**ISD Lab Group 3 Project**

Design submission for Room Management

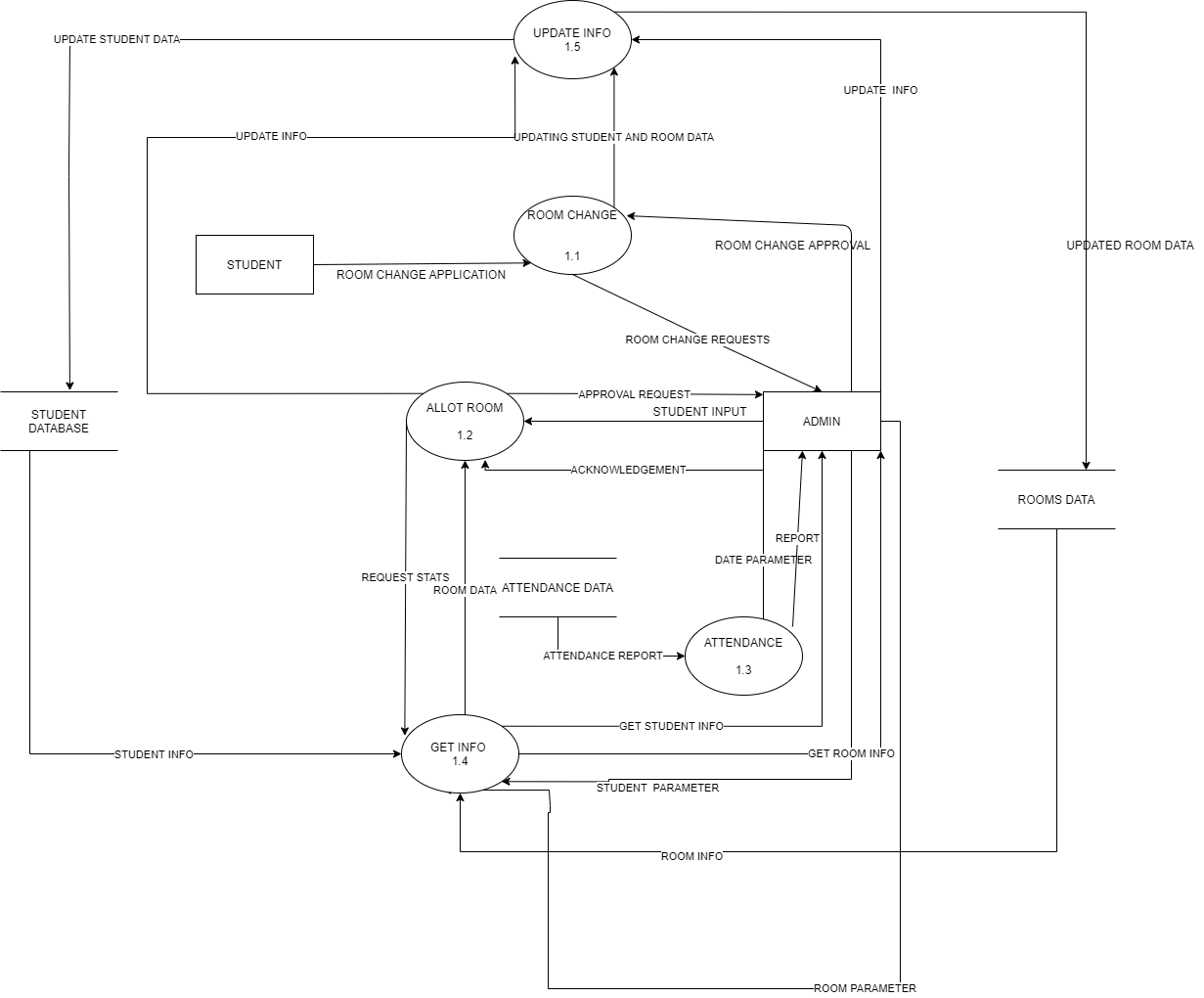
Created by

|  |  |
| --- | --- |
| Rishabh Sahu | 19ucs129 |
| Bhavya Sehgal | 19ucs155 |
| Mayank Raj | 19ucs151 |
| Paawan singal | 19ucs153 |
| Siddhant Gupta | 19ucs106 |
| Abhishek singhal | 19ucs127 |
|  |  |
| Akshit Sethi | 19ucs104 |
| Warul Sinha | 19ucs119 |
| Tanay Makharia | 19ucs122 |
| Manan Pulinkumar Gandhi | 19ucs130 |
| Kush Gandhi | 19ucs131 |
| Jhanvi Thakuria | 19ucs132 |

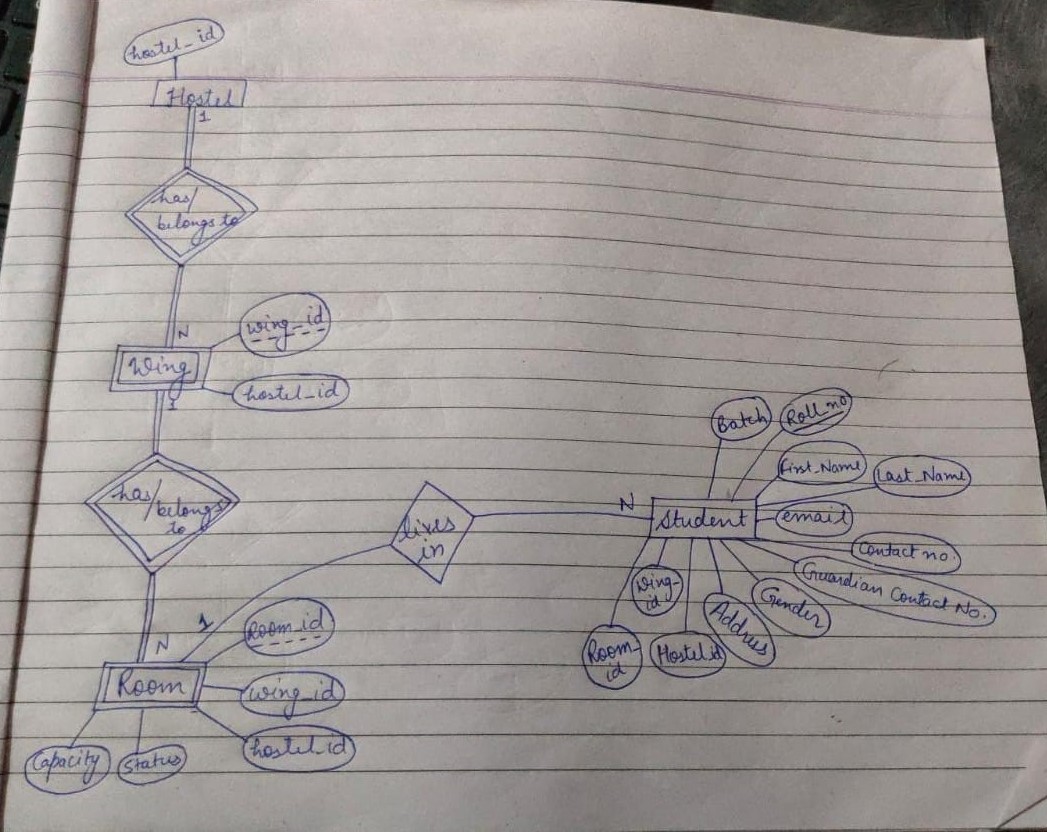
**Index**

|  |
| --- |
| [DFD](#_DFD) |
| [ERD](#_ERD) |
| [Class diagram](#_Class_diagram) |
| [Database Schema:](#_Database_Schema:) |
| [MENU DESIGN](#_MENU_DESIGN) |
| [GUI DESIGN](#_GUI_DESIGN) |
|  |

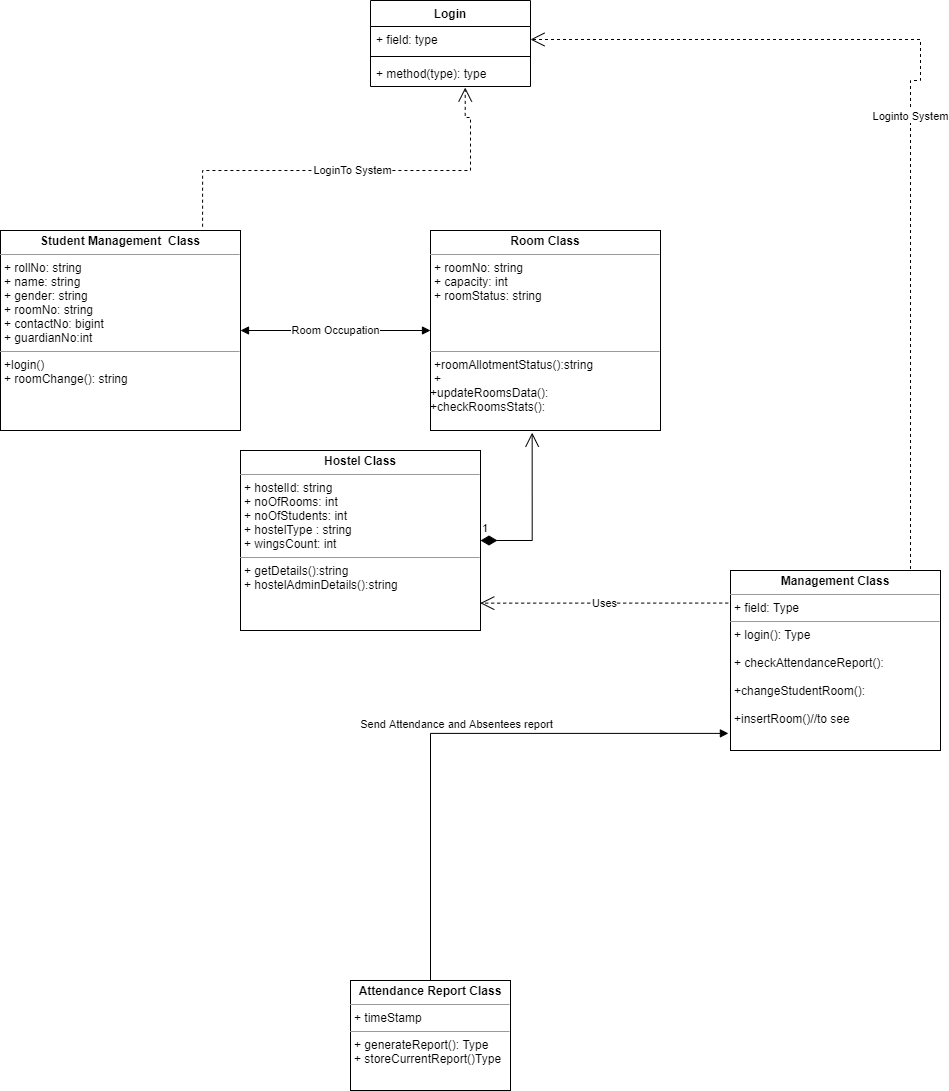
# **DFD**



# **ERD**



# **Class diagram**



# **Database Schema:**

HOSTEL :

1NF, 2NF, 3NF

|  |  |  |
| --- | --- | --- |
| hostel\_id(varchar(3)) | no\_of\_wings(int) | warden(varchar(20)) |
|  |  |  |

PK : hostel\_id(varchar(3))

Note: considering only one warden per hostel (as per college id associated)

WING :

1NF, 2NF, 3NF

|  |  |  |
| --- | --- | --- |
| wing\_id(char(1)) | hostel\_id(varchar(3)) | no\_of\_rooms(int) |
|  |  |  |

PK : wing\_id(char(1)), hostel\_id (composite primary key)(varchar(3))

FK : hostel\_id(varchar(3))

ROOM :

1NF, 2NF, 3NF

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| room\_id(char(3)) | wing\_id(char(1)) | hostel\_id(varchar(3)) | floor\_no(int) | capacity(int) | occupancy(int) |
|  |  |  |  |  |  |

PK : room\_id(char(3)), wing\_id(char(1)), hostel\_id(varchar(3)) (composite primary key)

FK : wing\_id(char(1)), hostel\_id(varchar(3))

STUDENTS :

1NF, 2NF, 3NF

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Roll\_no  (char(8)) | f\_name(varchar(20)) | l\_name(varchar(20)) | college\_email(varchar(21)) | contact\_no(char(10)) | guardian\_contact(char(10)) | Gender(char(1)) | Home\_Address(varchar(50)) | room\_id(char(3)) | wing\_id(char(1)) | hostel\_id(varchar(3)) | floor \_no(int) |
|  |  |  |  |  |  |  |  |  |  |  |  |

PK : roll\_no(char(8))

FK : room\_id(char(3)), wing\_id(char(1)), hostel\_id(varchar(3))

Note: Only single contact\_no, guardian\_contact will be associated per student(roll no)

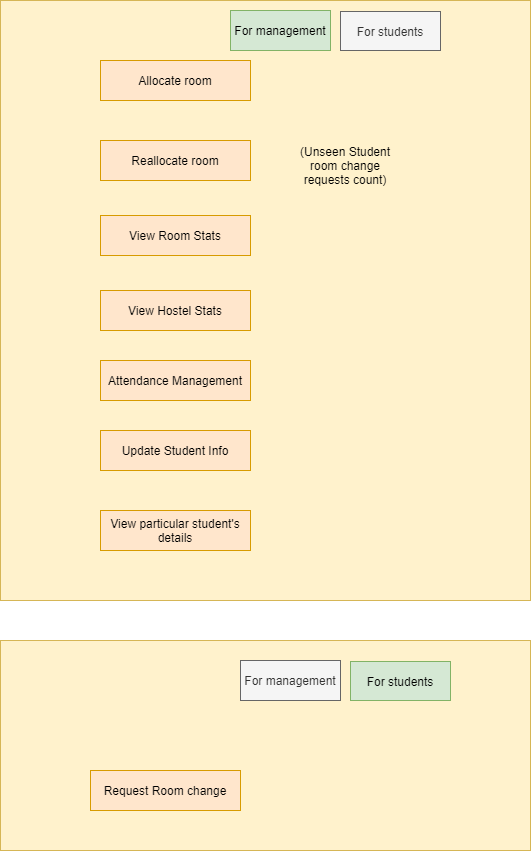
ATTENDENCE :

1NF, 2NF, 3NF

|  |  |
| --- | --- |
| datetime(DATETIME) | report.pdf(BLOB) |
|  |  |

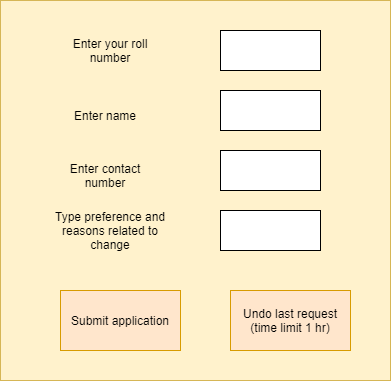
PK : datetime(composite primary key)

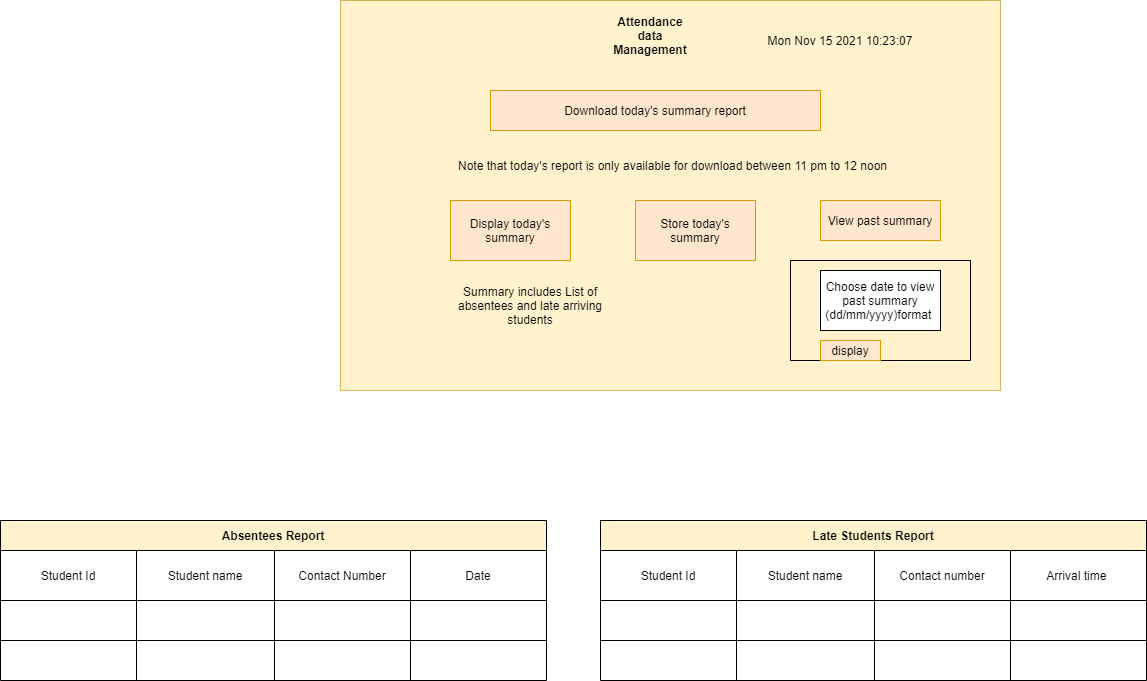
# **MENU DESIGN**

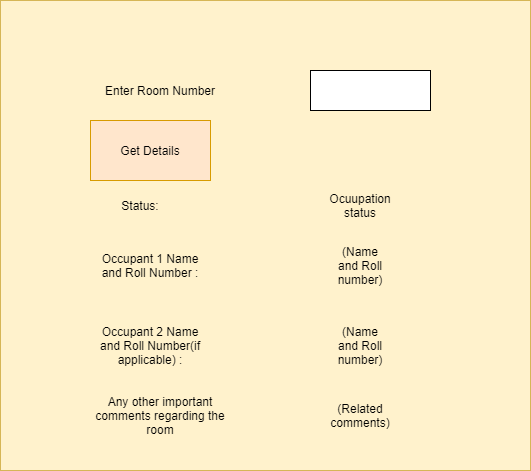


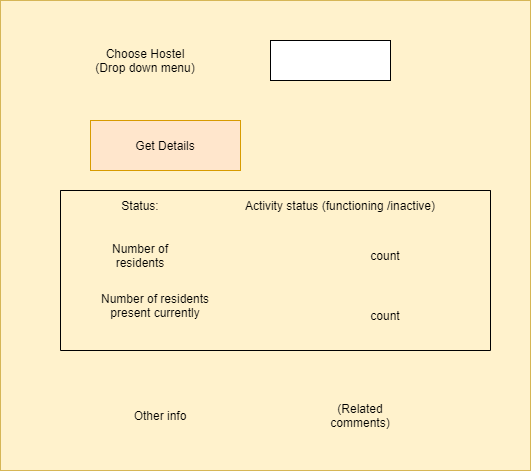
# **GUI DESIGN**

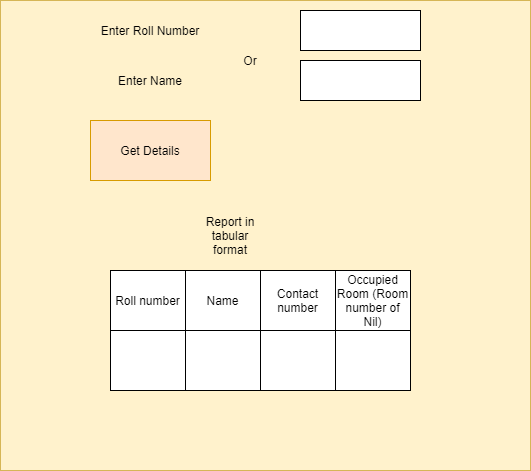
ROOM CHANGE GUI

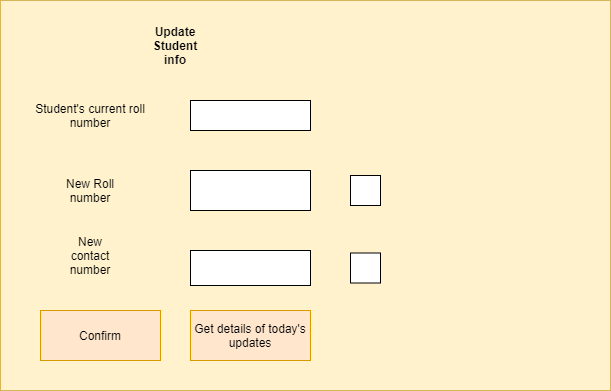


DISPLAY /SAVE ATTENDANCE REPORT

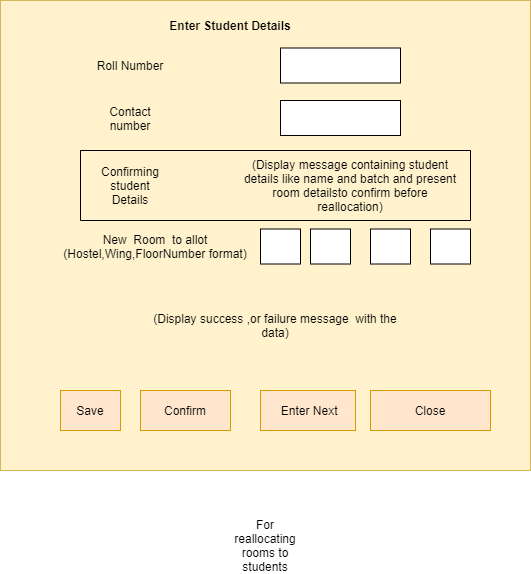
GET ROOM INFO

GET HOSTEL INFO

GET STUDENT DETAILS

UPDATE STUDENT DATA

REALLOCATE ROOM



ALLOT ROOMS