Academic training database

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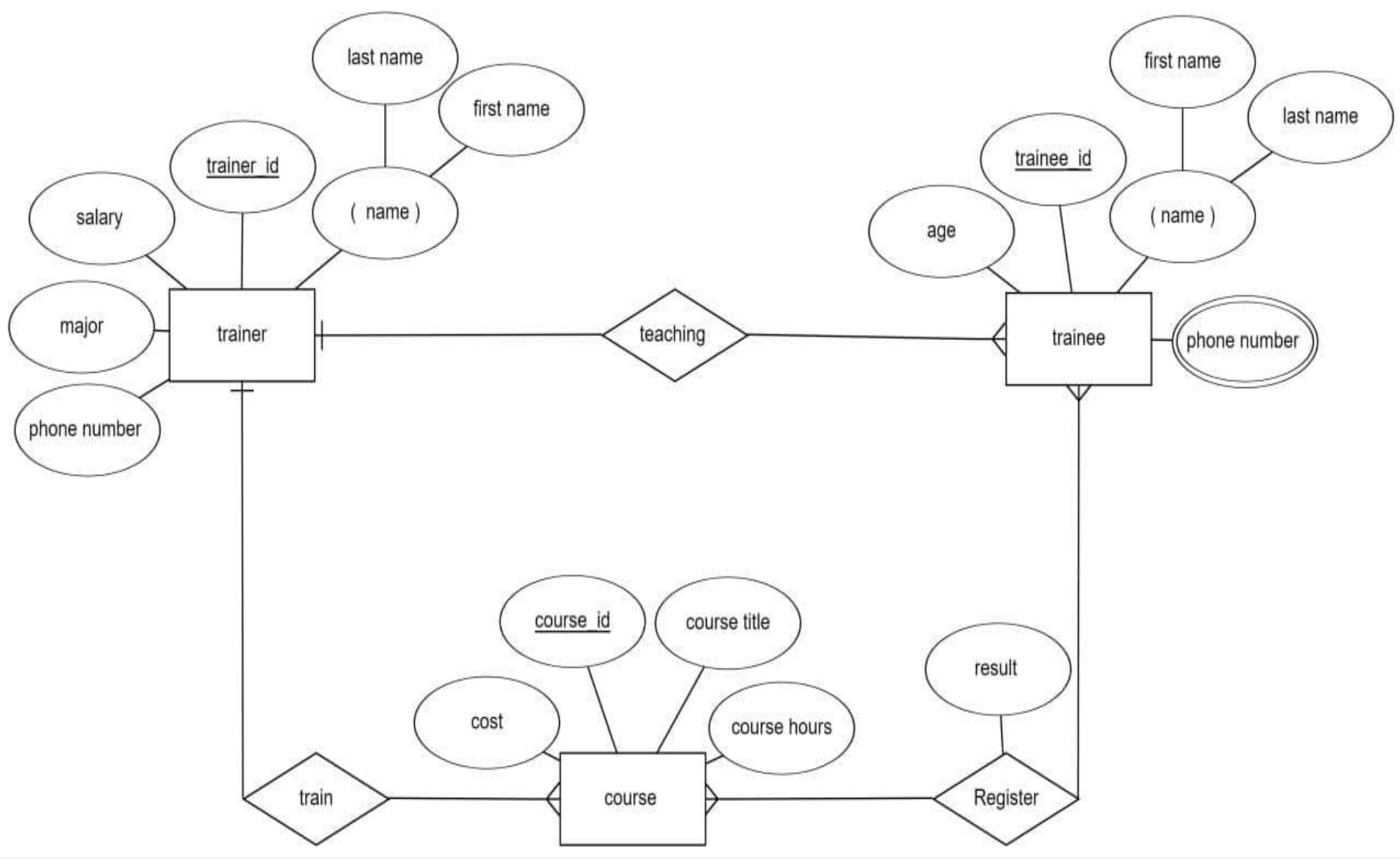
Introduction

The idea of our project is to create a database for the training institute, which provides courses to learn medic , computer science, English and business administration. And we created a set of tables to start designing the database, which include the name and information of the course, and the information of the trainer and trainee

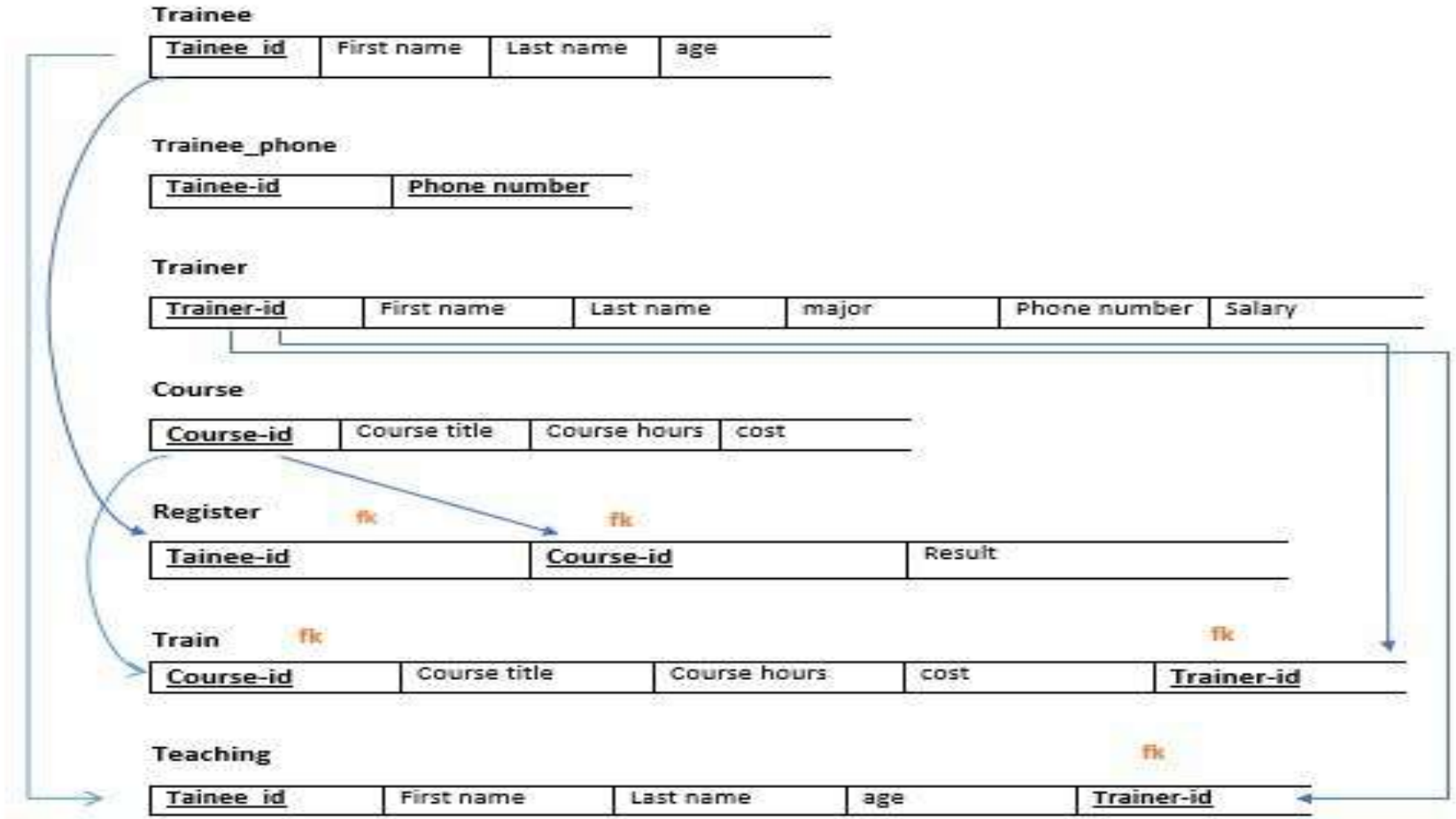
The purpose of the Training institute

Record the trainee's name, age, number and phone number so that he has more than one phone number.Record the trainer's information, including his name, specialty, number, salary and phone number.Register information about the available courses such as the course name, number, number of hours and price.The trainee can register in more than one course and the result of the course will be recorded.Recording the courses taught by the trainer, and he can train more than one course.

ERD

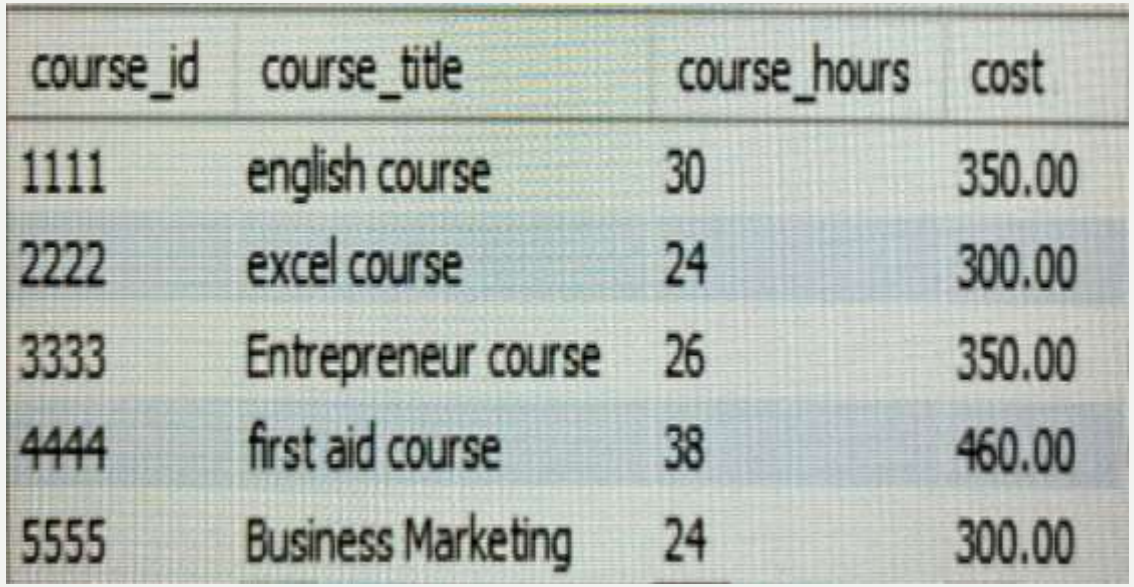

last name
first name
trainer_id
salary
(name)
major
trainer
phone number
teaching
first name
last name
trainee_id
age
(name)
trainee
phone number
course_id
course title
cost
course hours
course
train
result
Register

schema


Trainee
Tainee_id
First name
Last name
age
Trainee_phone
Tainee-id
Phone number
Trainer
Trainer-id
First name
Last name
major
Phone number
Salary
Course
Course-id
Course title
Course hours
cost
Register
fk
fk
Tainee-id
Course-id
Result
Train
fk
fk
Course-id
Course title
Course hours
cost
Trainer-id
Teaching
fk
Tainee_id
First name
Last name
age
Trainer-id

Create course table

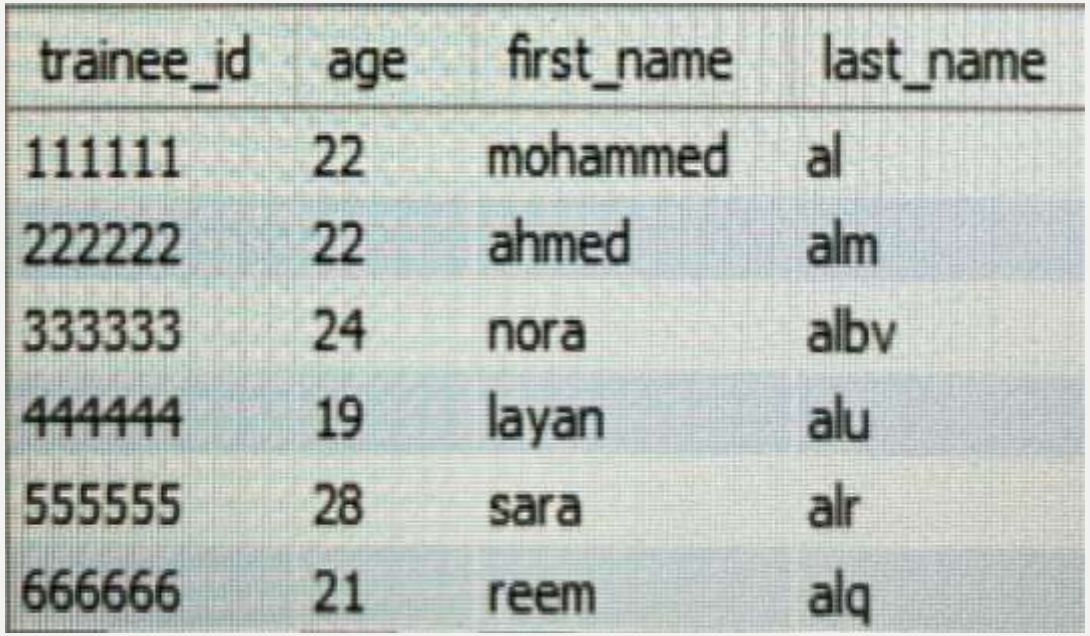
```
create table course (
course_id char(4),
course_title varchar(20),
course_hours int,
cost numeric(12,2),
primary key(course_id)
);
```



course_id	course_title	course_hours	cost
1111	english course	30	350.00
2222	excel course	24	300.00
3333	Entrepreneur course	26	350.00
4444	first aid course	38	460.00
5555	Business Marketing	24	300.00

create trainee table

```
create table trainee (
trainee_id char(6),
age int,
first_name varchar(20),
last_name varchar(20),
primary key(trainee_id)
);
```



trainee_id	age	first_name	last_name
111111	22	mohammed	al
222222	22	ahmed	alm
333333	24	nora	albv
444444	19	layan	alu
555555	28	sara	alr
666666	21	reem	alq

create trainer table

```
create table trainer (
trainer_id char(6),
phone_number char(10),
first_name varchar(20),
last_name varchar(20),
salary numeric(12,2),
major varchar(30),
primary key(trainer_id)
);
```

trainer_id	phone_number	first_name	last_name	salary	major
123456	565493025	reema	alp	9400.00	medic
341256	576340098	khalid	alo	8200.00	Computer Science
651243	574440758	bayan	alb	9100.00	Business Management
654321	576340758	saad	alm	7800.00	english

create register table

```
create table register (
trainee_id char(6),
course_id char(4),
result varchar(15),
primary key(trainee_id,course_id)
);
```

trainee_id	course_id	result
333333	2222	success
444444	2222	fail
444444	3333	success
555555	1111	fail
666666	1111	fail
666666	3333	success

create train table

```
create table train (
course_id char(4),
course_title varchar(20),
course_hours int,
cost numeric(12,2),
trainer_id char(6),
primary key(trainer_id,course_id)
);
```

course_id	course_title	course_hours	cost	trainer_id
4444	first aid course	38	460.00	123456
2222	excel course	24	300.00	341256
3333	Entrepreneur course	26	350.00	651243
5555	Entrepreneur course	24	300.00	651243
1111	english course	30	350.00	654321

Create teaching table

```
create table teaching (
trainee_id char(6),
first_name varchar(20),
last_name varchar(20),
age int,
trainer_id char(6),
primary key(trainee_id,trainer_id)
);
```

trainee_id	first_name	last_name	age	trainer_id
222222	ahmed	alm	22	123456
333333	nora	albv	24	341256
444444	layan	alu	19	341256
444444	layan	alu	19	651243
555555	sara	alr	28	654321
666666	reem	alq	21	651243
666666	reem	alq	21	654321

Create trainee_phone table

```
create table trainee_phone (
trainee_id char(6),
phone_number char(10),
Primary key
(trainee_id,phone_number)
);
```

trainee_id	phone_number
111111	546893089
111111	577627754
222222	533091654
333333	537651654
444444	507657754
555555	512357754
666666	512987754
666666	576587754

Create the Fk constraints on register table

alter table register

add constraint tra1 Foreign key (trainee_id) references trainee (trainee_id);

alter table register-- add constraint co1 Foreign key (course_id) references course (course_id);

Create the Fk constraints on train table

```
alter table train

add constraint co2 Foreign key (course_id) references course
(course_id);

alter table train

add constraint tran1 Foreign key (trainer_id) references trainee
(trainer_id);
```

Create the Fk constraints on teaching table

```
alter table teaching
add constraint tran2 Foreign key (trainee_id) references trainee
(trainee_id);
alter table teaching
add constraint tran33 Foreign key (trainer_id) references
trainer (trainer_id);
```

Checking the schema

```
use information_schema;

select distinct * from

key_column_usagewhere referenced_table_name ='trainee’

and referenced_column_name ='trainee_id’

——————————

use information_schema;

select * from key_column_usage

where referenced_table_name ='trainer’

and referenced_column_name ='trainer_id’

——————————

use information_schema;

select * from key_column_usage

where referenced_table_name ='course’

and referenced_column_name ='course_id'
```

THE END