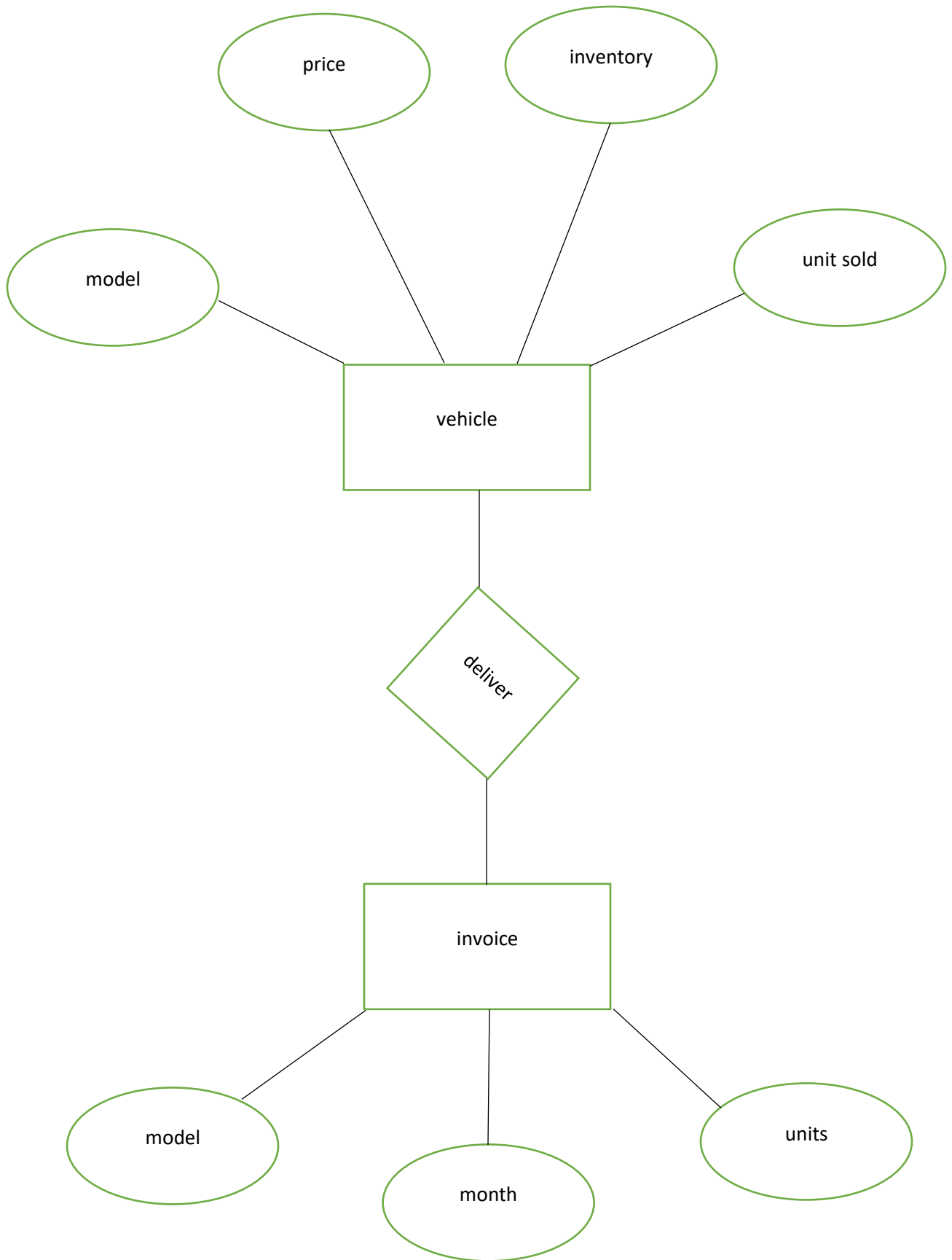


ERD



SQL Queries

```
create database Toyota
use Toyota
create table vehicle (model varchar(30) not null, price double, invoice double, unit_sold int
, inventory int);
create table toyota_worth (month varchar(11), corola_sold int, camry_sold int, CHR_sold int,
avalon_sold int, prius_sold int, tacoma_sold int, tundra_sold int); );
create table toyota_north_worth (month varchar(11), corola_sold int, camry_sold int, CHR_sold
int, avalon_sold int, prius_sold int, tacoma_sold int, tundra_sold int);
create table toyota_dallas (month varchar(11), corola_sold int, camry_sold int, CHR_sold int,
avalon_sold int, prius_sold int, tacoma_sold int, tundra_sold int);
create table toyota_lexus (month varchar(11), corola_sold int, camry_sold int, CHR_sold int,
avalon_sold int, prius_sold int, tacoma_sold int, tundra_sold int);

insert into vehicle values ("Corolla", 18218, 17000, 4, 1000);
insert into vehicle values ("Camry", 23343, 22000, 4, 1000);
insert into vehicle values ("Avalon", 31524, 28200, 4, 1000);
insert into vehicle values ("C-HR", 19605, 16750, 6, 1200);
insert into vehicle values ("Prius", 23299, 21100, 4, 1200);
insert into vehicle values ("Tacoma", 26055, 24000, 5, 1100);
insert into vehicle values ("Tundra", 33483, 30000, 6, 1300);
```

Questions

- ❖ **How much revenue did the Camry bring to Lexus of Commerce for February?**

$$\begin{aligned} \text{Revenue} &= \text{sales} * \text{sales price} \\ &= 2 * \$23,343 \\ &= \$46,684 \end{aligned}$$

- ❖ **What is the total revenue for the year?**

CAR	REVENUE GENERATED
COROLLA	39 * 18218 = \$ 3,918,218
CAMRY	13 * 23343 = \$ 304,642
C-HR	63 * 31524 = \$ 1,986,012
AVALON	48 * 19605 = \$ 941,040
PRIUS	38 * 26055 = \$ 885,362
TACOMA	47 * 26055 = \$ 1,224,584
TUNDRA	51 * 33483 = \$ 1,707,633

$$\text{Net Revenue} = \$ 10,967,491$$

- ❖ **What is the gross profit for the year?**

$$\begin{aligned} \text{Profit} &= \text{revenue} - \text{cost of sold cars} \\ &= \$ 10,967,491 - 6,989,400 \\ &= \$ 3,978,091 \end{aligned}$$

- ❖ **How much revenue did each car provide for the year?**

Car Revenue

<i>Corolla</i>	39 * 18218 = \$ 3,918,218
<i>Camry</i>	13 * 23343 = \$ 304,642
<i>C-HR</i>	63 * 31524 = \$ 1,986,012
<i>Avalon</i>	48 * 19605 = \$ 941,040
<i>Prius</i>	38 * 26055 = \$ 885,362
<i>Tacoma</i>	47 * 26055 = \$ 1,224,584
<i>Tundra</i>	51 * 33483 = \$ 1,707,633

- ❖ **What is the final inventory of the Tacoma?**

$$\begin{aligned} \text{Final inventory} &= 1300 - 51 \\ &= 1294 \end{aligned}$$

- ❖ **If the retail price of the Prius increases by 10%, what is the gross profit margin?**

$$10\% \text{ of } 26055 = 2605.5$$

$$\text{New retail price} = \$ 26055 + \$ 2605.5 = \$ 28,660.5$$

$$\text{Gross profit margin} = [(47 * 286,605.5) - (47 * 24,000)] / (47 * 286,605.5) \\ = 6.14$$

- ❖ **How many vehicles were ordered in January?**

$$\text{Vehicle ordered in January 2019} = 23$$

- ❖ **What is the revenue per year per location?**

↪ **Revenue at Toyota Fort Worth**

$$= \$ 455450 + \$ 116715 + \$ 1324008 + \$ 1039065 + \$ 489279 + \$ 208446 + \$ 368313 \\ = \$ 4,001,270$$

↪ **Revenue at Toyota North Fort Worth**

$$= \$ 91060 + \$ 315240 + \$ 781650 + \$ 1138422 \\ = \$ 2,326,372$$

↪ **Revenue at Toyota Dallas**

$$= \$ 54654 + \$ 117630 + \$ 157620 + \$ 116495 + \$ 100449 \\ = \$ 546,848$$

↪ **Revenue at Lexus of Commerce**

$$= \$ 91090 + \$ 186744 + \$ 315240 + \$ 279588 + \$ 234495 + \$ 100449 \\ = \$ 1,207,606$$

The END