Querying Relational Databases Part 3 Notes

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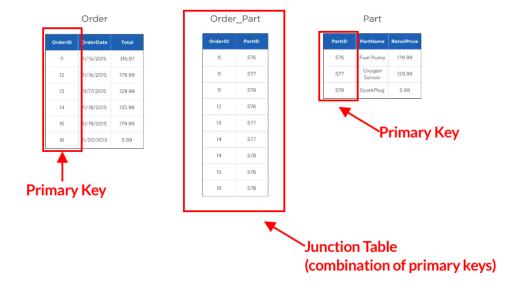
1 One to Many Relationships

- Is most common type of relationship
- Is case where there is one table with many foreignkeys and not the other
- Foreign Key is always the many side

Sale Table				Product Table		
SaleID	SaleDate	Amount	ProductID	ProductID	ProductName	SuggestedPrice
39835	11/15/2015	285.00	145	145	Flat Screen TV	325.00
39836	11/16/2015	300.00	145	146	Speaker Bar	120.00
39837	11/17/2015	325.00	145	147	Washing Machine	450.00
39838	11/18/2015	120.00	146			
39839	11/19/2015	120.00	146			
39840	11/20/2015	110.00	147			
				Th	ne many side	, Foreign k

2 Many to Many Relationships

- mean that a record in one table can relate to many other records in another table, and one record from the second table can also relate back to many records in the first table
- Creates a junction table between two tables
 - is a combination of two primary keys
 - junction table is not a third table (there are still 2 tables)



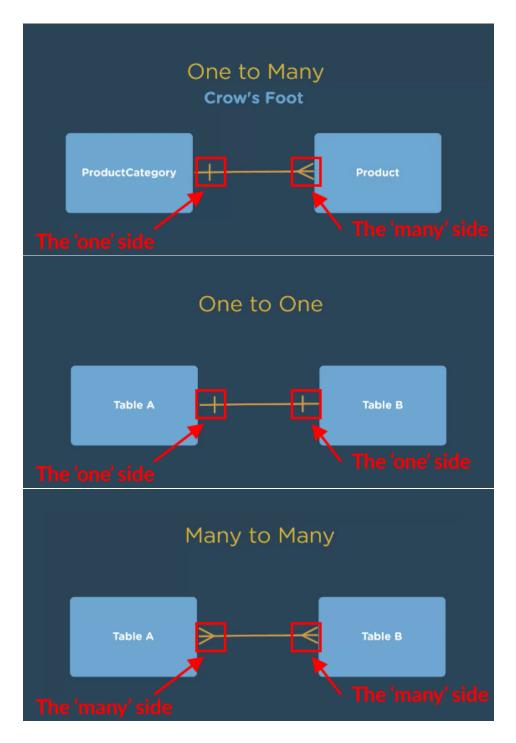
3 One to One Relationships

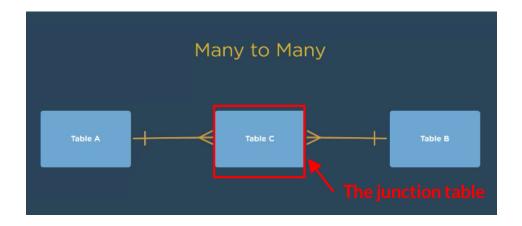
- Means that a row in one table can only relate to one row in the table on the other side of their relationship and vice versa
- Is least common relationship
- Is for boosting performance with infrequently used columns
- Is for working with 3rd party databases
 - to extend the existing database



4 Modeling Table Relationships

- Notations
 - This is really cool!!



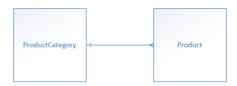


5 Quiz 1

- 1. Which relationship type is the most common in a relational database?
 - A. Many to Many
 - B. One to Many
 - C. One to One
 - D. One to Ten

Answer: B

2. In the diagram shown, this notation style is called:



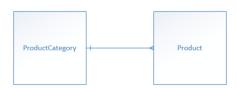
- A. Chen Notation
- B. Stick Figure Notation
- C. UML Notation
- D. Crow's Foot Notation

Answer: D

- 3. What do we do to handle a Many to Many relationship between tables during the design process?
 - A. Add a Foreign Key to the table on the left
 - B. Add a Foreign Key to the table on the right
 - C. Add a third table between the original two tables
 - D. Link the two tables with an extra index

Answer: C

4. In the diagram shown, what is the relationship between the two tables?



- A. Many to Many
- B. One to Many
- C. One to One

Answer: B

- 5. Which of the following is NOT a type of table relationship?
 - A. One to Many
 - B. Many to Many
 - C. One to One
 - D. Slim to None

Answer: D