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DATABASE MANAGEMENT SYSTEM – FINAL COURSEWORK 01

**Question 01**

Guest

Guest is the one of the most importent entity in this sinario. Its linking to the Booking Preferences entity.

Booking Preferences

this is most important entity and its linking to the other several entites such as Cancellation Details, Receptionist Staff, Cancellation Details, final bill,

Cancellation Details

This scenario describes there may be a cancellation of the Booking Preferences. And also mentioned they keep the records of the cancellation. So it can be idintified as a entity.

Room Information

In This scenario describes there are total 100 rooms. And its link to the the Booking Preferences as well as Room Type entities. So it can be idintified as a one of most importent entity.

Room Type

In This scenario describes there are several room types. And it can be linked to the Room Information entity as well. And new entity called room views.

Room views

I idintified extra entity called room views. This is not discribes in the scenario. Since there is the way to check the room informations by guest him self, this information may valuable.

Final bill

Final bill is one of the most important part of this operation and it can be iditified as a a main entity. And several entities can be link to this entity such as Financial Staff, Payment methods, and discount information.

Discount information

In This scenario discribe about the Discount information for the final bill. So it can be idintified as a entity.

Payment methods

This scenario discribes about the Payment methods mention tn final bill and discount information records.

Financial Staff

This scenario discribe about Financial Staff which linked to the final billing managementg. So it can be idintified as a entity.

Receptionist Staff

Booking Preferences is manage by the Receptionist Staff. So it can be idintified as a main entity.

Housekeeping Staff

This scenario discribes about Housekeeping Staff and its duties. So it can be linked to room information.

software maintain information

scenario discribes about abot the it related information. So it can be idintified as a main entity.

IT Staff

It staff related to the software related tasks. So it can be linked to software maintain information entity.

**Question 02**

Guest - Booking Preferences

One Guest have at least one or meny Booking Preferences and Booking Preferences have only one guest and must have one a guest.

Booking Preferences - Cancellation Details

One Booking Preferences have zero or one Cancellation Details and Cancellation Details have only one Booking Preferences and must have one a Booking Preferences

Receptionist staff - Booking Preferences

One receptionist staff manages the at least one or many Booking Preferences and one many Booking Preferences manage by only one receptionist staff and must have one

Housekeeping staff - Room Information

Many housekeeping staff manages the at least one or many Room Information and many Room Information manage by at least one or many housekeeping staff. (Many to many relationship) Associated entity with ‘duty’ attribute.

Room Information - Booking Preferences

One Room Information have zero or meny Booking Preferences and one Booking Preferences have only one Room Information and must have one a Room Information

Room Information - Room views

Many Room Information has at least one or many Room views and many room view have at least one or many room information as well. (Many to many relationship) only joining table.

Room type - Room information

One room type has at least one or Many room information and one room information belong to only one room type and at least have one room type

Booking Preferences - final bill

One Booking Preferences have optional or one final bill and final bill only have one Booking Preferences and must have one.

payment method - final bills

One payment method has at least one or many final bills and final bill belong to only one payment method and must have one.

Discount information - Final bills

One discount information has zero or many final bills and final bill only have one discount information and its optional.

Payment method - Discount information

One payment method has at least one or many discount information and discount information belong to only one payment method and must have one.

Financial staff - Final bills

One financial staff manages the at least one or many final bills and one final bill manage by only one financial staff and must have one.

Many IT - Software Maintains

Many IT staff manages the at least one or many software maintains and many software maintains manage by at least one or many It staff. (Many to many relationship) – Associated entity with ‘duty’ attribute.

**Question 03**

***Guest***

guest\_id, name, address, contry, Gender, user\_name,password

***Booking* Preferences**

booking\_id, booking\_create\_date, expected\_arrival\_date, checkin\_date, checkout\_date, cancelation?

***Cancellation* Details**

Cancellation\_id, cancellation\_date, reason

**Room *Information***

room\_id, avalable?, room\_area, has\_balcony?

**Room *Information* - *Housekeeping Staff associated entity***

Duties

**Room *Information* - *Room views associated entity***

room\_id, view\_id (primary keys only)

***Room* Type**

room\_type\_id, room\_type\_name, has\_bathtub?, has\_kicthen?, has\_tv?, has\_internet?, has\_hot\_tub?, has\_fridge?, has\_Microwave?, number\_of\_guests, total\_double\_beds, total\_single\_beds

***Room views***

view\_id, view

***Final bill***

final\_bill\_id, bill\_date, final\_amount

***Discount information***

discount\_info\_id, discount\_name,discount\_presentage

**Payment methods**

payment\_method\_id, payment\_method\_name

***Financial Staff***

financial\_staff\_id, name, phone, user\_name, passowrd

***Receptionist Staff***

receptionist\_staff\_id, name, phone, user\_name, passowrd

***Housekeeping Staff***

housekeeping\_staff\_id, name, phone, user\_name, passowrd

***IT Staff***

it\_staff\_id, name, phone, user\_name, passowrd

***Software maintains information***

report\_id, description

**Question 04**

***Guest***

No forign keys

***Booking* Preferences**

guest\_id, receptionist\_staff\_id, room\_id,

***Cancellation* Details**

booking\_id,

**Room *Information***

room\_type\_id

***Housekeeping Staff***

No forign keys

**Room *Information* - *Housekeeping Staff associated entity***

room\_id, housekeeping\_staff\_id (also composite primary keys)

***Room views***

No forign keys

**Room *Information* - *Room views associated entity***

room\_id, view\_id (also composite primary keys)

***Room* Type**

No forign keys

***Final bill***

booking\_id, payment\_method\_id, financial\_staff\_id, discount\_info\_id

***Discount information***

payment\_method\_id

**Payment methods**

No forign keys

***Financial Staff***

No forign keys

***Receptionist Staff***

No forign keys

***Housekeeping Staff***

No forign keys

***IT Staff***

No forign keys

***Software maintains information***

No forign keys

***Software maintains information - IT Staff associated entity***

it\_staff\_id, report\_id (also composite primary keys)