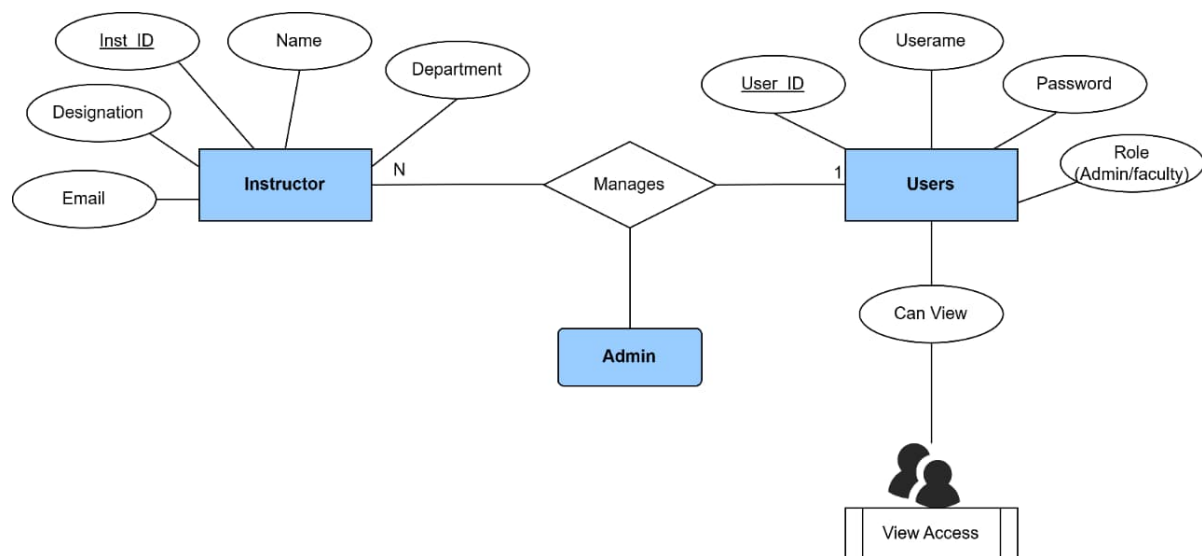
2. Key Features

The EWU Faculty Management System helps with things like storing and managing data in the database. The East West University Faculty Management System does this by supporting database operations like these:

1. **Faculty Management (CRUD):** Admin can create, read, update, and delete faculty records.
   Managing the faculty members is a part of the system. The admin person can make faculty records look at the existing ones change them if needed and even delete them if they are not required anymore. The admin can create faculty records read the faculty records update the faculty records and delete the faculty records.

2. **Faculty Information Viewing:** Users can view faculty details but cannot modify data.
   When it comes to Faculty Information Viewing, the Users are able to look at the Faculty details. They can see what is there. The Users cannot make any changes, to the Faculty data. The Faculty information is available for the Users to view. That is all they can do with the Faculty details.

3. **Role-Based Access Control:** Two user roles (Admin and Faculty/user) with different permissions.

4. **Database:** The school has one big system that holds all the information about the faculty. This system is like a container that stores everything about the faculty, in one place, which is the Centralized Database.

5. **Data Accuracy and Consistency:** Ensures updated and reliable faculty records.
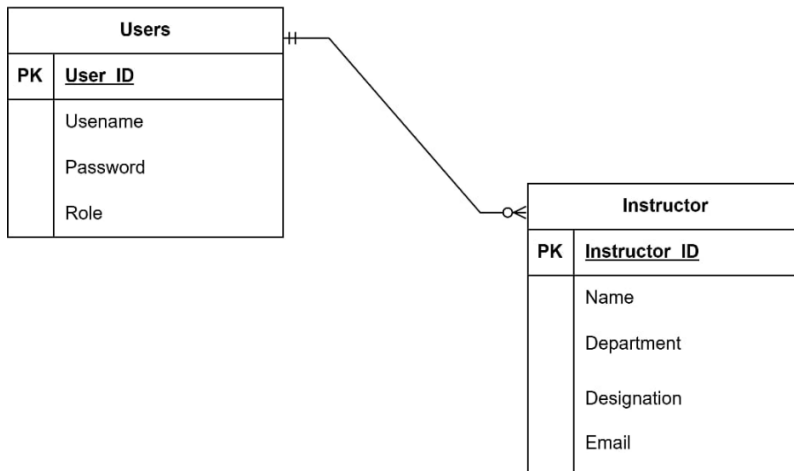
3. Database Design

3.1 E-R Model

3.2 Relational Data Model

Table Name	Attributes	Key Type	Description
Instructor	instructor_id	Primary Key (PK)	Unique identifier for each faculty member.
	name	Attribute	Full name of the instructor.
	department	Attribute	The academic department.
	designation	Attribute	Job title
	email	Attribute	Official contact email address.
Users	user_id	Primary Key (PK)	Unique identifier for system login.
	username	Attribute	Name used to log into the system.
	password	Attribute	Secure credential for authentication.
	role	Attribute	User level

Schema Diagram

```
┌─────────────────────────┐
│         Users           │
├─────┬───────────────────┤
│ PK  │ User_ID           │        ┌───────────────────────────────┐
├─────┼───────────────────┤        │          Instructor           │
│     │ Usename           │        ├─────┬─────────────────────────┤
│     │ Password          │        │ PK  │ Instructor_ID           │
│     │ Role              │        ├─────┼─────────────────────────┤
└─────┴───────────────────┘        │     │ Name                    │
                                   │     │ Department              │
                                   │     │ Designation             │
                                   │     │ Email                   │
                                   └─────┴─────────────────────────┘
```

4. Tools & Technologies Used

Category	Tools	Purpose
DBMS	MySQL	Database Management System
Query Language	SQL (Structured Query Language)	Creating tables, inserting data and querying
Programming	PHP , HTML, CSS	Graphical User Interface (GUI) implementation
Diagram Tool	draw.io	ER Diagram design

5. Role Assignment

The system implements two user roles with defined access rights:

Role 1: Admin

Duties: Full access to the system including Create, Read, Update, and Delete operations on faculty records.

Access: Can manage all faculty information and system users.

Role 2: Faculty/User

Duties: View-only access to faculty information.

Access: Can read faculty details but cannot modify or delete any data.

6. GUI Screenshot

Login as user :

EWU FACULTY INFORMATION MANAGEMENT

Login

| Username | faculty |
| Password | faculty123 |

LOGIN

EWU FACULTY INFORMATION MANAGEMENT

FACULTY   LOGOUT

Faculty List

ID	NAME	DEPARTMENT	DESIGNATION	EMAIL	ACTION
1	Dr. Ayesha Rahman	CSE	Associate Professor	ayesha@ewubd.edu	View Only
2	Mr. Tanvir Hasan	CSE	Lecturer	tanvir@ewubd.edu	View Only
3	Dr. Farhana Islam	EEE	Professor	farhana@ewubd.edu	View Only
4	Mr. Shafiq Ahmed	BBA	Senior Lecturer	shafiq@ewubd.edu	View Only
5	Ms. Nusrat Jahan	CSE	Lecturer	nusrat@ewubd.edu	View Only

Login as Admin:

EWU FACULTY INFORMATION MANAGEMENT

Login

| Username | admin |
| Password | •••••••• |

LOGIN

EWU FACULTY INFORMATION MANAGEMENT

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Faculty List

ID	NAME	DEPARTMENT	DESIGNATION	EMAIL	ACTION	
1	Dr. Ayesha Rahman	CSE	Associate Professor	ayesha@ewubd.edu	EDIT	DELETE
2	Mr. Tanvir Hasan	CSE	Lecturer	tanvir@ewubd.edu	EDIT	DELETE
3	Dr. Farhana Islam	EEE	Professor	farhana@ewubd.edu	EDIT	DELETE
4	Mr. Shafiq Ahmed	BBA	Senior Lecturer	shafiq@ewubd.edu	EDIT	DELETE
5	Ms. Nusrat Jahan	CSE	Lecturer	nusrat@ewubd.edu	EDIT	DELETE

ADD :

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Add New Faculty

Name	Antu Chowdhury
Department	CSE
Designation	Lecturer
Email	antu.chowdhury@ewubd.edu

SAVE FACULTY

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Faculty List

ID	NAME	DEPARTMENT	DESIGNATION	EMAIL	ACTION	
1	Dr. Ayesha Rahman	CSE	Associate Professor	ayesha@ewubd.edu	EDIT	DELETE
2	Mr. Tanvir Hasan	CSE	Lecturer	tanvir@ewubd.edu	EDIT	DELETE
3	Dr. Farhana Islam	EEE	Professor	farhana@ewubd.edu	EDIT	DELETE
4	Mr. Shafiq Ahmed	BBA	Senior Lecturer	shafiq@ewubd.edu	EDIT	DELETE
5	Ms. Nusrat Jahan	CSE	Lecturer	nusrat@ewubd.edu	EDIT	DELETE
8	Antu Chowdhury	CSE	Lecturer	antu.chowdhury@ewubd.edu	EDIT	DELETE

Update :

EWU FACULTY INFORMATION MANAGEMENT

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Update Faculty

Faculty ID	1
	SHOW

EWU FACULTY INFORMATION MANAGEMENT

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Update Faculty

Faculty ID	
	SHOW

Name	Dr. Ayesha Rahman
Department	BBA [Tab]
Designation	Associ...
Email	ayesha...

Saved info ×

BBA

Activate W
Go to Settings

UPDATE FACULTY

EWU FACULTY INFORMATION MANAGEMENT

FACULTY   ADD FACULTY   UPDATE FACULTY   DELETE FACULTY   LOGOUT

Faculty List

ID	NAME	DEPARTMENT	DESIGNATION	EMAIL	ACTION
1	Dr. Ayesha Rahman	BBA	Associate Professor	ayesha@ewubd.edu	EDIT DELETE

Delete :

After Logout :

7. Conclusion

The EWU Faculty Management System is an useful project that does what the Computer Science and Engineering 302 Database Systems class needs. We learned a lot from this project like how to make tables for the database use SQL to get the information we need and make sure only the right people can see and change things in the EWU Faculty Management System.

The system works well to keep track of faculty information. It does this in a way that's easy to understand and use. Admin users can update faculty records without any problems and other users can look at the information without worrying about it being shared with the people. Working on this project helped us learn a lot about designing databases using SQL and making systems that people can actually use in the world. We gained an understanding of faculty information systems and how they can be managed effectively. The faculty information system is a tool, for managing faculty information.

Future improvements may include password encryption, advanced search options, and a more interactive graphical user interface.

8. References

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