ISD Lab Group 3 Project

Design submission for Room Management

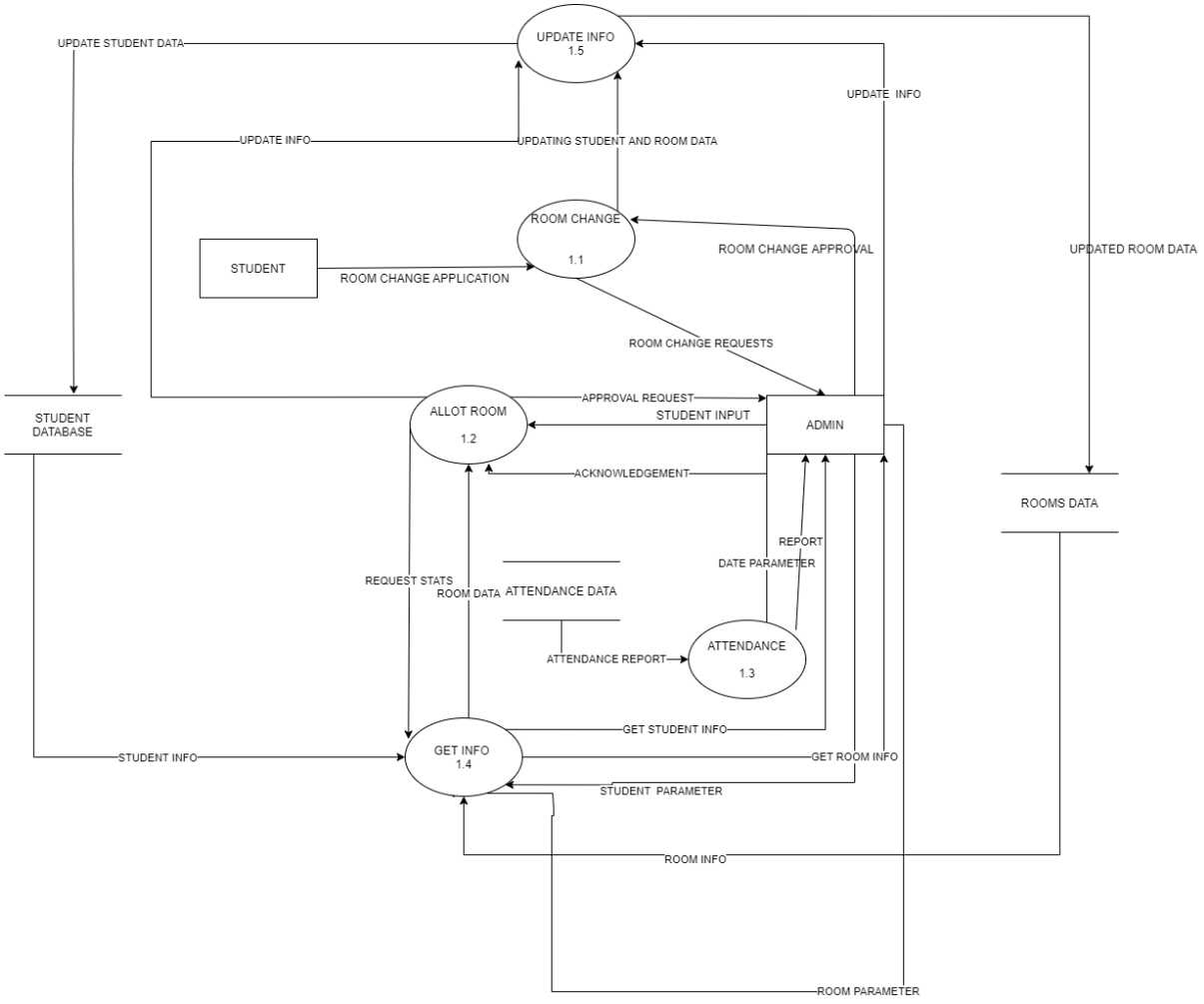
Created by

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

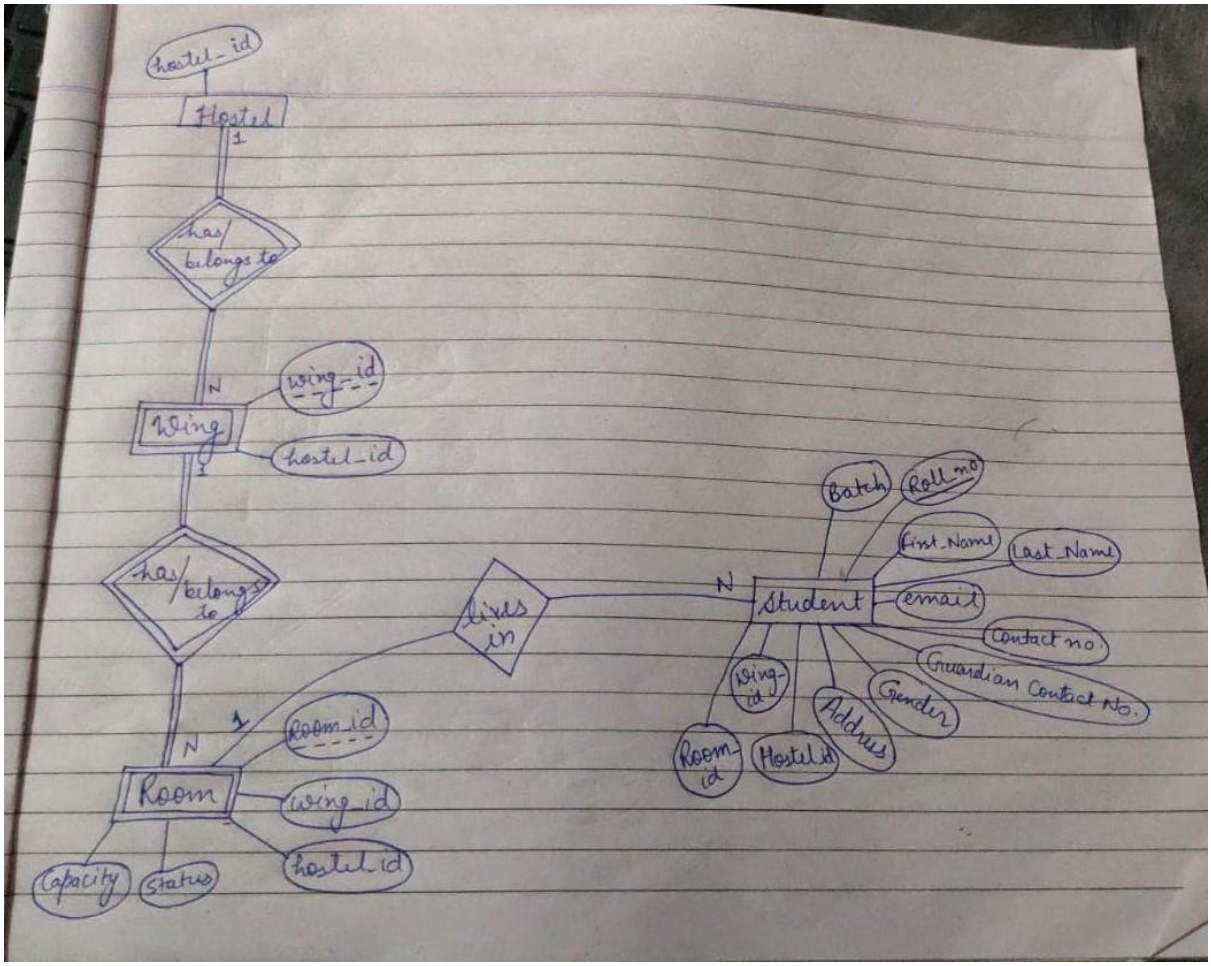
Index

DFD
ERD
Class diagram
Database Schema:
MENU DESIGN
GUI DESIGN

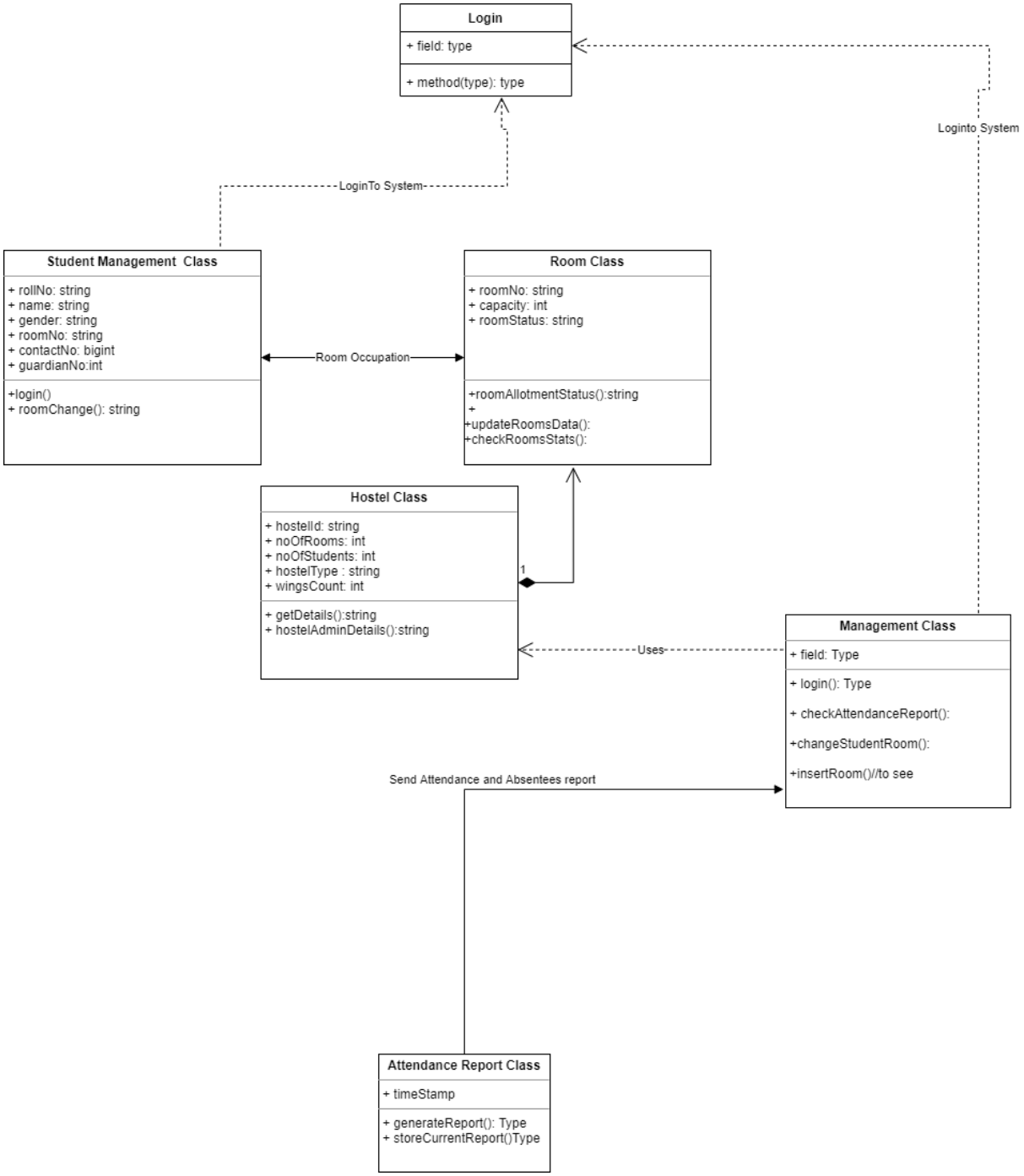
DFD


UPDATE INFO
1.5
UPDATE STUDENT DATA
UPDATE INFO
UPDATING STUDENT AND ROOM DATA
UPDATE INFO
ROOM CHANGE
1.1
STUDENT
ROOM CHANGE APPLICATION
ROOM CHANGE APPROVAL
UPDATED ROOM DATA
ROOM CHANGE REQUESTS
STUDENT
DATABASE
APPROVAL REQUEST
ALLOT ROOM
1.2
STUDENT INPUT
ADMIN
ACKNOWLEDGEMENT
ROOMS DATA
REPORT
DATE PARAMETER
REQUEST STATS
ROOM DATA
ATTENDANCE DATA
ATTENDANCE REPORT
ATTENDANCE
1.3
GET STUDENT INFO
STUDENT INFO
GET INFO
1.4
GET ROOM INFO
STUDENT PARAMETER
ROOM INFO
ROOM PARAMETER

ERD


hostel_id
Hostel
1
has/belongs to
N
wing_id
Wing
hostel_id
1
has/belongs to
lives in
N
Student
Batch
Roll_no
First_Name
Last_Name
email
Contact no
Guardian Contact No.
Gender
Address
Wing-id
Room-id
Hostel id
1
N
Room_id
Room
wing_id
hostel_id
Capacity
Status

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)

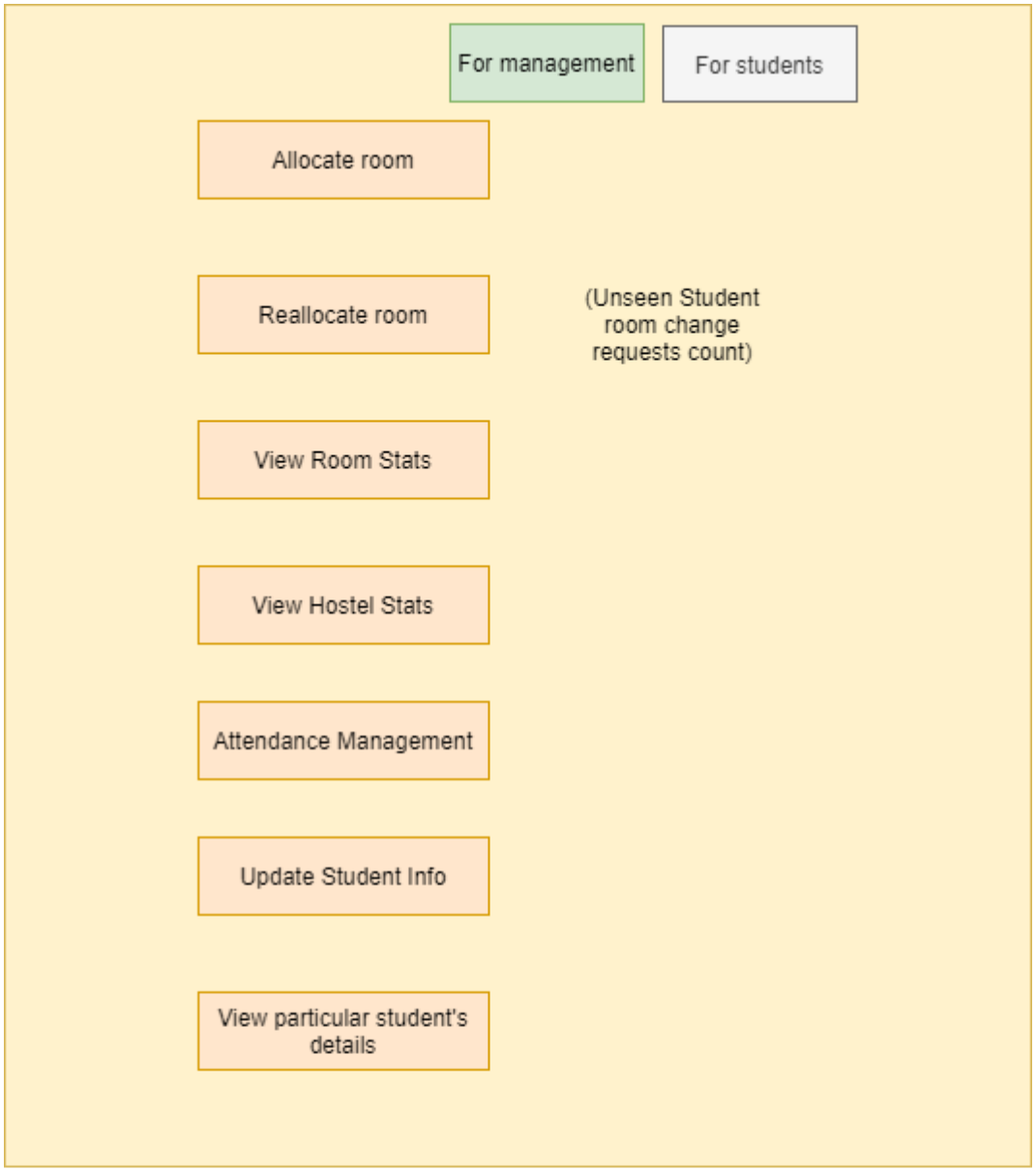
ATTENDENCE :

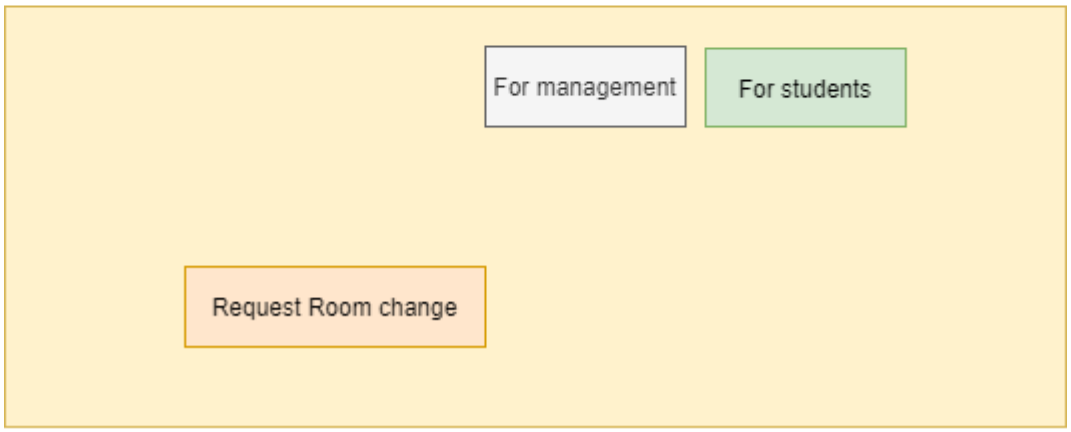
1NF, 2NF, 3NF

datetime(DATETIME)	report.pdf(BLOB)

PK : datetime(composite primary key)

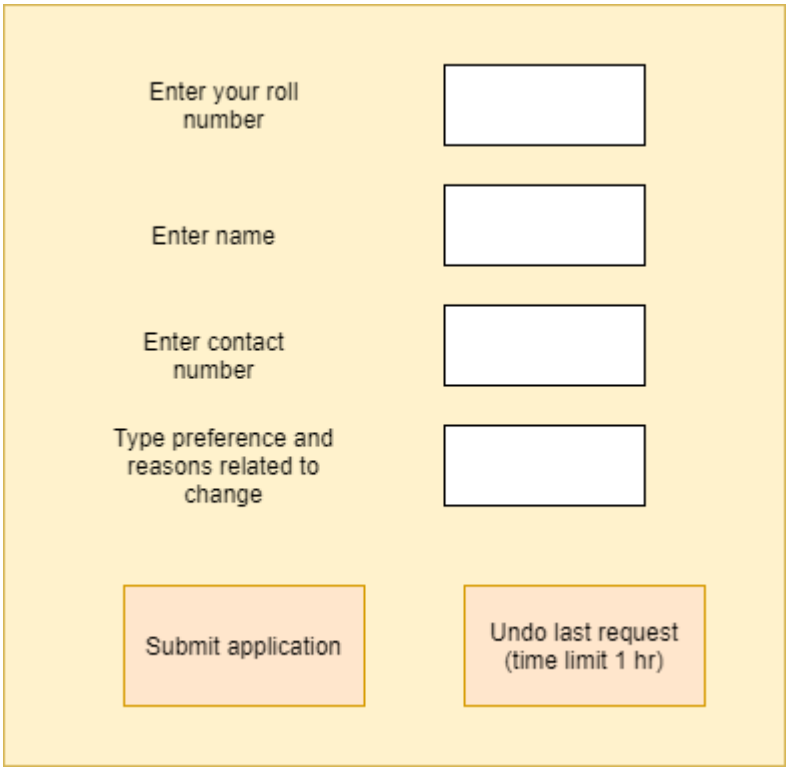
MENU DESIGN


For management
For students
Allocate room
Reallocate room
(Unseen Student room change requests count)
View Room Stats
View Hostel Stats
Attendance Management
Update Student Info
View particular student's details

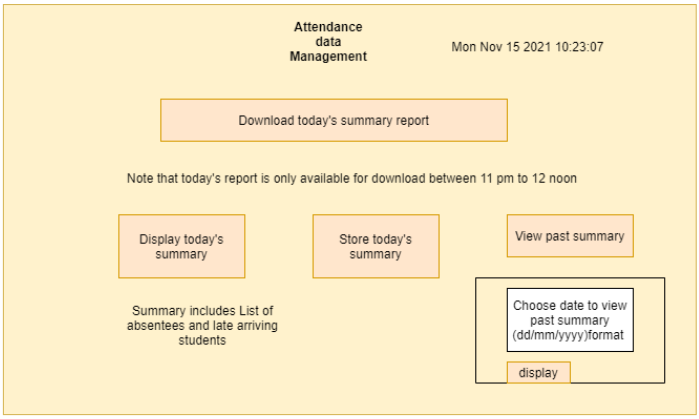

For management
For students
Request Room change

GUI DESIGN

ROOM CHANGE GUI



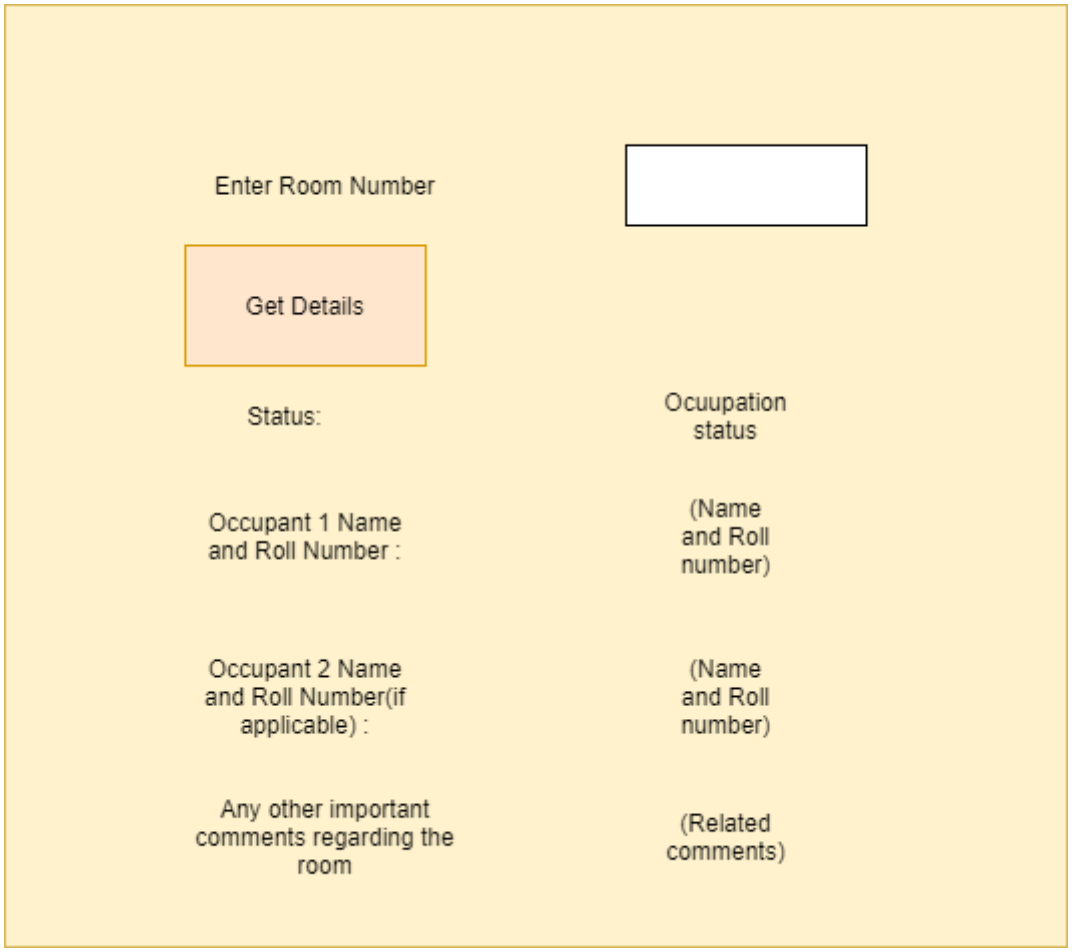
DISPLAY /SAVE ATTENDANCE REPORT



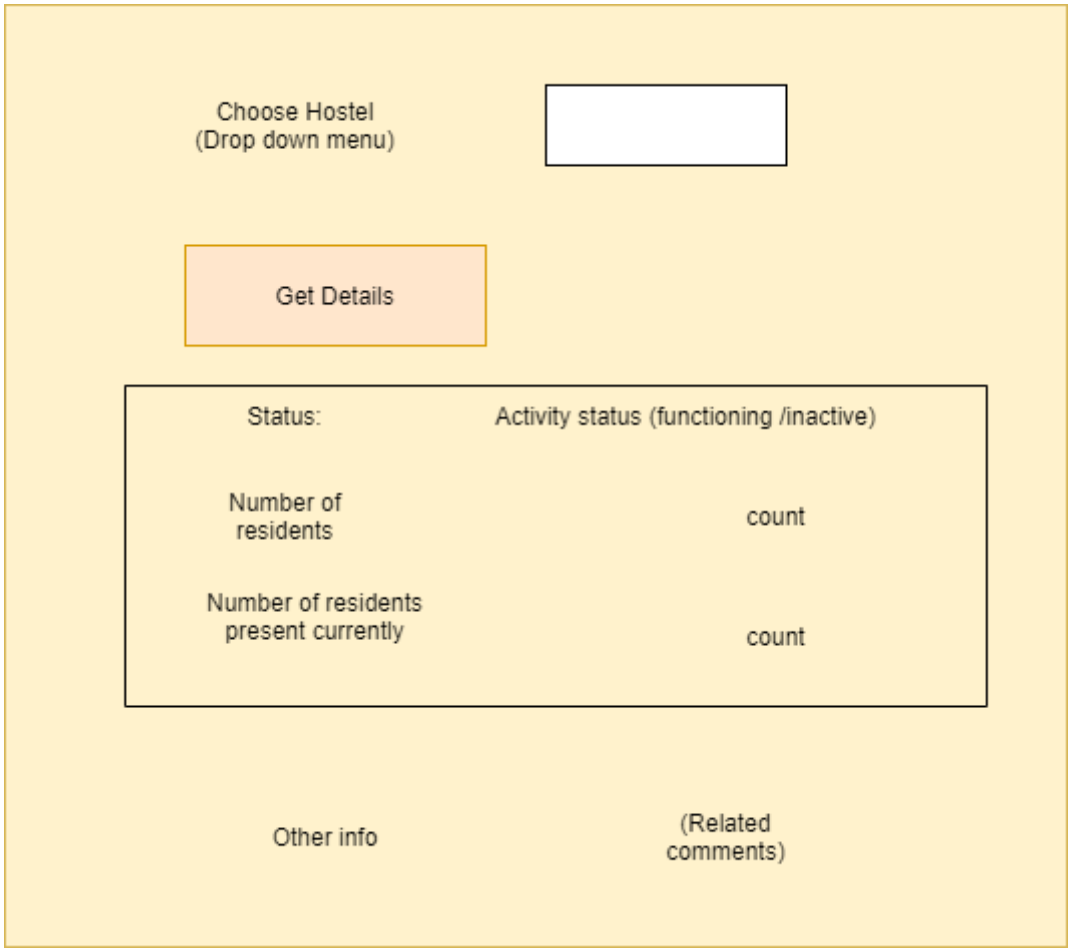
Absentees Report			
Student Id	Student name	Contact Number	Date

Late Students Report			
Student Id	Student name	Contact number	Arrival time

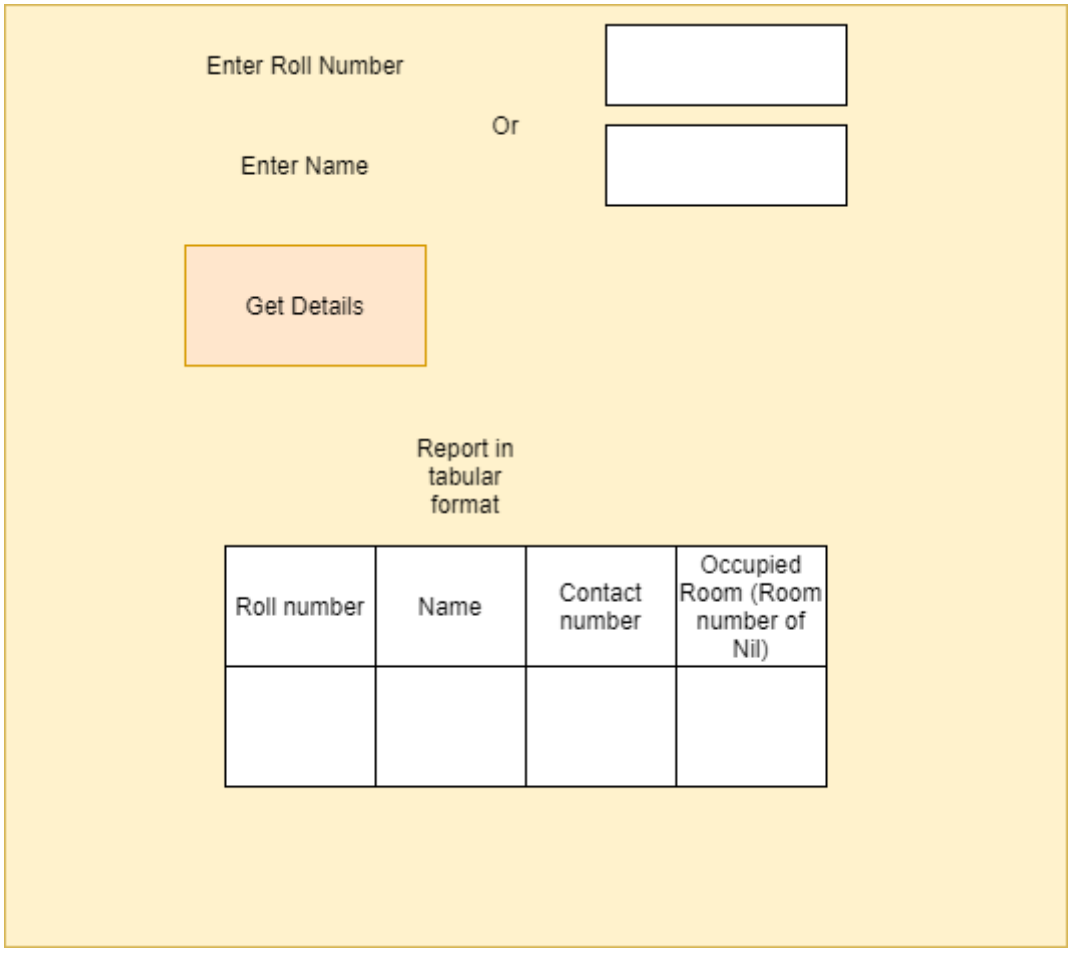
GET ROOM INFO



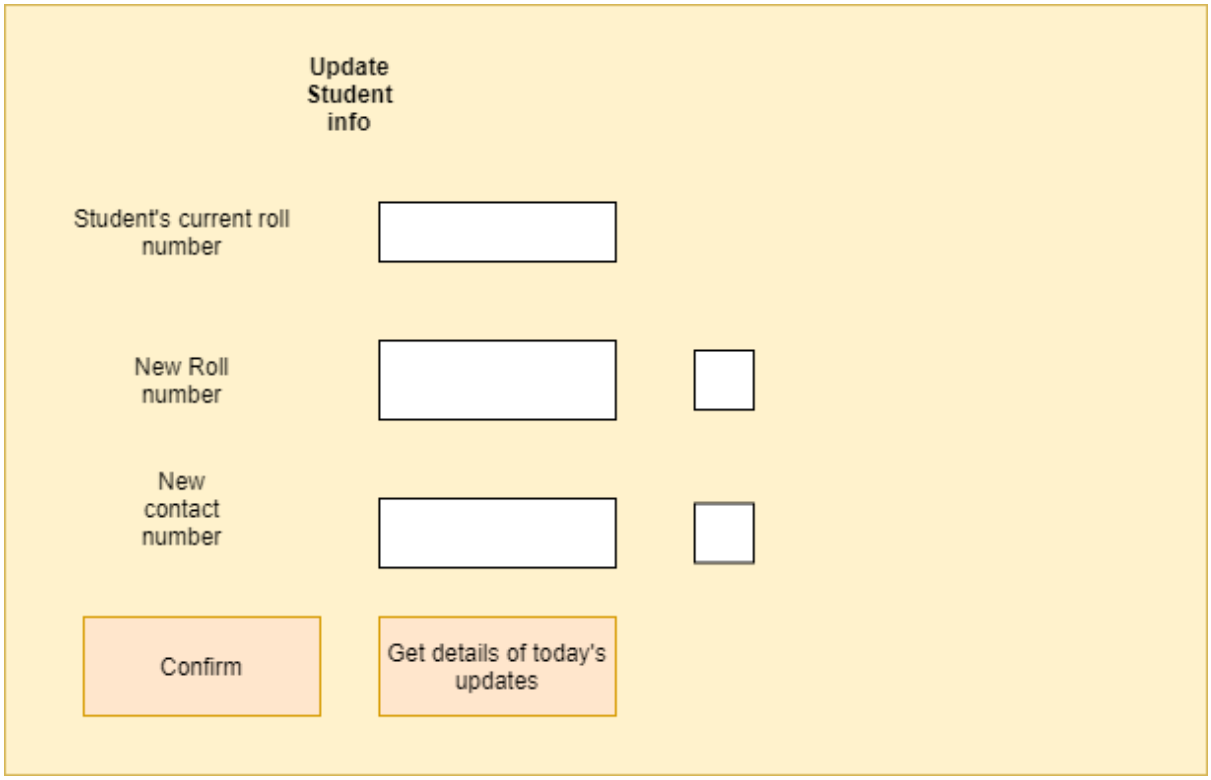
GET HOSTEL INFO



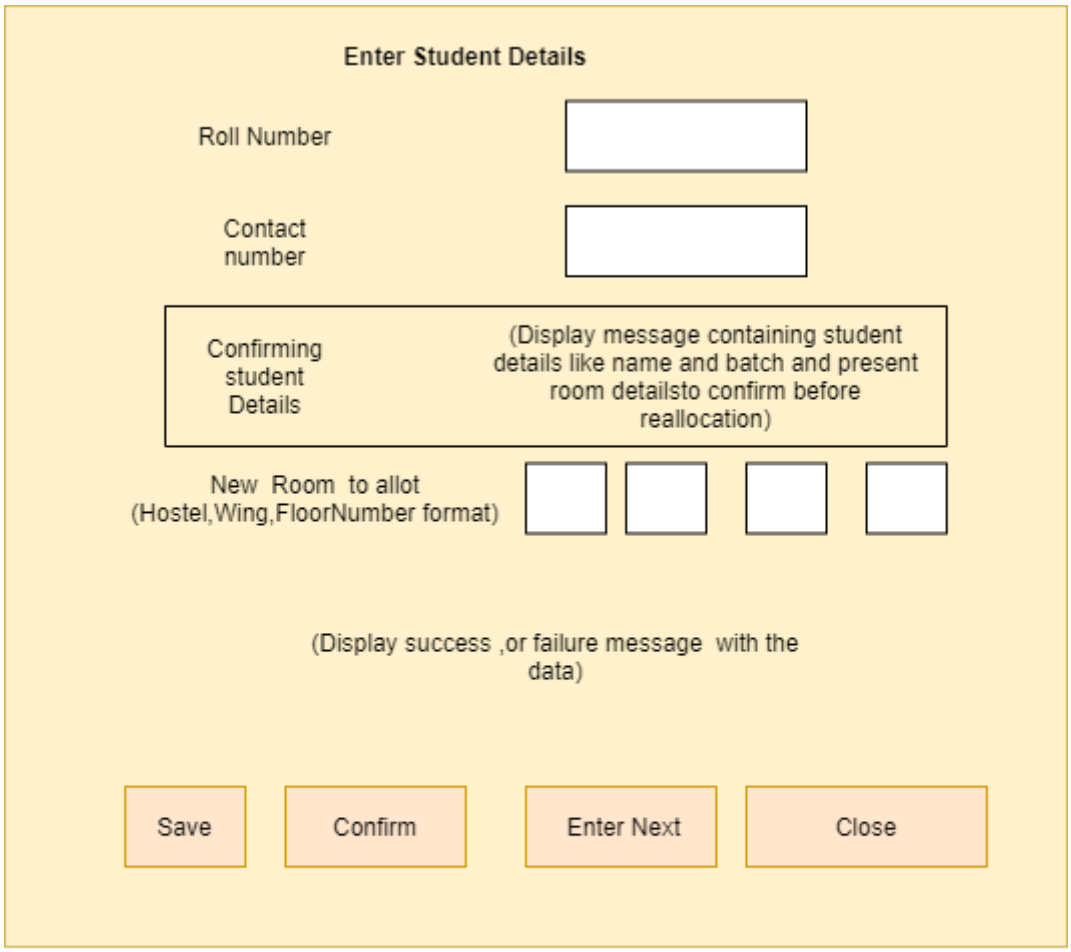
GET STUDENT DETAILS



UPDATE STUDENT DATA

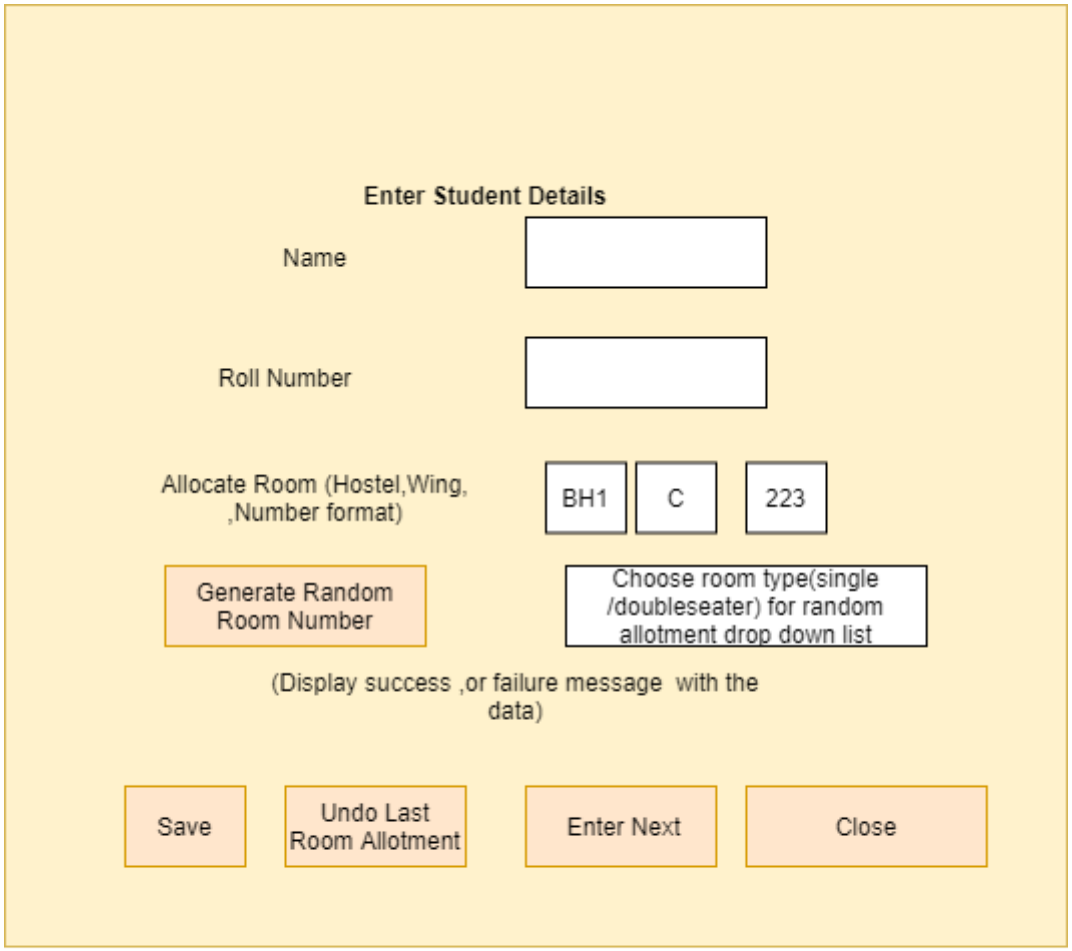


REALLOCATE ROOM



For reallocating rooms to students

ALLOT ROOMS



For allocating rooms to students