# Project description:

The requirement is to create a system using Java and JavaFX to support the UWE accommodation office in the management of accommodation in the halls of residence. The users of the system are the Hall Manager, Hall Wardens and the System Administrator. The system is required to provide for the creation of leases and the holding of information about them, room scheduling and availability, maintaining information about rooms and the management of cleaning. Users are granted privileges according to their roles:

* The Manager is able to view and edit room details including:
  + Creating and deleting leases.
  + Editing hall name, student name, hall number, lease number and room number.
  + Setting a room as “offline” if it requires work beyond cleaning.
* The Warden for a hall is able to view all room details for that hall but can only edit the Cleaning Status of a room, which the Warden may enter as “clean”, “dirty” or “offline”.
* The Administrator is able to perform all actions available to the Manager and Warden, but can also add or delete users, students and halls. The Administrator can access the “Administrator Panel” and check:
  + How many students are registered.
  + How many rooms are registered.
  + How many rooms are occupied.
  + How many rooms are unoccupied.
  + The monthly income of all the rooms added together.

The information held on each student is: First Name, Last Name and Student ID.

The information held on each hall is: Hall ID, Name, Short Name, Address, Post Code, Phone and Room Count.

The information held on each room is: Hall ID, Flat ID, Room ID, Occupancy status, Cleaning Status and Monthly Price. A room that is offline can’t be occupied, as it requires work beyond cleaning.

The information held on each lease is: Lease ID, Hall Name, Flat Number, Room Number, Student Name.

SCRUM, a form of Agile Development, was used as the methodology for developing the software (see Section 5 – Agile practices).   
  
The project was realized in five sprints each lasting a week. The first sprint developed use cases, defined the initial classes and created the sequence diagram. The second and third sprints developed the classes into a GUI. The fourth sprint created database handlers and set up user permissions; the fifth sprint added search options and refined the GUI.

Under SCRUM, testing is an integral part of the sprints and is therefore conducted progressively as development proceeds.