**Student Details**

| Repository Name | DBS25P107 |
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| Registration Number | 2024-CS-107 |

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| ***Project*** |  |
| Project Title | Faculty Workload Management System |
| Executive Summary | 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.  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.  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.  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.  In short, this project makes faculty workload management effortless. It ensures fair workload distribution, removes 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. |
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| ***Interface Name*** | Admin Duties |
| *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 AdminDuties class | Semester(Table) | | 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 | | |

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| ***Interface Name*** | Rooms |
| *Picture*   |  |  |  |  | | --- | --- | --- | --- | | **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"; | | |

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| ***Business Report-1*** | Course Report |
| *Business Report Name:* *CourseScheduleReport* | |
| *Sample of report:* | |
| *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"* | |

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| ***Business Report-2*** | Faculty Report |
| *Business Report Name:* *FacultyReport* | |
| *Sample of report:* | |
| *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* | |