**UWE Accommodation system**

The main responsibility of the UWE accommodation office is to provide the necessary help for all the registered students who are entitled and require their accommodation on-campus. The on-campus accommodation comprises of many halls of residence, and each hall has a number of rooms. The accommodation office has a hall manager who supervises the operation of the halls. Each hall has a warden who oversees the regular cleaning and maintenance of all the rooms in that hall. Each hall of residence has a name, number, address, telephone number. The halls provide only single rooms which have a room number and monthly rent rate. The total number of rooms provided by the accommodation office should also be available. The hall number uniquely identifies each room in all of the halls controlled by the accommodation office, and is used when renting a room to a student.

The UWE Bristol Accommodation Services allow students renting rooms for the entire 12-month academic year from September to August. Each individual rental agreement between a student and the accommodation office is uniquely identified using a lease number. The data stored on each lease includes the lease number, duration of the lease (in months), address details of the hall, room number and student’s name.

The room scheduling is coordinated by the hall manager. That is, the hall manager generates and maintains the room schedule, keeps a record of all the students staying in the halls and reviews applications for future bookings. The hall manager can edit and view room details. The view should show all the detailed information about a single room in a hall, including its room number, room status (namely, occupied or unoccupied), monthly rent rate and other details describing the room. The hall manager should be able to determine from this description whether a particular room is available and its suitability for a new student to occupy. On the other hand, a warden can view the room details but he has limited editing privileges and can only change a room’s cleaning status which can be “clean” ,”dirty, or “off-line”. An off-line room is one that cannot be occupied because it requires maintenance beyond a normal cleaning.

You are required to design and implement a system which enables the hall manager and wardens to schedule hall activities and keep track of the hall rooms in a simpler and easier way.

Develop the above system using Java (and JavaFX/Swing) considering the following functionalities.

A user interface that lets

1. the manager to view and edit room details. For example, assume that there are 2 halls, each having 3 rooms, and rooms are either occupied or off-line at the moment.
2. A warden to view and edit room details. A warden can only change the cleaning status of a room and cannot delete a lease.