schema entità-relazione del database
modello logico del database
query sql:

1. i nomi dei brand

```
select brand_name from production.brands
```

	brand_name
1	Electra
2	Haro
3	Heller
4	Pure Cycles
5	Ritchey
6	Strider
7	Sun Bicycles
8	Surly
9	Trek

2. i nomi dei prodotti con il brand

```
select product_name, brand_name
from production.products
inner join production.brands
on production.brands.brand_id = production.products.brand_id
```

	product_name	brand_name
1	Trek 820 - 2016	Trek
2	Ritchey Timberwolf Frameset - 2016	Ritchey
3	Surly Wednesday Frameset - 2016	Surly
4	Trek Fuel EX 8 29 - 2016	Trek
5	Heller Shagamaw Frame - 2016	Heller
6	Surly Ice Cream Truck Frameset - 2016	Surly
7	Trek Slash 8 27.5 - 2016	Trek
8	Trek Remedy 29 Carbon Frameset - 2016	Trek
9	Trek Conduit+ - 2016	Trek
10	Surly Straggler - 2016	Surly
11	Surly Straggler 650b - 2016	Surly
12	Electra Townie Original 21D - 2016	Electra
13	Electra Cruiser 1 (24-Inch) - 2016	Electra
14	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	Electra
15	Electra Moto 1 - 2016	Electra
16	Electra Townie Original 7D EQ - 2016	Electra
17	Pure Cycles Vine 8-Speed - 2016	Pure Cycles
18	Pure Cycles Western 3-Speed - Women's - 2015/2016	Pure Cycles
19	Pure Cycles William 3-Speed - 2016	Pure Cycles

3. i nomi dei prodotti con il brand e la categoria a cui appartiene il prodotto

```
select product_name, brand_name, category_name
from production.products
inner join production.brands
on production.brands.brand_id = production.products.brand_id
inner join production.categories
on production.categories.category_id = production.products.category_id
```

	product_name	brand_name	category_name
1	Trek 820 - 2016	Trek	Mountain Bikes
2	Ritchey Timberwolf Frameset - 2016	Ritchey	Mountain Bikes
3	Surly Wednesday Frameset - 2016	Surly	Mountain Bikes
4	Trek Fuel EX 8 29 - 2016	Trek	Mountain Bikes
5	Heller Shagamaw Frame - 2016	Heller	Mountain Bikes
6	Surly Ice Cream Truck Frameset - 2016	Surly	Mountain Bikes
7	Trek Slash 8 27.5 - 2016	Trek	Mountain Bikes
8	Trek Remedy 29 Carbon Frameset - 2016	Trek	Mountain Bikes
9	Trek Conduit+ - 2016	Trek	Electric Bikes
10	Surly Straggler - 2016	Surly	Cyclocross Bicycles
11	Surly Straggler 650b - 2016	Surly	Cyclocross Bicycles
12	Electra Townie Original 21D - 2016	Electra	Cruisers Bicycles
13	Electra Cruiser 1 (24-Inch) - 2016	Electra	Cruisers Bicycles
14	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	Electra	Cruisers Bicycles
15	Electra Moto 1 - 2016	Electra	Cruisers Bicycles
16	Electra Townie Original 7D EQ - 2016	Electra	Cruisers Bicycles
17	Pure Cycles Vine 8-Speed - 2016	Pure Cycles	Cruisers Bicycles
18	Pure Cycles Western 3-Speed - Women's - 2015/2016	Pure Cycles	Cruisers Bicycles
19	Pure Cycles William 3-Speed - 2016	Pure Cycles	Cruisers Bicycles

4. i nomi dei prodotti con le quantità disponibili in stock

```sql
select product_name, quantity
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
```

	product_name	quantity
1	Trek 820 - 2016	27
2	Trek 820 - 2016	14
3	Trek 820 - 2016	14
4	Ritchey Timberwolf Frameset - 2016	24
5	Ritchey Timberwolf Frameset - 2016	16
6	Ritchey Timberwolf Frameset - 2016	5
7	Surly Wednesday Frameset - 2016	6
8	Surly Wednesday Frameset - 2016	28
9	Surly Wednesday Frameset - 2016	0
10	Trek Fuel EX 8 29 - 2016	11
11	Trek Fuel EX 8 29 - 2016	2
12	Trek Fuel EX 8 29 - 2016	23
13	Heller Shagamaw Frame - 2016	22
14	Heller Shagamaw Frame - 2016	1
15	Heller Shagamaw Frame - 2016	3
16	Surly Ice Cream Truck Frameset - 2016	27
17	Surly Ice Cream Truck Frameset - 2016	11
18	Surly Ice Cream Truck Frameset - 2016	0
19	Trek Slash 8 27.5 - 2016	8

5. i nomi dei prodotti che hanno uno stock superiore a 10

```sql
select product_name, quantity
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
where production.stocks.quantity > 10
```

	product_name	quantity
1	Trek 820 - 2016	27
2	Surly Wednesday Frameset - 2016	28
3	Surly Ice Cream Truck Frameset - 2016	27
4	Surly Straggler 650b - 2016	30
5	Electra Townie Original 21D - 2016	30
6	Electra Townie Original 7D EQ - Women's - 2016	26
7	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	29
8	Electra Townie Original 7D EQ - 2016	27
9	Trek X-Caliber 8 - 2017	29
10	Surly Ice Cream Truck Frameset - 2017	30
11	Surly Troll Frameset - 2017	26
12	Surly Troll Frameset - 2017	28
13	Haro Flightline One ST - 2017	30
14	Trek Stache 5 - 2017	28
15	Trek Fuel EX 9.8 27.5 Plus - 2017	26
16	Haro SR 1.1 - 2017	26
17	Trek Silque SLR 7 Women's - 2017	29
18	Trek Emonda S 5 - 2017	27
19	Trek Madone 9.2 - 2017	27

6. i nomi dei prodotti che hanno uno stock compreso tra 5 e 10

```
select product_name, quantity
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
where production.stocks.quantity between 5 and 10
```

	product_name	quantity
1	Ritchey Timberwolf Frameset - 2016	5
2	Surly Wednesday Frameset - 2016	6
3	Trek Slash 8 27.5 - 2016	8
4	Trek Slash 8 27.5 - 2016	8
5	Surly Straggler 650b - 2016	8
6	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	8
7	Electra Moto 1 - 2016	6
8	Pure Cycles Western 3-Speed - Women's - 2015/2016	5
9	Electra Cruiser 1 (24-Inch) - 2016	8
10	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	8
11	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	9
12	Electra Townie Original 21D - 2016	10
13	Electra Townie Original 7D - 2015/2016	10
14	Surly Big Dummy Frameset - 2017	10
15	Surly Wednesday - 2017	10
16	Surly Wednesday - 2017	10
17	Surly Wednesday Frameset - 2017	8
18	Surly Wednesday Frameset - 2017	10
19	Trek Session DH 27.5 Carbon Frameset - 2017	6

7. i nomi dei prodotti che hanno uno stock compreso tra 5 e 10 e che costano meno di 300 $

```
select product_name, quantity, list_price
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
where production.products.list_price <300 and
production.stocks.quantity between 5 and 10
```

Risultati | Messaggi

	product_name	quantity	list_price
1	Electra Girl's Hawaii 1 (16-inch) - 2015/2016	8	269.99
2	Electra Cruiser 1 (24-Inch) - 2016	8	269.99
3	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	8	299.99
4	Electra Girl's Hawaii 1 (20-inch) - 2015/2016	9	299.99
5	Sun Bicycles Revolutions 24 - Girl's - 2017	8	250.99
6	Sun Bicycles Revolutions 24 - Girl's - 2017	6	250.99
7	Trek Precaliber 12 Girls - 2017	8	189.99
8	Trek Precaliber 12 Girls - 2017	7	189.99
9	Trek Precaliber 16 Boys - 2017	9	209.99
10	Trek Precaliber 16 Boys - 2017	8	209.99
11	Trek Precaliber 16 Girls - 2017	9	209.99
12	Haro Shredder Pro 20 - 2017	6	249.99
13	Electra Girl's Hawaii 1 16" - 2017	10	299.99
14	Electra Cruiser 1 - 2016/2017/2018	10	269.99
15	Electra Cruiser 1 - 2016/2017/2018	10	269.99
16	Electra Cruiser 1 Ladies' - 2018	6	269.99
17	Trek MT 201 - 2018	8	249.99
18	Trek MT 201 - 2018	6	249.99
19	Strider Sport 16 - 2018	7	249.99

8. i nomi dei prodotti che hanno la parola "Cruiser" nel nome

```
select product_name, quantity
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
where production.products.product_name like '%cruiser%'
```

	product_name	quantity
1	Electra Cruiser 1 (24-Inch) - 2016	13
2	Electra Cruiser 1 (24-Inch) - 2016	24
3	Electra Cruiser Lux 1 - 2017	9
4	Electra Cruiser Lux Fat Tire 1 Ladies - 2017	23
5	Electra Cruiser 1 - 2016/2017/2018	14
6	Electra Cruiser 7D - 2016/2017/2018	27
7	Electra Cruiser 1 Ladies' - 2018	4
8	Electra Cruiser 7D Ladies' - 2016/2018	7
9	Electra Cruiser 1 Tall - 2016/2018	12
10	Electra Cruiser Lux 3i - 2018	3
11	Electra Cruiser Lux 7D - 2018	16
12	Electra Cruiser 7D (24-Inch) Ladies' - 2016/2018	19
13	Electra Cruiser 7D Tall - 2016/2018	22
14	Electra Cruiser Lux 1 - 2016/2018	27
15	Electra Cruiser Lux 1 Ladies' - 2018	7
16	Electra Cruiser Lux 3i Ladies' - 2018	25
17	Electra Cruiser Lux 7D Ladies' - 2018	5
18	Electra Cruiser Lux Fat Tire 7D - 2018	5
19	Electra Cruiser 7D (24-Inch) Ladies' - 2016/2018	11

9. i nomi dei prodotti che non hanno la parola "Cruiser" nel nome

```
select product_name, quantity
from production.products
inner join production.stocks
on production.products.product_id = production.stocks.product_id
where production.products.product_name not like '%cruiser%'
```

	product_name	quantity
1	Trek 820 - 2016	27
2	Trek 820 - 2016	14
3	Trek 820 - 2016	14
4	Ritchey Timberwolf Frameset - 2016	24
5	Ritchey Timberwolf Frameset - 2016	16
6	Ritchey Timberwolf Frameset - 2016	5
7	Surly Wednesday Frameset - 2016	6
8	Surly Wednesday Frameset - 2016	28
9	Surly Wednesday Frameset - 2016	0
10	Trek Fuel EX 8 29 - 2016	11
11	Trek Fuel EX 8 29 - 2016	2
12	Trek Fuel EX 8 29 - 2016	23
13	Heller Shagamaw Frame - 2016	22
14	Heller Shagamaw Frame - 2016	1
15	Heller Shagamaw Frame - 2016	3
16	Surly Ice Cream Truck Frameset - 2016	27
17	Surly Ice Cream Truck Frameset - 2016	11
18	Surly Ice Cream Truck Frameset - 2016	0
19	Trek Slash 8 27.5 - 2016	8