**Database Management System – cs422 DE**

**Lab 4 – Week 9**

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**The *EasyDrive School of Motoring* case study**

For exam practice, I didn’t use graphic illustration and just listed entities and relationships using plain text.

(1) Create a conceptual data model for the above case study. State any assumptions necessary to

support your design.

ANS:

Entities:

Office

Staff

Client

Interview

Lesson

Car

Test

Relations:

Office 1 <--> 1 Staff(position-Manager)

Office 1 <--> \* Staff

Staff 1 <--> \* Client

Staff 1 <--> \* Interview

Client 1 <--> \* Lesson

Staff 1 <--> 1 Car

Client 1 <--> \* Test

(2) Create and validate a logical data model from the conceptual data model created in (1) above.

ANS:

Office -> **office\_id**, name, manager\_id(staff\_id), address

Address -> **address\_id**, street, city, state, zipCode

Staff -> **staff\_id**, name, gender, email, phoneNumber, office\_id, position

Client -> **client\_id**, name, email, phoneNumber, instructor\_id(staff\_id)

Interview -> **interview\_id**, instructor\_id(staff\_id), client\_id, date, result

Lesson -> **lesson\_id**, instructor\_id(staff\_id), client\_id, start\_time, end\_time, milage

Car -> **car\_id**, instructor\_id(staff\_id), model, totalMilage

Test -> **test\_id**, client\_id, car\_id, test\_date, result