Introduction to On Campus Accommodation Office:

Read about the project described here, and also refer project The Art Gallery as a sample. Use the sample project as a model in carrying out the steps for your project. If you can do so, interview people who are familiar with the environment described in your project. Based on your interviews, the written description, and your own analysis of the project, do the following four steps. Remember that you should not make any assumptions about the internal structure of the database at this point. Your reports and forms should be based on user’s needs, not on what you think the eventual structure of the database might be. Do not create a database at this point. These steps can be done by hand or using a word processor, a spreadsheet, or similar tool.

* + Step 1.1. Write out the format of every source document that provides information to be stored in the database.
  + Step 1.2 Write out the format of every routine report to be produced using the database. Do not make any assumptions about how records actually appear in the database, or what programming may be involved in producing the report.
  + Step 1.3 Describe or sketch the input and output screens for routine transactions to be performed using the database. Assume the data from the source documents is already stored in some unknown form, and do not include screens for transactions that simply insert new records, update existing records, or delete existing records.
  + Step 1.4 Write out an initial list of assumptions for the project.

**The *On Campus Accommodation Office***

The director of the *On Campus Accommodation Office* requires you to design a database to assist with the administration of the office. The requirements collection and analysis phase of the database design process has provided the following data requirements specification for the *On Campus Accommodation Office* database followed by examples of query transactions that should be supported by the database.

**B.1.1 Data Requirements**

**Students**

The data stored for each full-time student includes: the banner number, name (first and last name), home address (street, city, postcode), mobile phone number, email, date of birth, gender, category of student (for example, first-year undergraduate, postgraduate), nationality, special needs, any additional comments, current status (placed/waiting), major, and minor.

The student information stored relates to those currently renting a room and those on the waiting list. Students may rent a room in a hall of residence or student apartment.

When a student joins the university, he or she is assigned to a member of staff who acts as his or her Adviser. The Adviser is responsible for monitoring the student’s welfare and academic progression throughout his or her time at the university.

The data held on a student’s Adviser includes full name, position, name of department, internal telephone number, email, and room number.

**Halls of residence**

Each hall of residence has a name, address, telephone number, and a hall manager,who supervises the operation of the hall. The halls provide only single rooms, which have a room number, place number, and monthly rent rate.

The place number uniquely identifies each room in all halls controlled by the Residence Office and is used when renting a room to a student.

**Student flats**

The Residence Office also offers student apartments. These are fully furnished and provide single-room accommodation for groups of three, four, or five students. The information held on student apartments includes an apartment number, address, and the number of single bedrooms available in each apartment. The flat number

uniquely identifies each apartment.

Each bedroom in an apartment has a monthly rent rate, room number, and a place number. The place number uniquely identifies each room available in all student apartments and is used when renting a room to a student.

**Leases**

A student may rent a room in a hall or student apartment for various periods of time. New lease agreements are negotiated at the start of each academic year, with a minimum rental period of one semester and a maximum rental period of one year, which includes semesters 1 and 2 and the summer semester. Each individual lease agreement between a student and the Residence Office is uniquely identified using a lease number.

The data stored on each lease includes the lease number, duration of the lease (given as semesters), student’s name and banner number, place number, room number, address details of the hall or student apartment, and the date the student wishes to enter the room, and the date the student wishes to leave the room (if known).

**Invoices**

At the start of each semester, each student is sent an invoice for the following rental period. Each invoice has a unique invoice number.

The data stored on each invoice includes the invoice number, lease number, semester, payment due, student’s full name and banner number, place number, room number, and the address of the hall or apartment. Additional data is also held regarding the payment of the invoice and includes the date the invoice was paid, the method of payment (check, cash, Visa, and so on), the date the first and second reminder was sent (if necessary).

**Student apartment inspections**

Student apartments are inspected by staff on a regular basis to ensure that the accommodation is well maintained. The information recorded for each inspection is the name of the member of staff who carried out the inspection, the date of inspection, an indication of whether the property was found to be in a satisfactory condition (yes or no), and any additional comments.

**Residence staff**

Some information is also held on members of staff of the Residence Office and includes the staff number, name (first and last name), email, home address (street, city, postcode), date of birth, gender, position (for example, Hall Manager, Administrative Assistant, Cleaner) and location (for example, Residence Office or Hall).

**Courses**

The Residence Office also stores a limited amount of information on the courses offered by the university, including the course number, course title (including year), course instructor, instructor’s on-campus telephone number, email, room number, and department name. Each student is also associated with a single programme of studies.

**Next-of-kin**

Whenever possible, information on a student’s next-of-kin is stored, which includes the name, relationship, address (street, city, postcode), and contact telephone number.

Research and identify the common operations eg. Data Entry ,Data update or deletion operations ,List the problems that needs to be addressed.

An example could be : Display the details of lease agreements that include the summer semester , Display the details of the total rent paid by a given student etc.