Exercise 3 – Entity Occurrence Diagrams
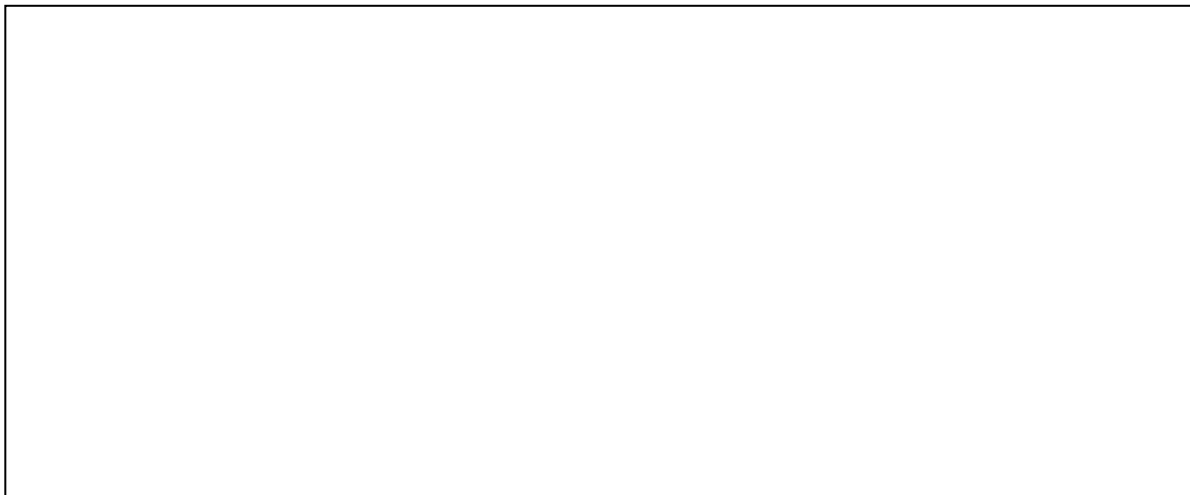
1. The following tables shows which bookings have been made by which customers.

Booking	Customer
BD223145	1234
NF874607	3456
KL763832	3456
TG803017	2804
JT397282	1234

Draw an entity occurrence diagram to represent the relationship between the Booking and Customer entities.

2. Consider the details stored in the Driver and Taxi entities shown below. Draw an entity occurrence diagram to represent the relationship between the Driver and Taxi entities.

Driver

Driver ID	Driver Name	Taxi
03	Jo Fleming	TY528UQ
15	Ian Smith	AS512ER
18	Pat Page	VJ537KL

Taxi

Registration Num	Carries	Disabled Access
TY528UQ	5	Yes
AS512ER	4	No
VJ537KL	8	Yes

3. Consider the details stored in the Course, Tutor and Student tables shown below. Draw an entity occurrence diagram to represent the relationship between:

(a) the Course and Tutor entities.

(b) the Student and Course entities.

Course

Course ID	Name	Credits	Tutor ID
D556	Computing	1	1989
D766	Hardware	1	7817
C991	DB Design	2	7817
M101	Calculus	2	3456

Tutor

Tutor ID	Tutor Name	Phone Num
1989	Mr Boyd	7618
7817	Mrs Harris	9914
6516	Mr George	1233
3456	Ms Cross	5052

Student

StudentNo	Firstname	Surname	DOB	CourseID
18728	Joseph	Millar	06/02/1996	D556
18728	Joseph	Millar	06/02/1996	D766
18728	Joseph	Millar	06/02/1996	C991
18729	Anna	Polizi	14/06/1995	D556
18729	Anna	Polizi	14/06/1995	M101

a)

b)

4. Consider the details stored in the Teacher, Class and Pupil tables shown below. Draw an entity occurrence diagram to represent the relationship between:

   (a)   the Teacher and Class entities.

   (b)   the Pupil and Class entities.

Teacher

TeacherNo	Class	Name	Department
123	E23	Green	English
145	S79	Black	Science
168	M29	Brown	Music
123	E31	Green	English

Class

Class Code	Subject	Level
E23	Literature	Higher
M29	Performance	Higher
E31	Textual Analysis	Higher
S79	Physics	N5

Pupil

Pupil ID	Firstname	Lastname	DOB	Class
40438271	Alan	Adams	10/02/2001	E23
40438271	Alan	Adams	10/02/2001	E31
39879342	Barnaby	Brambles	21/07/2002	S79
37690065	Carl	Crookston	31/10/2002	M29
37690065	Carl	Crookston	31/10/2002	E23
37690065	Carl	Crookston	31/10/2002	E31
41414141	Dhavid	Dhesi	12/12/2002	M29
41414141	Dhavid	Dhesi	12/12/2002	S79

a)

b)

5. Consider the details stored in the Employee, Pilot and Admin tables shown below. Draw an entity occurrence diagram to represent the relationship between:

(a) the Employee and Pilot entities.

(b) the Employee and Admin entities.

Pilot

EmployeeID	Grade
12345	2
15050	3
19753	2

Admin

EmployeeID	Job Title
13579	Personal Assistant
17531	Booking Agent

Employee

EmployeeID	Firstname	Surname
12345	Harold	Hamilton
13579	Lynn	Lindsay
15050	Paula	Franelli
17531	Thomas	Moore
19753	Phil	Avis

a)

b)