# Entity-Relationship Diagram Assumptions:

* Each Lease can receive multiple Invoices over the course of its duration
* Multiple payments can be made for each Invoice
* Each Student can have multiple Next-of-Kin
* Advisor of Studies is not part of the University Accommodation Office Staff
* Each Advisor of Studies can advise multiple students
* Each Student has a single Advisor of Studies
* Each Student can sign multiple Leases over the course of their time at the university
* Each Course can contain multiple Students
* Each Room can have multiple Leases refer to it
* Each Accommodation option contains one or more Rooms
* Room number, place number, and rent have similar format across Flat rooms and Residence Hall rooms
* There are no Accommodation options other than Flats and Residence Halls
* Multiple Inspections can be performed on each Flat
* Each Hall Manager staff member can manage more than one Hall
* Each member of Office Staff can conduct multiple Inspections
* On each Lease, the date the Student wishes to enter/leave is not necessarily the same as the Lease start/end date, so it is not redundant to list that along with the lease duration
* People in the same Position can work in different Locations (so Location is not functionally dependent on Position)
* Courses can have the same name and still be in different Departments (e.g. “Research Methods”)
* Identical Positions can exist in multiple advising departments (e.g. “career counselor”), so Department is not functionally dependent on Position
* A rentRate field is included in Lease, even though rentRate is already in the FlatRoom and HallRoom entities. While a JOIN can be used to determine current rentRate, storing rentRate in the Lease lets us determine rentRate at the time of a Student’s specific Lease, in case Lease rentRate changes

# PART 2: RELATIONAL MODEL

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| **Student**  matriculationNo {PK}  FK advisorNo REFERENCES AdvisorOfStudies (advisorNo)  FK courseNo REFERENCES course (courseNo)  firstName, lastName, streetAddress, cityAddress, postcodeAddress, dateOfBirth, sex, studentCategory, nationality, smoker, specialNeeds, additionalComments, currentStatus | **Lease**  leaseNo {PK}  FK flatPlaceNo REFERENCES FlatRoom(placeNo)  FK hallPlaceNo REFERENCES HallRoom(placeNo)  FK stuMatriculationNo REFERENCES Student(matriculationNo)  rentRate, year, leaseDuration, entryDate, leaveDate |
| **AdvisorOfStudies**  advisorNo {PK}  firstName, lastName, position, department, telNo, roomNumber | **Payment**  paymentNo {PK}  FK invoiceNo REFERENCES Invoice(invoiceNo)  amount, invoicePayDate, paymentMethod, firstReminderDate, secondReminderDate |
| **HallOfResidence**  hallNo {PK}  FK managerNo REFERENCES OfficeStaff(staffNo),  hallName, streetAddress, cityAddress, postcodeAddress, telNo | **Inspection**  inspectionNo {PK}  FK flatNo REFERENCES Flat(flatNo)  FK inspectorNo REFERENCES Staff(staffNo)  inspectionDate, satisfactionCondition, comments |
| **HallRoom**  placeNo {PK}  FK hallNo REFERENCES HallOfResidence(hallNo)  roomNo, rentRate | **Staff**  staffNo {PK}  firstName, lastName, streetAddress, cityAddress, postcodeAddress, dateOfBirth, sex, position, location |
| **Flat**  flatNo {PK}  streetAddress, cityAddress, postcodeAddress, roomsAvailable | **Course**  courseNo {PK}  courseTitle, courseYear, courseLeader, telNo, roomNo, deptName |
| **FlatRoom**  placeNo {PK}  FK flatNo REFERENCES Flat(FlatNo)  roomNo, rentRate | **NextOfKin**  kinNo {PK}  FK studentNo REFERENCES Student(matriculationNo)  firstName, lastName, relationship, streetAddress, cityAddress, postcodeAddress, telNo |
|  | **Invoice**  invoiceNo {PK}  FK leaseNo REFERENCES Lease(leaseNo),  semester, paymentDue |