



# CSC104-Database Systems Mid Project Report(Spring 2025)



## Student Details

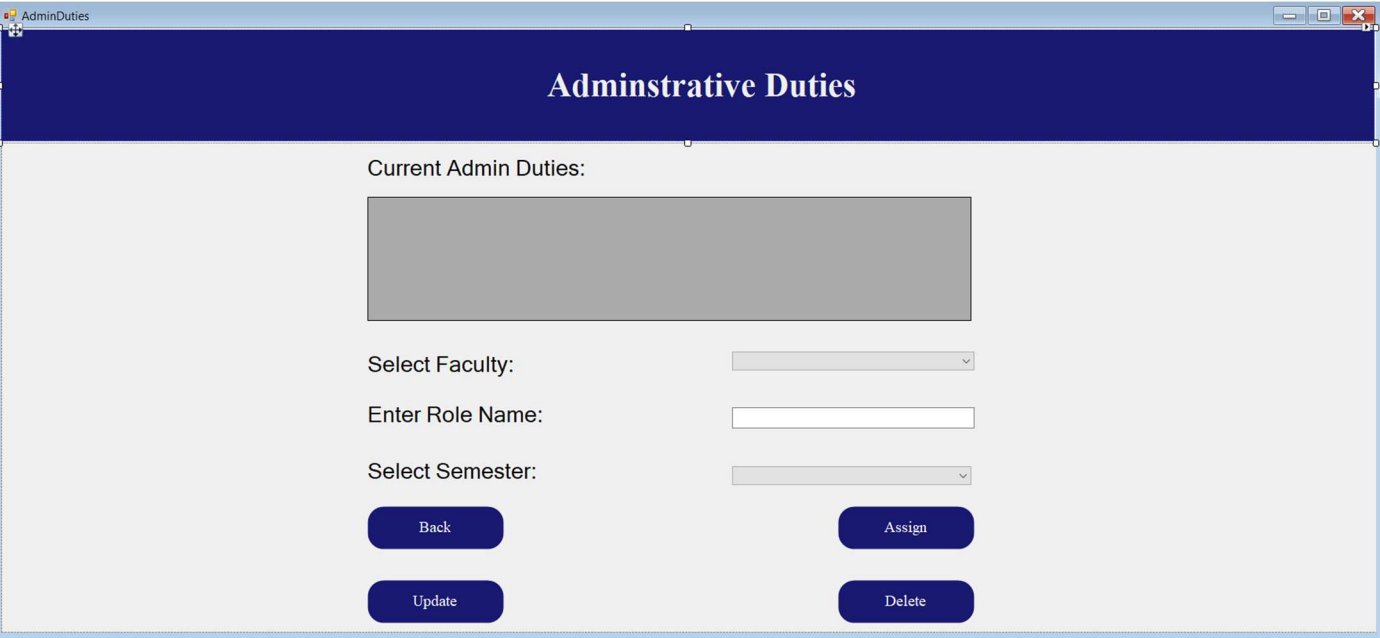
Repository Name	DBS25P107
Registration Number	2024-CS-107

Project	
Project Title	Faculty Workload Management System
Executive Summary	<p>The management of a department has to face many issues while assigning workload to faculty. Sometimes, a few faculty members are overloaded while others are mostly free. Moreover, it is difficult to maintain every record. This project helps in maintaining all data in one place and accessing it without any worry. It also makes sure that we don't have to go directly to the database to add or update data.</p> <p>This saves a lot of time. The admin doesn't have to manually go into the database and change data in multiple tables. Adding data directly in the database is time-consuming because of queries, and on top of that, it's risky. A small mistake can cause major issues, which is why having a system that handles everything through a proper interface is a game-changer.</p> <p>Another big relief this project brings is getting rid of scattered data. No more emails back and forth, no more Excel files piling up. Everything is centralized, making it easy to manage and reducing the chances of data inconsistency. With all data stored in a structured way, retrieving information is faster, and there's no risk of losing important records.</p> <p>One of the best parts is the report generation feature. Instead of manually compiling data, the system allows us to generate reports instantly. Whether it's faculty workload distribution, course assignments, or resource allocation, everything is just a few clicks away.</p> <p>In short, this project makes faculty workload management effortless. It ensures fair workload distribution, removes</p>

	unnecessary manual work, and keeps everything organized in one place. No more struggling with spreadsheets or database queries—just smooth, efficient, and secure workload management.

<i>Interface Name</i>	Admin Duties
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Picture



UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
cutterntDuty_lbl	Label	currentDuty_lbl in AdminDuties class	
fac_lbl	Label	fac_lbl in AdminDuties class	
role_lbl	Label	role_lbl in AdminDuties class	
sem_lbl	Label	sem_lbl in AdminDuties class	
faculty_comboBox	Combo Box	faculty_comboBox in AdminDuties class	Faculty.Name
rolefacname_txtbox	Combo Box	rolefacname_txtbox in AdminDuties class	
sem_comboBox	Combo Box	sem_comboBox in	Semester(Table)

		AdminDuties class	
Back_btn	Button	Back_btn in AdminDuties class	
Assign_btn	Button	Assign_btn in AdminDuties class	
Update_btn	Button	Update_btn in AdminDuties class	
Del_btn	Button	Del_btn in AdminDuties class	
Panel1	Panel	Panel1 in AdminDuties	
Panel2	Panel	Panel2 in AdminDuties	
Datagridview1	Data Grid	Datagridview1 in AdminDuties class	Select admin_role_id,f.name as Faculty ,concat(s.term,'s.year) as Semester,f.faculty_id,s.semester_id,role_name From faculty_admin_roles natural join faculty f natural join semesters s

Interface Name	Rooms
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*Picture*

Rooms:

Enter Room Name:

Enter Room Type:

Enter Capacity:

Back Add

Update Delete

UI Component Name	Type of UI component	Class Attribute name, Classname, attribute name	Linked to which database column/table
Rooms_lbl	Label	Room_lbl in Rooms	
Name_lbl	Label	Name_lbl in Rooms	
romType_lbl	Label	romType_lbl in Rooms	
capacity_lbl	Label	capacity_lbl in Rooms	
Panel1	Panel	Panel1 in Rooms	
Panel2	Panel	Panel2 in Rooms	
Back_btn	Button	Back_btn in Rooms	
Add_btn	Button	Add_btn in Rooms	
Update_btn	Button	Update_btn in Rooms	
Delete_btn	Button	Delete_btn in Rooms	
name_txtbox	Text Box	name_txtboc in Rooms	
comboBox1	Combo Box	combioBox1 in Rooms	Room.type
capacity_txtbox	Text Box	Capacity_txtbox in Rooms	
Datagridview1	Datagrid	Datagridview1 in Rooms	"Select * From rooms";

<b>Business Report-1</b>	Course Report
<i>Business Report Name: CourseScheduleReport</i>	
<i>Sample of report:</i>	

## Faculty Workload Management System

Time Table

Faculty	Course Name	Semester	Room	Start Time	End Time	Day
Hassan	OOPL	Summer 2025	N6	08:00:00	10:00:00	Monday
Hassan	OOPL	Summer 2025	N6	08:00:00	09:00:00	Tuesday
Abdullah	OOPL	Summer 2025	N6	08:00:00	11:00:00	Thursday

Query to build Report: "SELECT f.name as Faculty,c.course\_name as Course,concat(s.term , ' ',s.year ) as Semester, r.room\_name as Room,fcs.day\_of\_week as Day ,fcs.start\_time as StartTime,fcs.end\_time as EndTime From faculty\_course\_schedule as fcs Natural Join faculty\_courses as fc Natural Join faculty as f Natural Join courses as c Natural Join semesters as s Natural Join rooms as r"

### Business Report-2

### Faculty Report

Business Report Name: FacultyReport

Sample of report:

## Faculty Workload Management

Faculty Report

Name	Email	Contact Number	Designation	Role	Total Teaching Hours
Hassan	hassan@gmail.com	03105897465	Professor	Faculty	6
Abdullah	abd@gamil.com	03111111111	Lecturer	Department Head	5

*Query to build Report: SELECT f.name as Name ,f.email as Email ,contact as ContactNumber,l.value as Designation,l2.value as Role,f.total\_teaching\_hours as TotalTeachingHours from faculty f Inner join lookup l on l.lookup\_id=f.designation\_id natural join users u inner join lookup l2 on u.role\_id=l2.lookup\_id*