

Project Phase 2: Database Design (SW 5063)

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Entities:

Owner, ownerID, ownerName, number, address

Pet, petName, petType, breed, weight, height, age

FeedSchedule, foodType, foodAmount, foodRate

MedSchedule, medType, medAmount, medRate

Vet, vetID, vetName, vetNumber

Description:

One Owner with attributes: ownerID(PK), ownerName, number, address

Owner has

One or many Pet(s) with attributes: ownerID(FK), petName(PK), vetID(FK), petType, breed, weight, height, age

Pet has

One or many (weak entity) Feed Schedules with attributes: petName(FK), foodType, foodAmount, foodRate

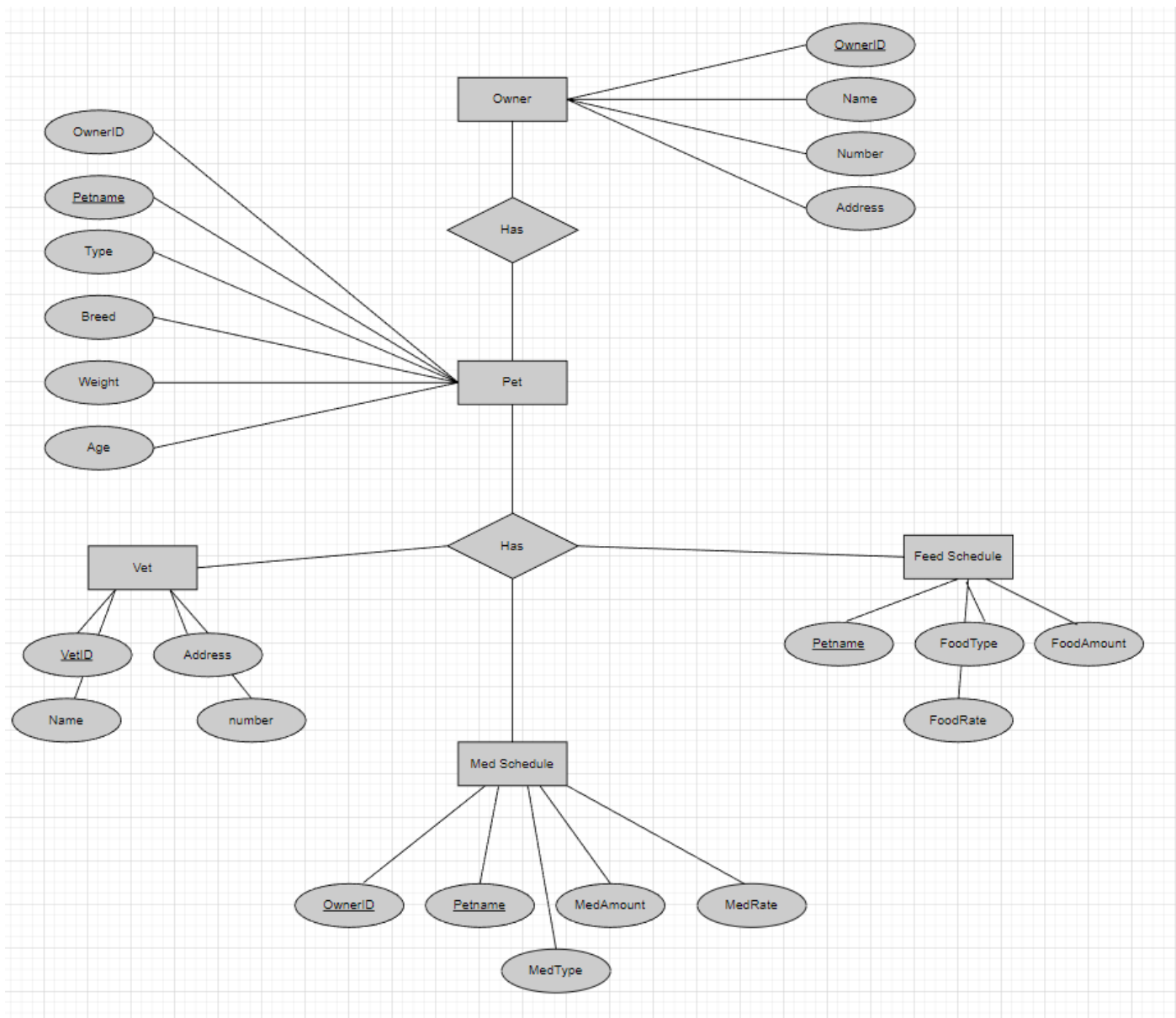
Pet has

One or many (weak entity) Med Schedules with attributes: petName(FK), medType, medAmount, medRate

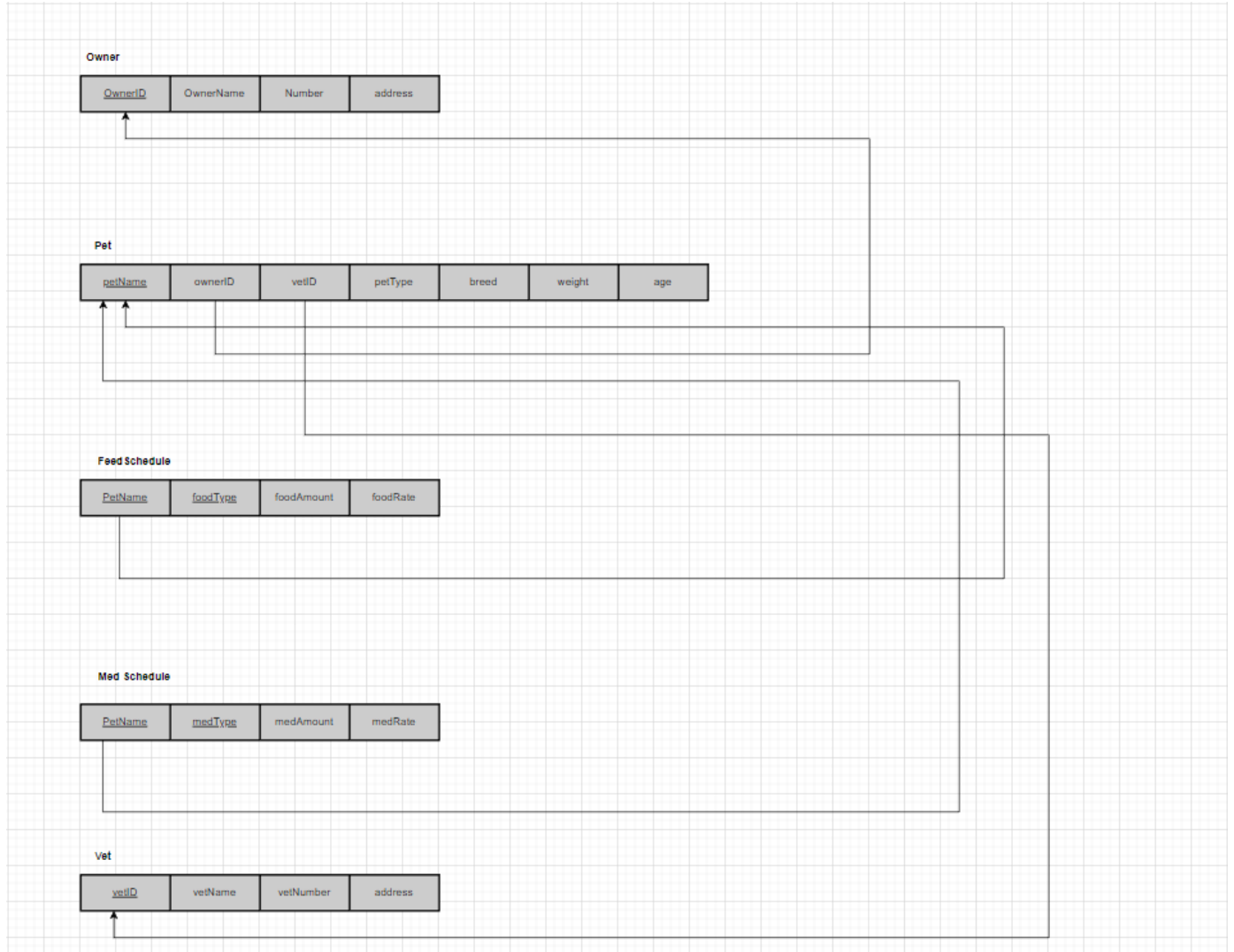
Pet has

One Vet with attributes: vetID, vetName, vetNumber, address

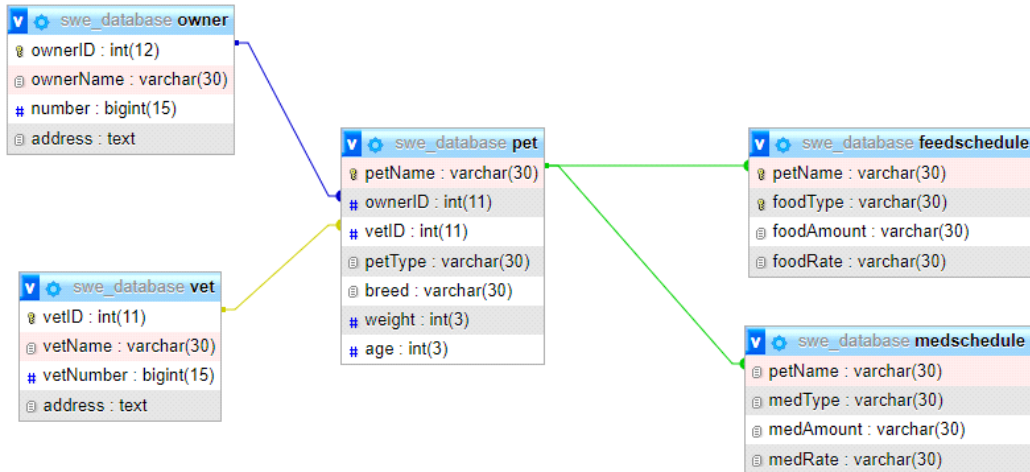
(2) Design the EER model for your database based on (1)



(3) Convert the EER model to database schema



(4) Use SQL statements to create your database



-- Table structure for table `owner`

--

```
CREATE TABLE `owner` (  
  `ownerID` int(12) NOT NULL,  
  `ownerName` varchar(30) DEFAULT NULL,  
  `number` bigint(15) DEFAULT NULL,  
  `address` text DEFAULT NULL  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

--

-- Dumping data for table `owner`

--

```
INSERT INTO `owner` (`ownerID`, `ownerName`, `number`, `address`) VALUES
(1, 'Rob Richard', 7772221212, '5050 Apple Lane, Atlanta, Georgia'),
(2, 'Tone Johnson', 1234567899, '420 McNugget Avenue, Dallas, Georgia'),
(3, 'Ryan McPatrick', 6663336969, '350 Cheesel Parkway, Kennesaw, Georgia');
```

[OBJ]

Showing rows 0 - 2 (3 total, Query took 0.0015 seconds.)

SELECT * FROM `owner`

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	ownerID	ownerName	number	address
<input type="checkbox"/> Edit Copy Delete 1	Rob Richard	7772221212	5050 Apple Lane, Atlanta, Georgia	
<input type="checkbox"/> Edit Copy Delete 2	Tone Johnson	1234567899	420 McNugget Avenue, Dallas, Georgia	
<input type="checkbox"/> Edit Copy Delete 3	Ryan McPatrick	6663336969	350 Cheesel Parkway, Kennesaw, Georgia	

-- Table structure for table `pet`

--

```
CREATE TABLE `pet` (
  `petName` varchar(30) NOT NULL,
  `ownerID` int(11) NOT NULL,
  `vetID` int(11) NOT NULL,
  `petType` varchar(30) NOT NULL,
  `breed` varchar(30) NOT NULL,
  `weight` int(3) NOT NULL,
  `age` int(3) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

--

-- Dumping data for table `pet`

--

```
INSERT INTO `pet` (`petName`, `ownerID`, `vetID`, `petType`, `breed`, `weight`, `age`) VALUES
('Blicky Richard', 1, 1, 'Dog', 'Pug', 29, 4),
('Poppy McPatrick', 3, 2, 'Bird', 'Tucan', 5, 15),
('Slither Johnson', 2, 1, 'Snake', 'Burmese Python', 15, 2),
('Spooby Johnson', 2, 1, 'Dog', 'Great Dane', 100, 7),
('Timbo Richard', 1, 1, 'Dog', 'Pug', 30, 5),
('Xena McPatrick', 3, 2, 'Cat', 'Manx', 6, 12);
```

✓ Showing rows 0 - 5 (6 total, Query took 0.0010 seconds.)

`SELECT * FROM `pet``

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☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

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				petName	ownerID	vetID	petType	breed	weight	age
<input type="checkbox"/>				Blicky Richard	1	1	Dog	Pug	29	4
<input type="checkbox"/>				Poppy McPatrick	3	2	Bird	Tucan	5	15
<input type="checkbox"/>				Slither Johnson	2	1	Snake	Burmese Python	15	2
<input type="checkbox"/>				Spooby Johnson	2	1	Dog	Great Dane	100	7
<input type="checkbox"/>				Timbo Richard	1	1	Dog	Pug	30	5
<input type="checkbox"/>				Xena McPatrick	3	2	Cat	Manx	6	12

-- Table structure for table `vet`

--

```
CREATE TABLE `vet` (
  `vetID` int(11) NOT NULL,
  `vetName` varchar(30) NOT NULL,
  `vetNumber` bigint(15) NOT NULL,
  `address` text NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

--

-- Dumping data for table `vet`

--

```
INSERT INTO `vet` (`vetID`, `vetName`, `vetNumber`, `address`) VALUES
```

```
(1, 'Dr. Marco Placebo', 6667771234, '990 Medical Avenue, Canton, Georgia'),
```

```
(2, 'Dr. Rick Sprangus', 3334445555, '1999 E. Sprinkler Way, Birmingham, Alabama');
```

✓ Showing rows 0 - 1 (2 total, Query took 0.0024 seconds.)

SELECT * FROM `vet`

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☐ Show all

Number of rows: 25

Filter rows:

Sort by key: None

+ Options

← T →

		vetID	vetName	vetNumber	address
<input type="checkbox"/>	Edit	Copy	Delete	1	Dr. Marco Placebo 6667771234 990 Medical Avenue, Canton, Georgia
<input type="checkbox"/>	Edit	Copy	Delete	2	Dr. Rick Sprangus 3334445555 1999 E. Sprinkler Way, Birmingham, Alabama

-- Table structure for table `medschedule`

--

```
CREATE TABLE `medschedule` (
```

```
  `petName` varchar(30) NOT NULL,
```

```
  `medType` varchar(30) NOT NULL,
```

```
  `medAmount` varchar(30) NOT NULL,
```

```
  `medRate` varchar(30) NOT NULL
```

```
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```


--

-- Dumping data for table `medschedule`

--

```
INSERT INTO `medschedule` (`petName`, `medType`, `medAmount`, `medRate`) VALUES
('Blicky Richard', 'Anti-Worm', '1 pill', '1 per day'),
('Poppy McPatrick', 'Beak-Booster', '1 pill', '1 per day'),
('Slither Johnson', 'Scale-Booster', '1 pill', '1 per week'),
('Spooby Johnson', 'Joint-Care', '1 pill', '1 per day'),
('Timbo Richard', 'Anti-Worm', '1 pill', '1 per day');
```

Showing rows 0 - 4 (5 total, Query took 0.0015 seconds.)

`SELECT * FROM `medschedule``

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+ Options

petName	medType	medAmount	medRate
Blicky Richard	Anti-Worm	1 pill	1 per day
Poppy McPatrick	Beak-Booster	1 pill	1 per day
Slither Johnson	Scale-Booster	1 pill	1 per week
Spooby Johnson	Joint-Care	1 pill	1 per day
Timbo Richard	Anti-Worm	1 pill	1 per day

-- Table structure for table `feedschedule`

--

```
CREATE TABLE `feedschedule` (
  `petName` varchar(30) NOT NULL,
  `foodType` varchar(30) NOT NULL,
  `foodAmount` varchar(30) NOT NULL,
  `foodRate` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

--

-- Dumping data for table `feedschedule`

--

```
INSERT INTO `feedschedule` (`petName`, `foodType`, `foodAmount`, `foodRate`) VALUES
('Blicky Richard', 'Kibble', '1 cup', '2 times a day'),
('Poppy McPatrick', 'Seeds', '4 oz', '3 times a day'),
('Slither Johnson', 'Rats', '1 Rat', '1 per day'),
('Spooby Johnson', 'Kibble', '1 cup', '3 times a day'),
('Timbo Richard', 'Kibble', '1 cup', '2 times a day'),
('Xena McPatrick', 'Kat Mix', '1 cup', '2 times a day');
```

✓ Showing rows 0 - 5 (6 total, Query took 0.0013 seconds.)

`SELECT * FROM `feedschedule``

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☐ Show all | Number of rows: | Filter rows: | Sort by key:

Options

				petName	foodType	foodAmount	foodRate
<input type="checkbox"/>				Blicky Richard	Kibble	1 cup	2 times a day
<input type="checkbox"/>				Poppy McPatrick	Seeds	4 oz	3 times a day
<input type="checkbox"/>				Slither Johnson	Rats	1 Rat	1 per day
<input type="checkbox"/>				Spooby Johnson	Kibble	1 cup	3 times a day
<input type="checkbox"/>				Timbo Richard	Kibble	1 cup	2 times a day
<input type="checkbox"/>				Xena McPatrick	Kat Mix	1 cup	2 times a day

(5) Use SQL statements to query your database tables

✓ Showing rows 0 - 5 (6 total, Query took 0.0053 seconds.)

```
SELECT ownerName FROM owner LEFT JOIN pet ON owner.ownerID = pet.ownerID;
```

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☐ Show all | Number of rows: 25 ▼ | Filter rows: Search this table | Sort by key: None ▼

+ Options

ownerName
Rob Richard
Rob Richard
Tone Johnson
Tone Johnson
Ryan McPatrick
Ryan McPatrick

✓ Showing rows 0 - 5 (6 total, Query took 0.0064 seconds.)

```
SELECT * FROM medschedule RIGHT JOIN pet ON medschedule.petName = pet.petName;
```

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☐ Show all | Number of rows: 25 ▼ | Filter rows: Search this table | Sort by key: None ▼

+ Options

petName	medType	medAmount	medRate	petName	ownerID	veterID	petType	breed	weight	age
Blicky Richard	Anti-Worm	1 pill	1 per day	Blicky Richard	1	1	Dog	Pug	29	4
Poppy McPatrick	Beak-Booster	1 pill	1 per day	Poppy McPatrick	3	2	Bird	Tucan	5	15
Slither Johnson	Scale-Booster	1 pill	1 per week	Slither Johnson	2	1	Snake	Burmese Python	15	2
Spooby Johnson	Joint-Care	1 pill	1 per day	Spooby Johnson	2	1	Dog	Great Dane	100	7
Timbo Richard	Anti-Worm	1 pill	1 per day	Timbo Richard	1	1	Dog	Pug	30	5
NULL	NULL	NULL	NULL	Xena McPatrick	3	2	Cat	Manx	6	12

Showing rows 0 - 5 (6 total, Query took 0.0025 seconds.)

```
SELECT * FROM owner INNER JOIN pet ON owner.ownerID = pet.ownerID;
```

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☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

ownerID	ownerName	number	address	petName	ownerID	vetID	petType	breed	weight	age
1	Rob Richard	7772221212	5050 Apple Lane, Atlanta, Georgia	Blicky Richard	1	1	Dog	Pug	29	4
3	Ryan McPatrick	6663336969	350 Cheesel Parkway, Kennesaw, Georgia	Poppy McPatrick	3	2	Bird	Tucan	5	15
2	Tone Johnson	1234567899	420 Mcnugget Avenue, Dallas, Georgia	Slither Johnson	2	1	Snake	Burmese Python	15	2
2	Tone Johnson	1234567899	420 Mcnugget Avenue, Dallas, Georgia	Spooby Johnson	2	1	Dog	Great Dane	100	7
1	Rob Richard	7772221212	5050 Apple Lane, Atlanta, Georgia	Timbo Richard	1	1	Dog	Pug	30	5
3	Ryan McPatrick	6663336969	350 Cheesel Parkway, Kennesaw, Georgia	Xena McPatrick	3	2	Cat	Manx	6	12

Showing rows 0 - 2 (3 total, Query took 0.0019 seconds.) [ownerID: 1... - 2...]

```
SELECT * FROM `pet` WHERE petType = "Dog" ORDER BY ownerID;
```

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☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Options

				petName	ownerID	vetID	petType	breed	weight	age
<input type="checkbox"/>				Blicky Richard	1	1	Dog	Pug	29	4
<input type="checkbox"/>				Timbo Richard	1	1	Dog	Pug	30	5
<input type="checkbox"/>				Spooby Johnson	2	1	Dog	Great Dane	100	7