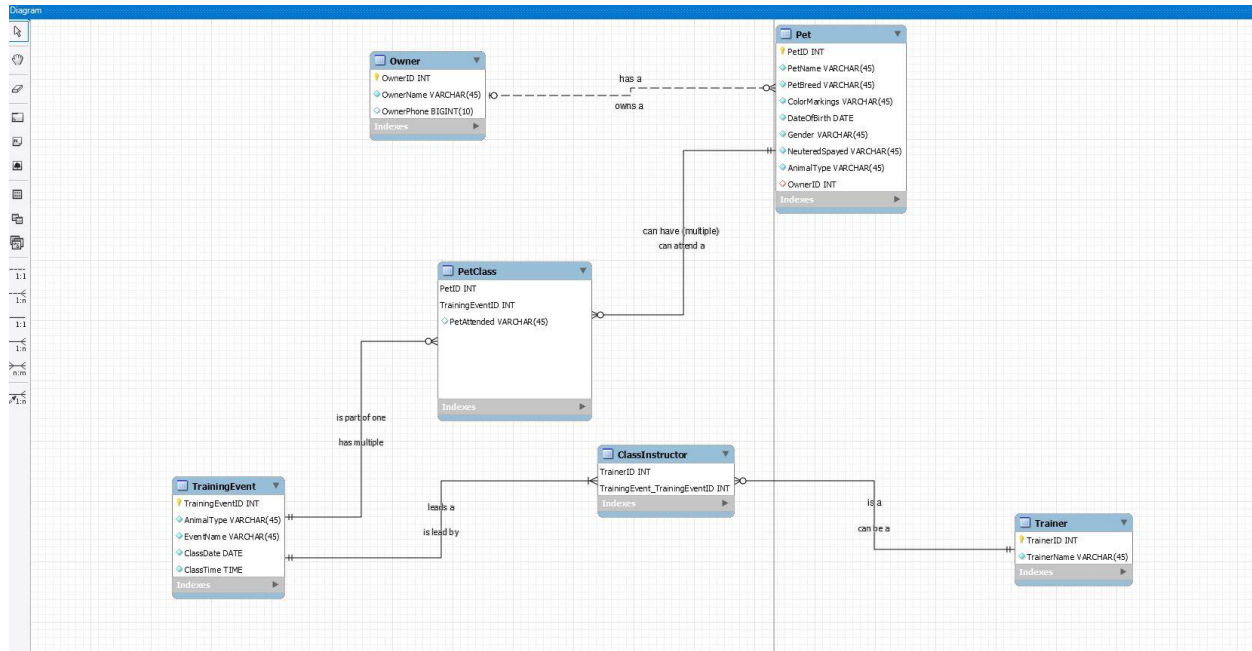


## Homework 4

## Data Model:



## Output of a DESCRIBE &lt;table&gt;:

-- all describe commands for each table

- describe Owner;

Field	Type	Null	Key	Default	Extra
OwnerID	int	NO	PRI	NULL	auto_increment
OwnerName	varchar(45)	NO		NULL	
OwnerPhone	bigint	YES		NULL	

- describe pet;

Field	Type	Null	Key	Default	Extra
PetID	int	NO	PRI	NULL	auto_increment
PetName	varchar(45)	NO		NULL	
PetBreed	varchar(45)	NO		NULL	
ColorMarkings	varchar(45)	NO		NULL	
DateOfBirth	date	NO		NULL	
Gender	varchar(45)	NO		NULL	
NeuteredSpayed	varchar(45)	NO		NULL	
AnimalType	varchar(45)	NO		NULL	
OwnerID	int	YES	MUL	NULL	

- describe petclass;

	Field	Type	Null	Key	Default	Extra
►	PetID	int	NO	PRI	NULL	
	TrainingEventID	int	NO	PRI	NULL	
	PetAttended	varchar(45)	YES		NULL	

- describe trainingevent;

Result Grid   Filter Rows:   Export:   Wrap Cell C						
	Field	Type	Null	Key	Default	Extra
►	TrainingEventID	int	NO	PRI	NULL	
	AnimalType	varchar(45)	NO		NULL	
	EventName	varchar(45)	NO		NULL	
	ClassDate	date	NO		NULL	
	ClassTime	time	NO		NULL	

- describe trainer;

Result Grid   Filter Rows:   Export:   Wrap Cell Content:   A						
	Field	Type	Null	Key	Default	Extra
►	TrainerID	int	NO	PRI	NULL	auto_increment
	TrainerName	varchar(45)	NO		NULL	

- describe classinstructor;

	Field	Type	Null	Key	Default	Extra
►	TrainerID	int	NO	PRI	NULL	
	TrainingEvent_TrainingEventID	int	NO	PRI	NULL	

## SQL Queries:

*Two Specific Queries (asked on slide 9)*

**-- A list of Owners and Pets showing the owner name, pet name, animal\*\*, breed, gender, date of birth**

```
select o.OwnerName, p.PetName,p.animalType,p.PetBreed,p.Gender,p.DateOfBirth
FROM pet p, owner o
where o.ownerID = p.OwnerID;
```

	OwnerName	PetName	animalType	PetBreed	Gender	DateOfBirth
▶	James Bond	Blue	Dog	English Black Lab	Female	2013-08-04
	Master Chief	Scooby	Dog	Husky	Male	2018-02-27
	Duke Silver	Brownie	Dog	Australian labradoodle	Female	2015-01-14
	Iron Man	Cheddar	Dog	Golden Retriever	Male	2014-12-16
	Joe Montana	Drax	Cat	Siamese	Female	2018-08-21

**-- A list of Upcoming Training Events showing the date, time, trainer, event type, owner, pet (with one trainer listed -- concise list)**

```
select t.TrainingEventID, t.EventName,t.AnimalType,t.ClassDate,t.ClassTime, tr.TrainerName,
p.PetName, o.OwnerName
```

```
FROM trainingevent t, classinstructor ci,trainer tr,petclass pc, pet p,owner o
where t.TrainingEventID = ci.TrainingEvent_TrainingEventID
AND tr.TrainerID = ci.TrainerId
AND pc.TrainingEventID = t.TrainingEventID
AND p.PetID = pc.PetID
AND o.OwnerID = p.OwnerID
Group By t.TrainingEventID,pc.PetID;
```

TrainingEventID	EventName	AnimalType	ClassDate	ClassTime	TrainerName	PetName	OwnerName
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Blue	James Bond
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Scooby	Master Chief
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Brownie	Duke Silver
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Cheddar	Iron Man
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Shey	Blue	James Bond
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Shey	Cheddar	Iron Man
3	Off-Leash Operation	Dog	2020-10-22	09:00:00	Marie	Scooby	Master Chief
3	Off-Leash Operation	Dog	2020-10-22	09:00:00	Marie	Brownie	Duke Silver
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Chuck	Blue	James Bond
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Chuck	Brownie	Duke Silver
5	Off-Leash Operation	Dog	2020-10-28	09:00:00	Marie	Scooby	Master Chief
5	Off-Leash Operation	Dog	2020-10-28	09:00:00	Marie	Brownie	Duke Silver
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Shey	Blue	James Bond
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Shey	Cheddar	Iron Man

-- A list of Upcoming Training Events showing the date, time, trainer, event type, owner, pet  
(with each trainer listed -- so repeat of events )

```
select t.TrainingEventID, t.EventName,t.AnimalType,t.ClassDate,t.ClassTime, tr.TrainerName,
p.PetName, o.OwnerName
```

```
FROM trainingevent t, classinstructor ci,trainer tr,petclass pc, pet p,owner o
```

```
where t.TrainingEventID = ci.TrainingEvent_TrainingEventID
```

```
AND tr.TrainerID = ci.TrainerId
```

```
AND pc.TrainingEventID = t.TrainingEventID
```

```
AND p.PetID = pc.PetID
```

```
AND o.OwnerID = p.OwnerID;
```

TrainingEventID	EventName	AnimalType	ClassDate	ClassTime	TrainerName	PetName	OwnerName
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Blue	James Bond
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Scooby	Master Chief
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Brownie	Duke Silver
1	Basic Skills	Dog	2020-10-21	12:00:00	Shey	Cheddar	Iron Man
1	Basic Skills	Dog	2020-10-21	12:00:00	Marie	Blue	James Bond
1	Basic Skills	Dog	2020-10-21	12:00:00	Marie	Scooby	Master Chief
1	Basic Skills	Dog	2020-10-21	12:00:00	Marie	Brownie	Duke Silver
1	Basic Skills	Dog	2020-10-21	12:00:00	Marie	Cheddar	Iron Man
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Shey	Blue	James Bond
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Shey	Cheddar	Iron Man
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Chuck	Blue	James Bond
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Chuck	Cheddar	Iron Man
3	Off-Leash Ope...	Dog	2020-10-22	09:00:00	Marie	Scooby	Master Chief
3	Off-Leash Ope...	Dog	2020-10-22	09:00:00	Marie	Brownie	Duke Silver
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Chuck	Blue	James Bond
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Chuck	Brownie	Duke Silver
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Carly	Blue	James Bond
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Carly	Brownie	Duke Silver
5	Off-Leash Ope...	Dog	2020-10-28	09:00:00	Marie	Scooby	Master Chief
5	Off-Leash Ope...	Dog	2020-10-28	09:00:00	Marie	Brownie	Duke Silver
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Shey	Blue	James Bond
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Shey	Cheddar	Iron Man

*Testing "Considerations" (with queries)*

-- A trainer's schedule for the week

-- Goal bring up Shey's schedule for the week

```
select t.TrainingEventID,t.ClassDate,t.ClassTime
```

```
FROM trainingevent t, classinstructor ci,trainer tr
```

```
where tr.TrainerName = "Shey"
```

```
AND t.TrainingEventID = ci.TrainingEvent_TrainingEventID
```

```
AND tr.TrainerID = ci.TrainerId;
```

Result Grid			
Filter Rows:			
	TrainingEventID	ClassDate	ClassTime
▶	1	2020-10-21	12:00:00
	2	2020-10-21	02:00:00
	6	2020-10-30	02:00:00

**-- A list of classes offered with day/time/trainer**

```
select t.TrainingEventID,t.ClassDate,t.ClassTime,tr.TrainerName
      FROM trainingevent t, classinstructor ci,trainer tr
      where t.TrainingEventID = ci.TrainingEvent_TrainingEventID
      AND tr.TrainerID = ci.TrainerID;
```

Result Grid				
Filter Rows:				
Export:   Wrap Cell Content:				
	TrainingEventID	ClassDate	ClassTime	TrainerName
▶	1	2020-10-21	12:00:00	Shey
	2	2020-10-21	02:00:00	Shey
	6	2020-10-30	02:00:00	Shey
	1	2020-10-21	12:00:00	Marie
	3	2020-10-22	09:00:00	Marie
	5	2020-10-28	09:00:00	Marie
	2	2020-10-21	02:00:00	Chuck
	4	2020-10-23	12:00:00	Chuck
	4	2020-10-23	12:00:00	Carly

**-- A list of pets/owners scheduled for each class**

```
select t.TrainingEventID, t.EventName,t.AnimalType,t.ClassDate,t.ClassTime, p.PetName,
      o.OwnerName
      FROM trainingevent t,petclass pc, pet p,owner o
      where pc.TrainingEventID = t.TrainingEventID
      AND p.PetID = pc.PetID
      AND o.OwnerID = p.OwnerID;
```



Result Grid    Filter Rows:   Export:  Wrap Cell Content: 							
TrainingEventID	EventName	AnimalType	ClassDate	ClassTime	PetName	OwnerName	
1	Basic Skills	Dog	2020-10-21	12:00:00	Blue	James Bond	
1	Basic Skills	Dog	2020-10-21	12:00:00	Scooby	Master Chief	
1	Basic Skills	Dog	2020-10-21	12:00:00	Brownie	Duke Silver	
1	Basic Skills	Dog	2020-10-21	12:00:00	Cheddar	Iron Man	
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Blue	James Bond	
2	Walk-Train-Play	Dog	2020-10-21	02:00:00	Cheddar	Iron Man	
3	Off-Leash Operation	Dog	2020-10-22	09:00:00	Scooby	Master Chief	
3	Off-Leash Operation	Dog	2020-10-22	09:00:00	Brownie	Duke Silver	
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Blue	James Bond	
4	Walk-Train-Play	Dog	2020-10-23	12:00:00	Brownie	Duke Silver	
5	Off-Leash Operation	Dog	2020-10-28	09:00:00	Scooby	Master Chief	
5	Off-Leash Operation	Dog	2020-10-28	09:00:00	Brownie	Duke Silver	
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Blue	James Bond	
6	Walk-Train-Play	Dog	2020-10-30	02:00:00	Cheddar	Iron Man	

-- A report showing recent history of classes and attendance

-- example: find attendance for all events

```
select t.ClassDate, t.EventName, p.PetName, pc.PetAttended
```

```
FROM trainingevent t, petclass pc, pet p, owner o
```

```
where pc.TrainingEventID = t.TrainingEventID
```

```
AND p.PetID = pc.PetID
```

```
AND o.OwnerID = p.OwnerID
```

```
Order By t.ClassDate, t.EventName;
```

	ClassDate	EventName	PetName	PetAttended
►	2020-10-21	Basic Skills	Blue	NULL
	2020-10-21	Basic Skills	Scooby	NULL
	2020-10-21	Basic Skills	Brownie	NULL
	2020-10-21	Basic Skills	Cheddar	NULL
	2020-10-21	Walk-Train-Play	Blue	NULL
	2020-10-21	Walk-Train-Play	Cheddar	NULL
	2020-10-22	Off-Leash Operation	Scooby	NULL
	2020-10-22	Off-Leash Operation	Brownie	NULL
	2020-10-23	Walk-Train-Play	Blue	NULL
	2020-10-23	Walk-Train-Play	Brownie	NULL
	2020-10-28	Off-Leash Operation	Scooby	NULL
	2020-10-28	Off-Leash Operation	Brownie	NULL
	2020-10-30	Walk-Train-Play	Blue	NULL
	2020-10-30	Walk-Train-Play	Cheddar	NULL

As the data I generated was for events in the future, all pets attending will not have a value for if they attended yet.