Relationships

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- Relationships

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relationships tell you how much of the data from a foreign key field can be seen in the primary key column of the table the data is related to and vice versa

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2	12/2/2016	2	C_1
3	4/15/2017	3	D_1
4	5/24/2017	1	B_2
5	5/25/2017	4	B_2
6	6/6/2017	2	B_1
7	6/10/2017	4	A_2
8	6/13/2017	3	C_1
9	7/20/2017	1	A_1
10	8/11/2017	2	B_1

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customer_id	first_name	last_name	email_address	number_of_complaints
1	John	McKinley	john.mackinley@365careers.com	0
2	Elizabeth	McFarlane	e.mcfarlane@365careers.com	2
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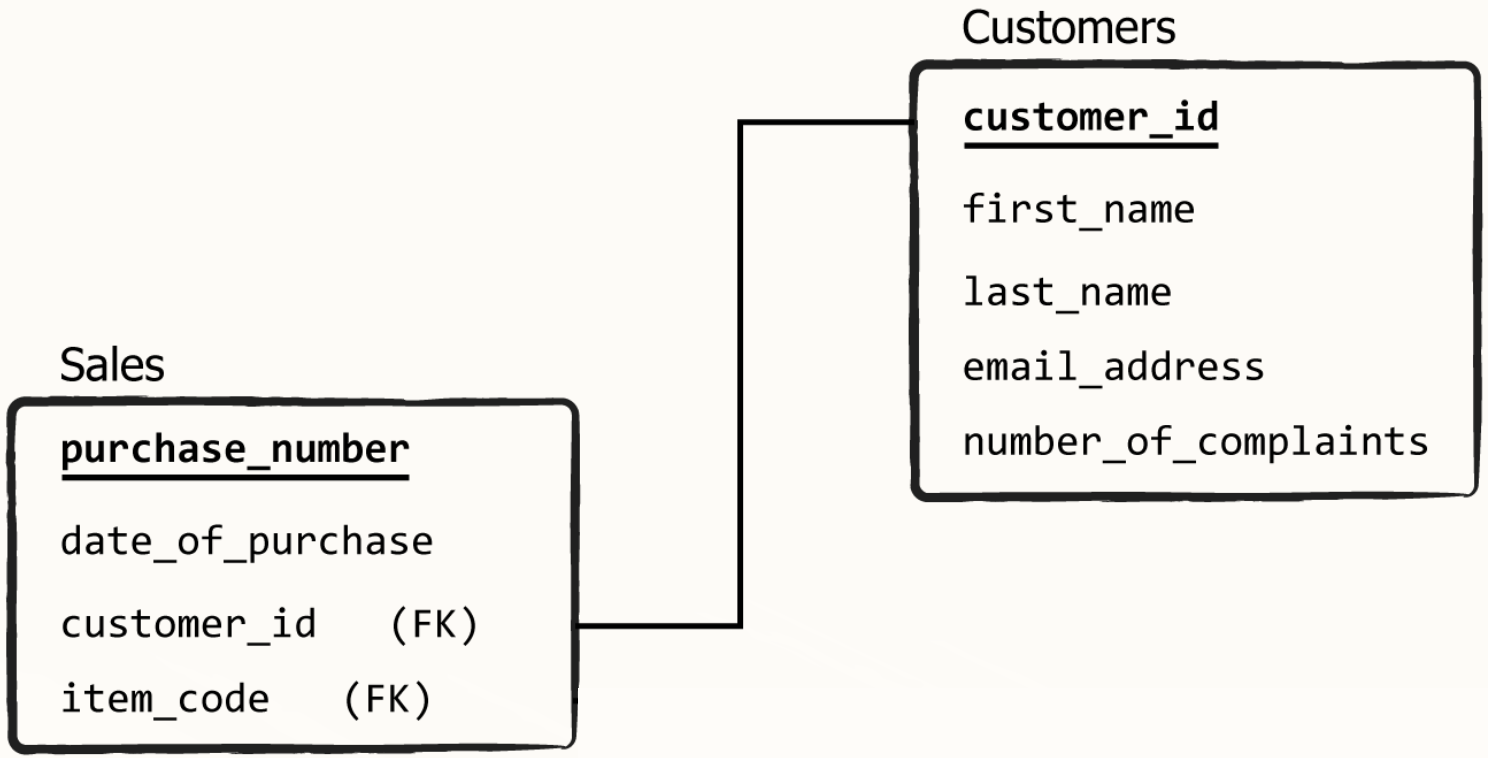
unique values

one-to-many type of relationship

one value from the *customer_id* column under the "Customers" table can be found **many** times in the *customer_id* column in the "Sales" table.

Relationships

Relationships



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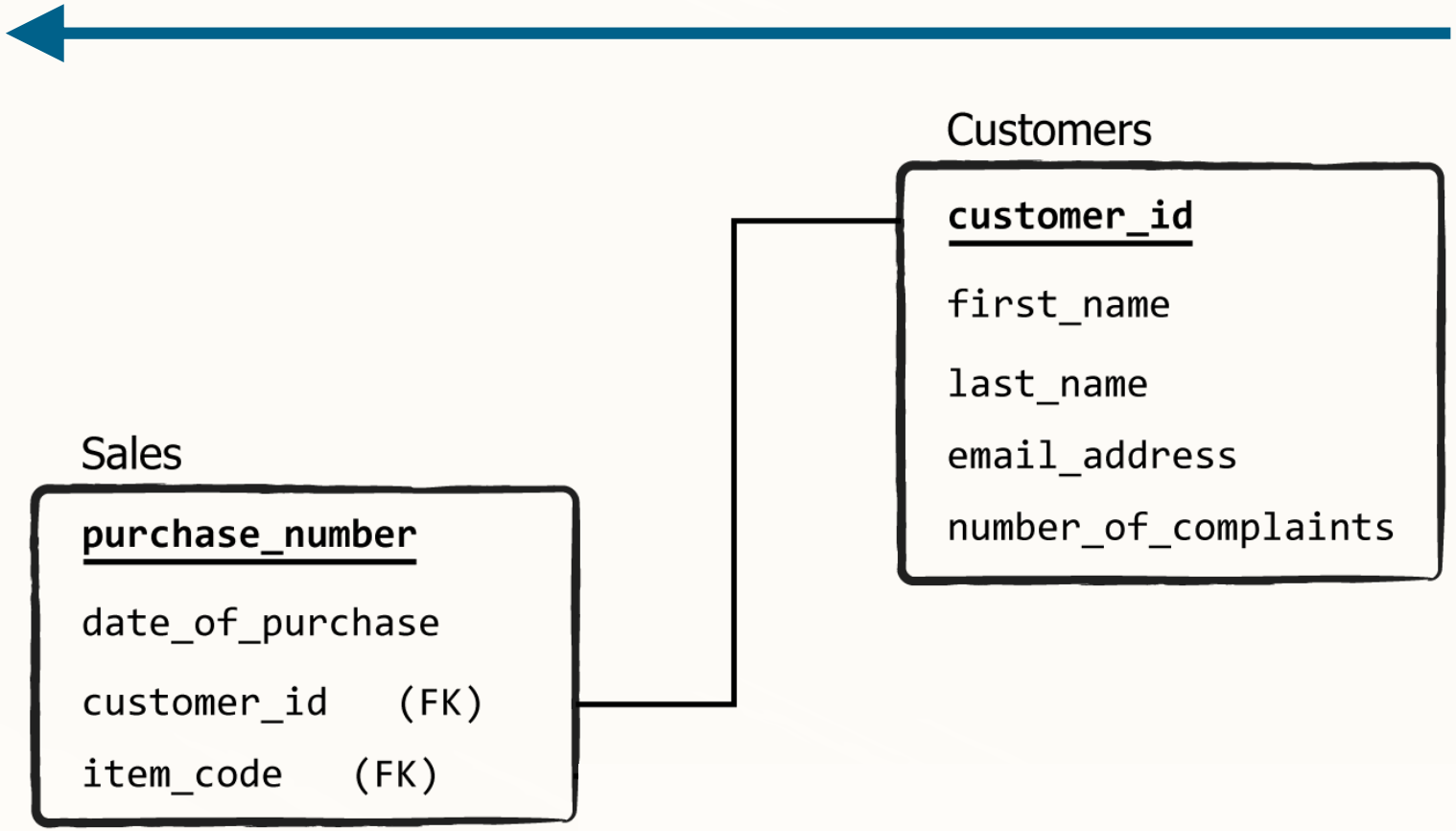

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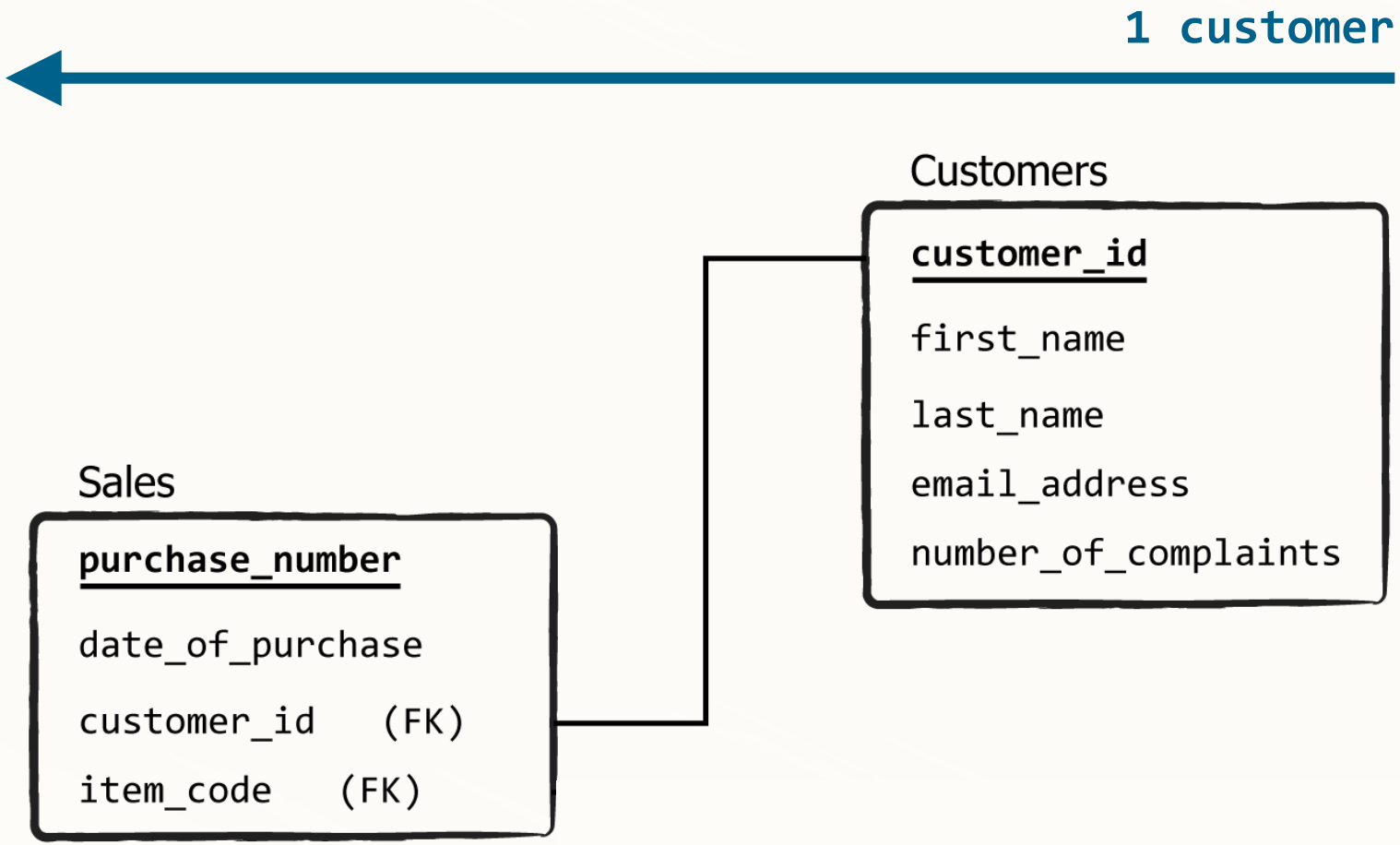

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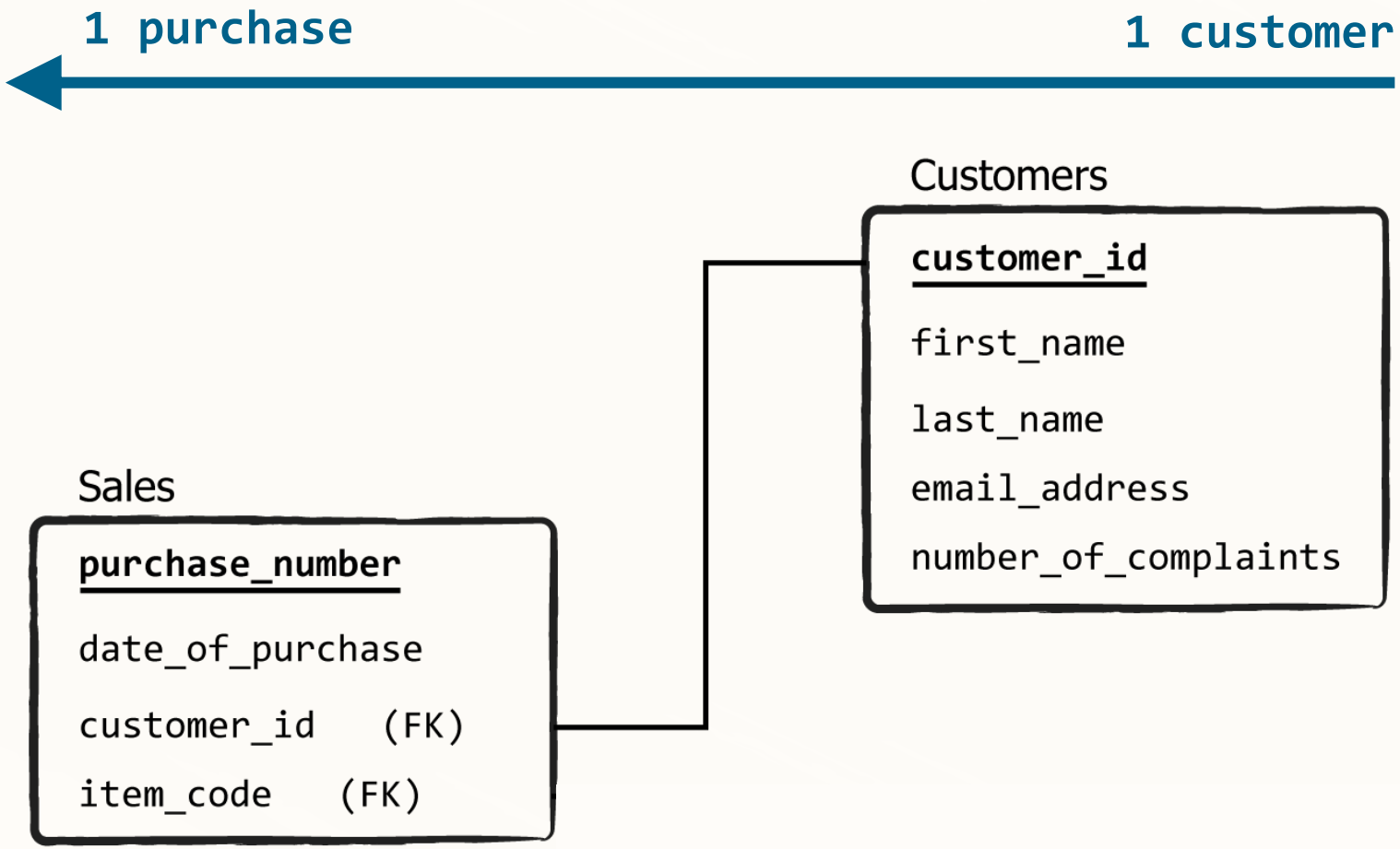

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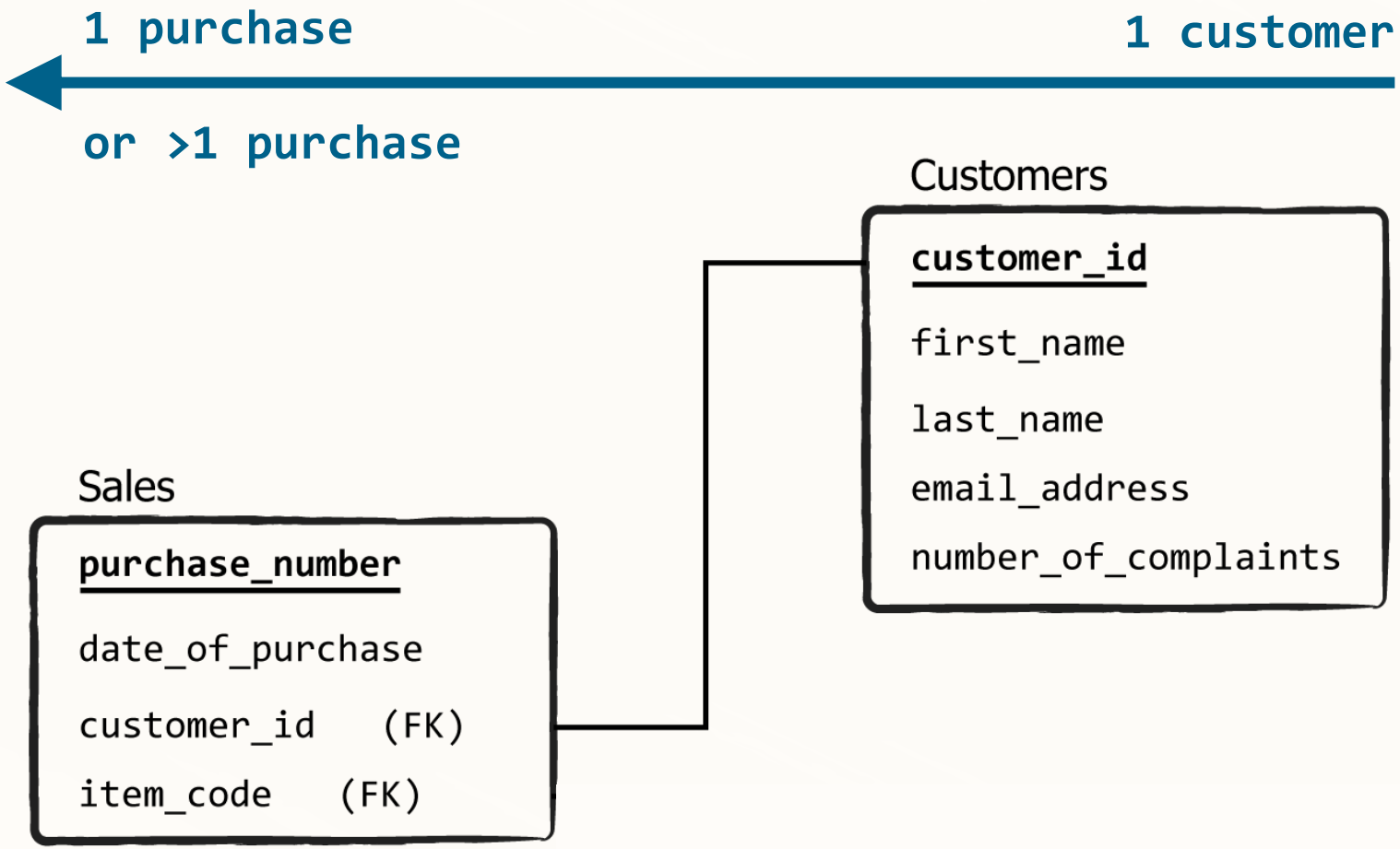

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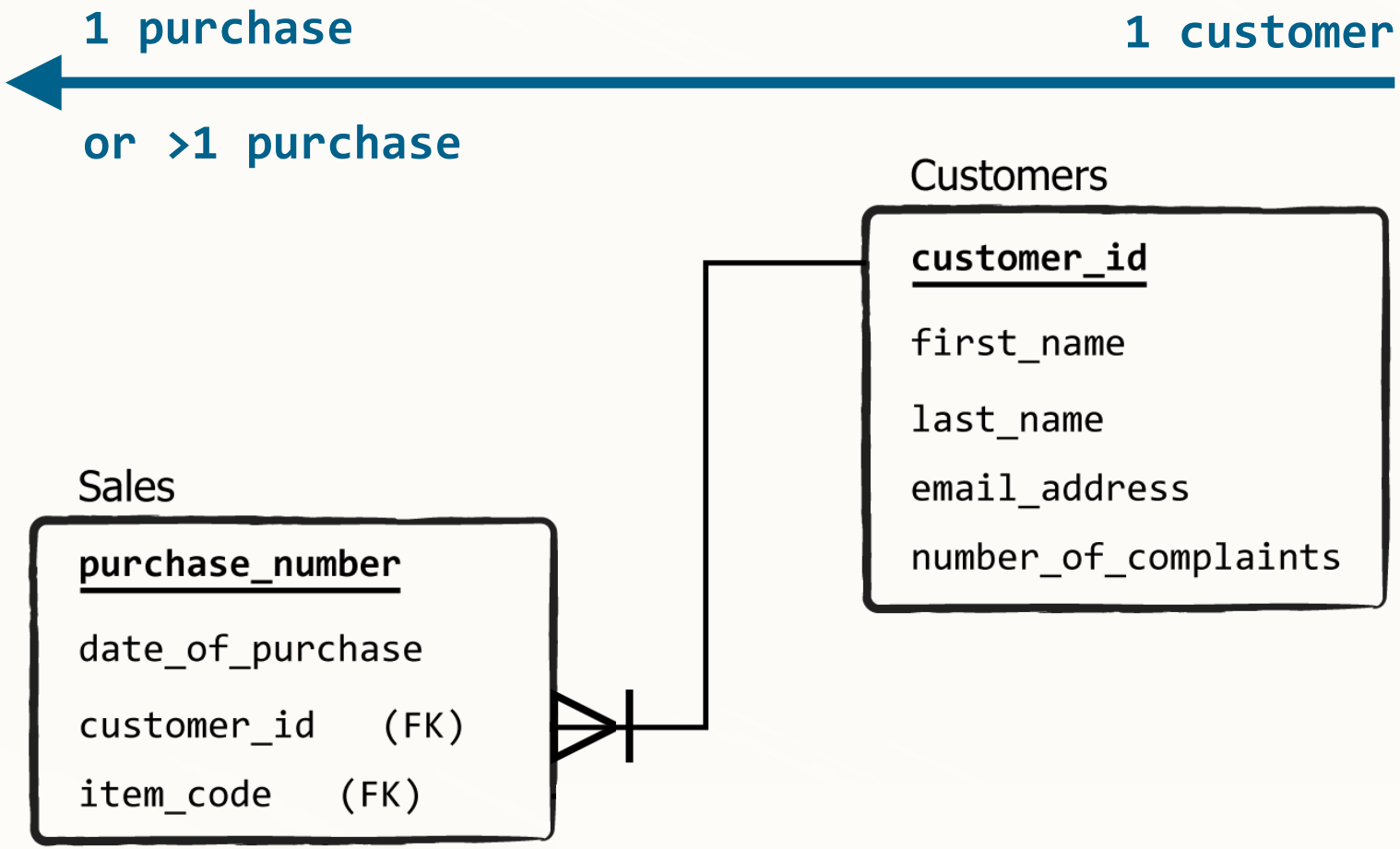

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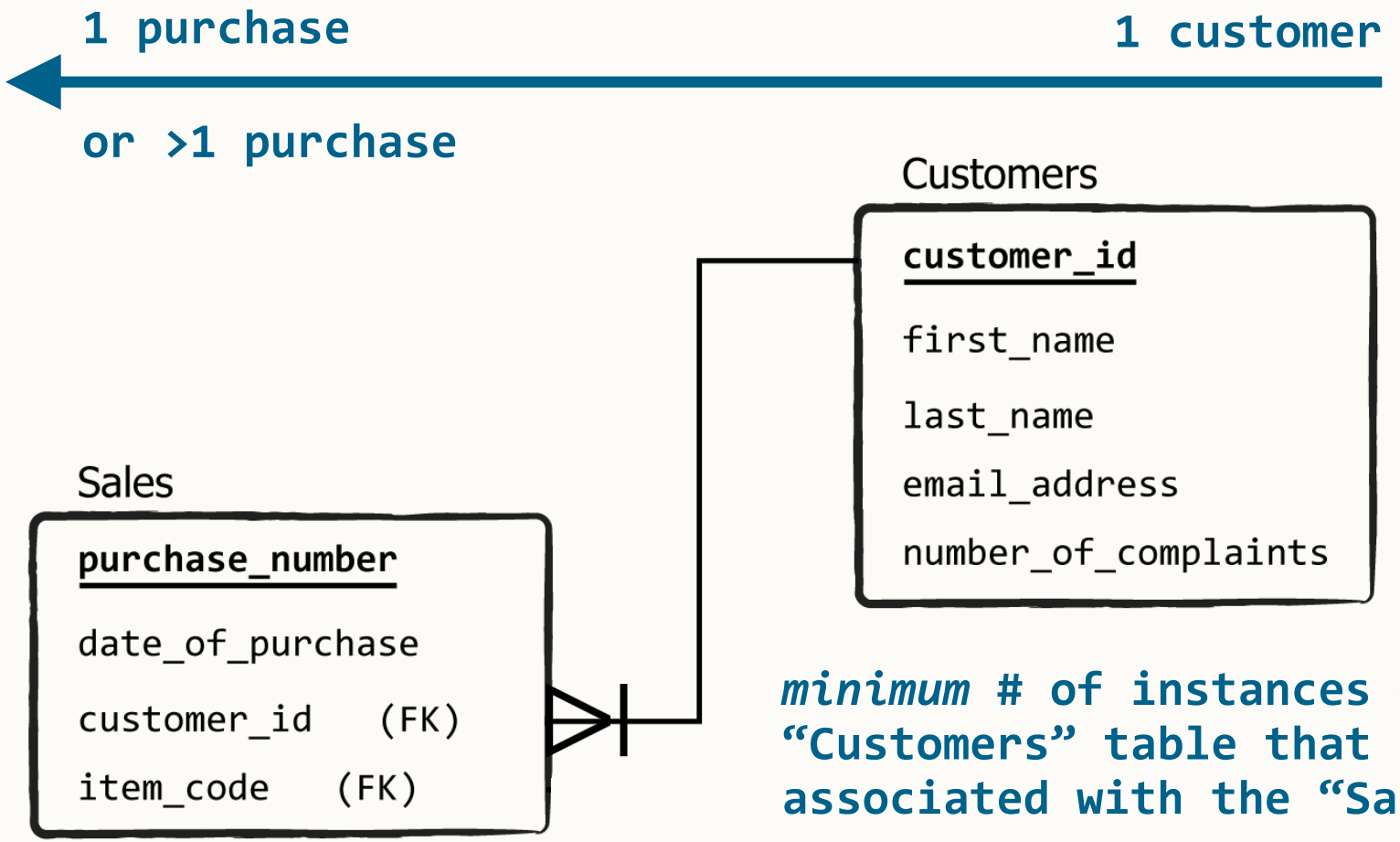
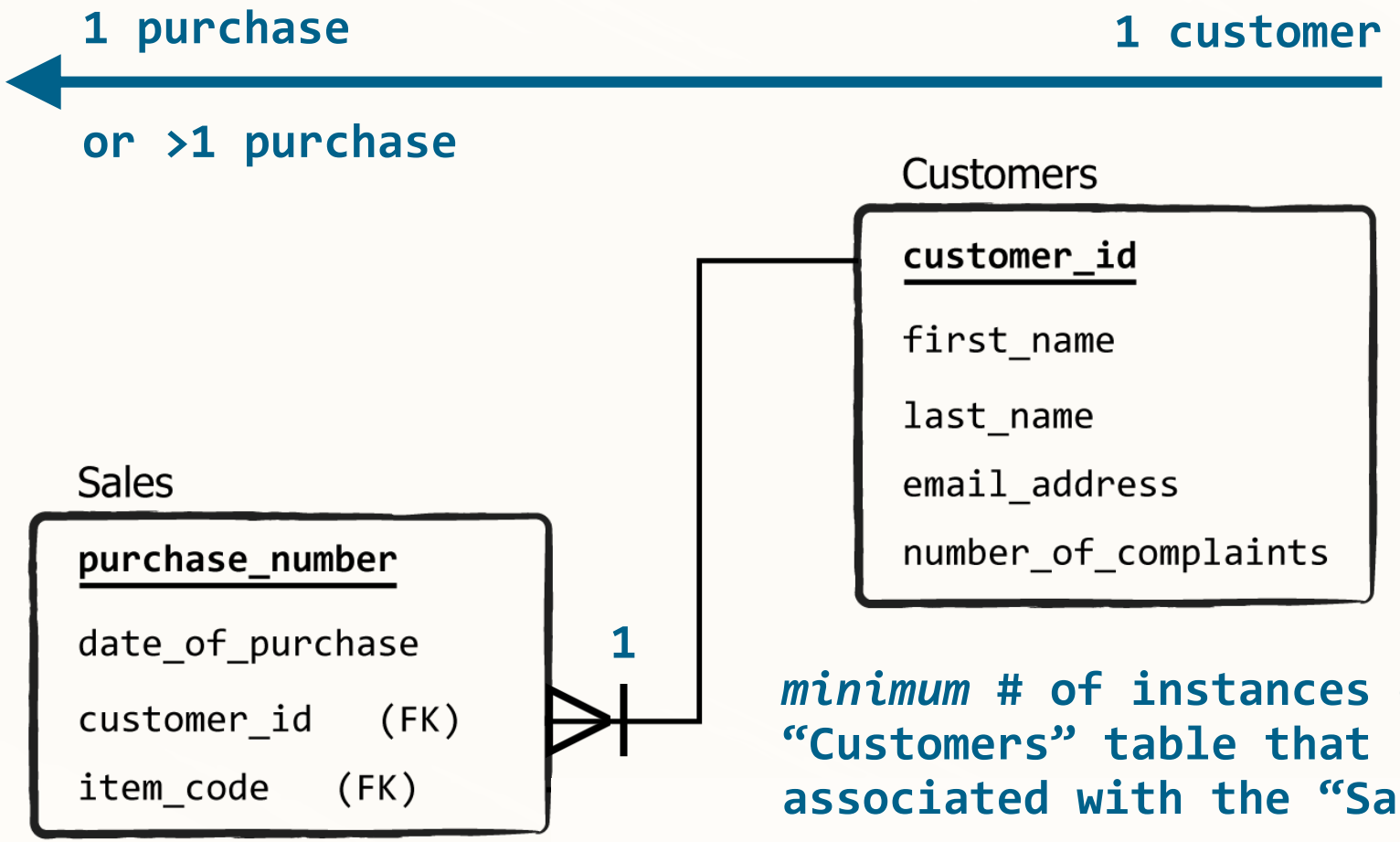


minimum # of instances of the "Customers" table that *can be* associated with the "Sales" entity

Relationships



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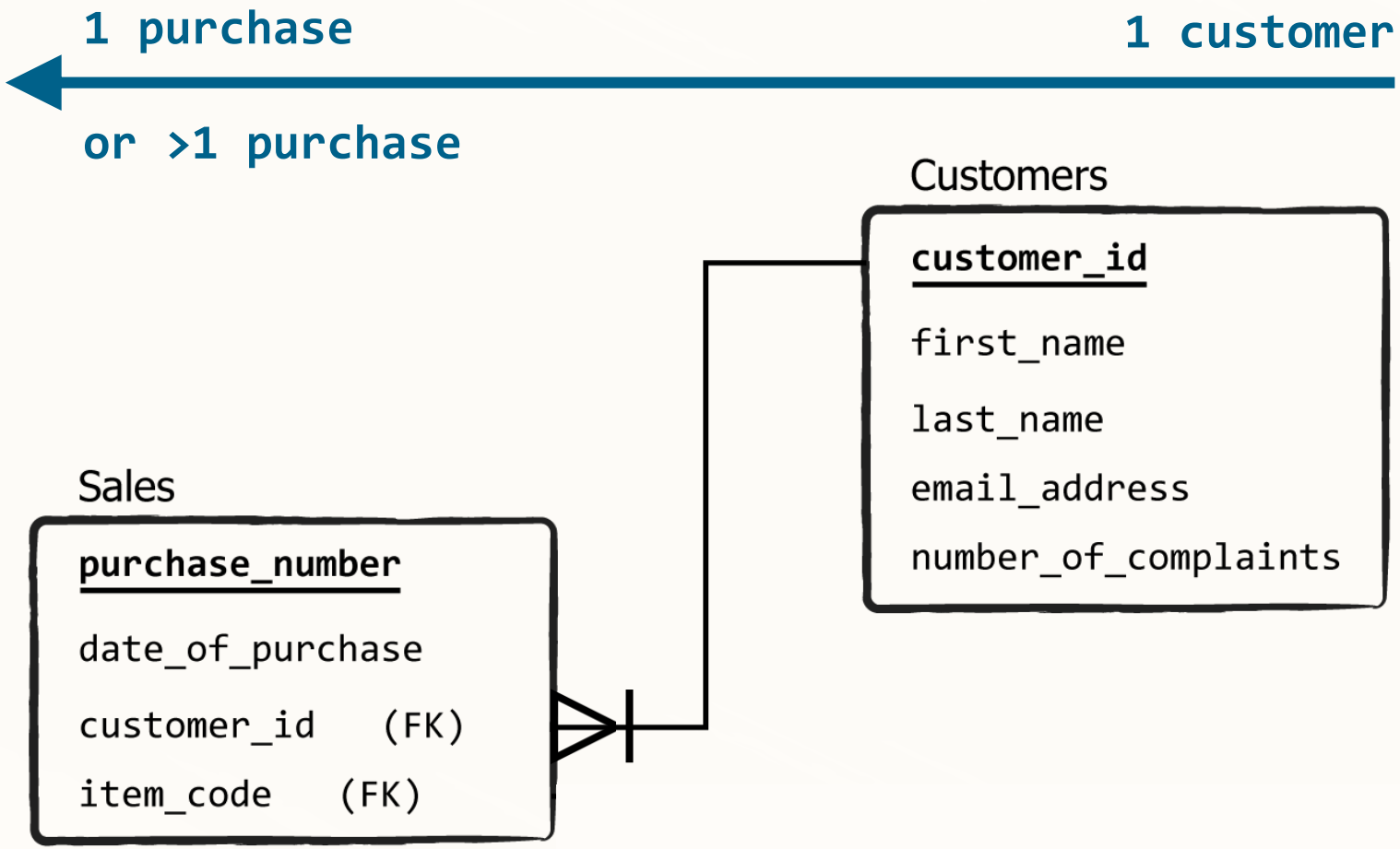

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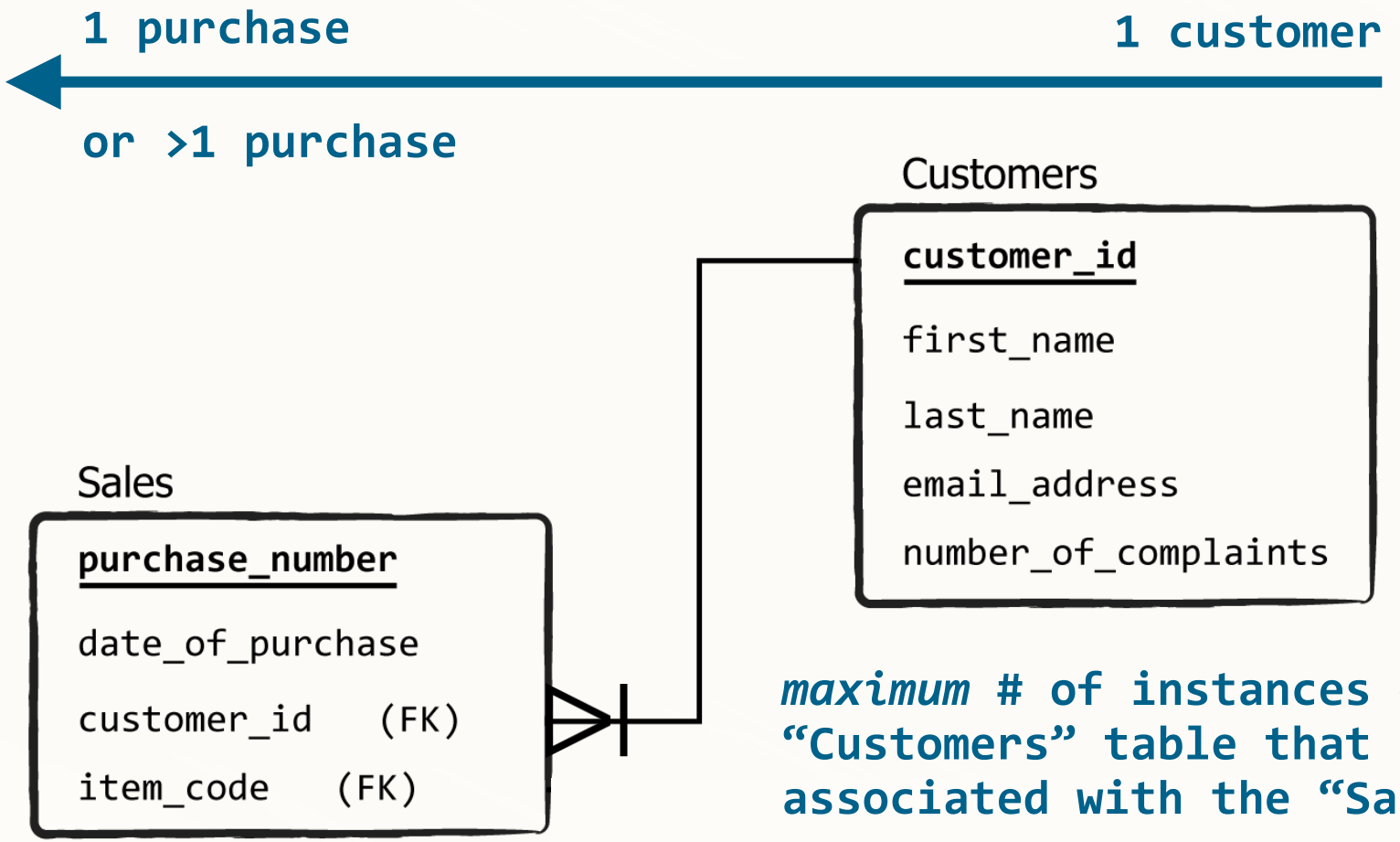

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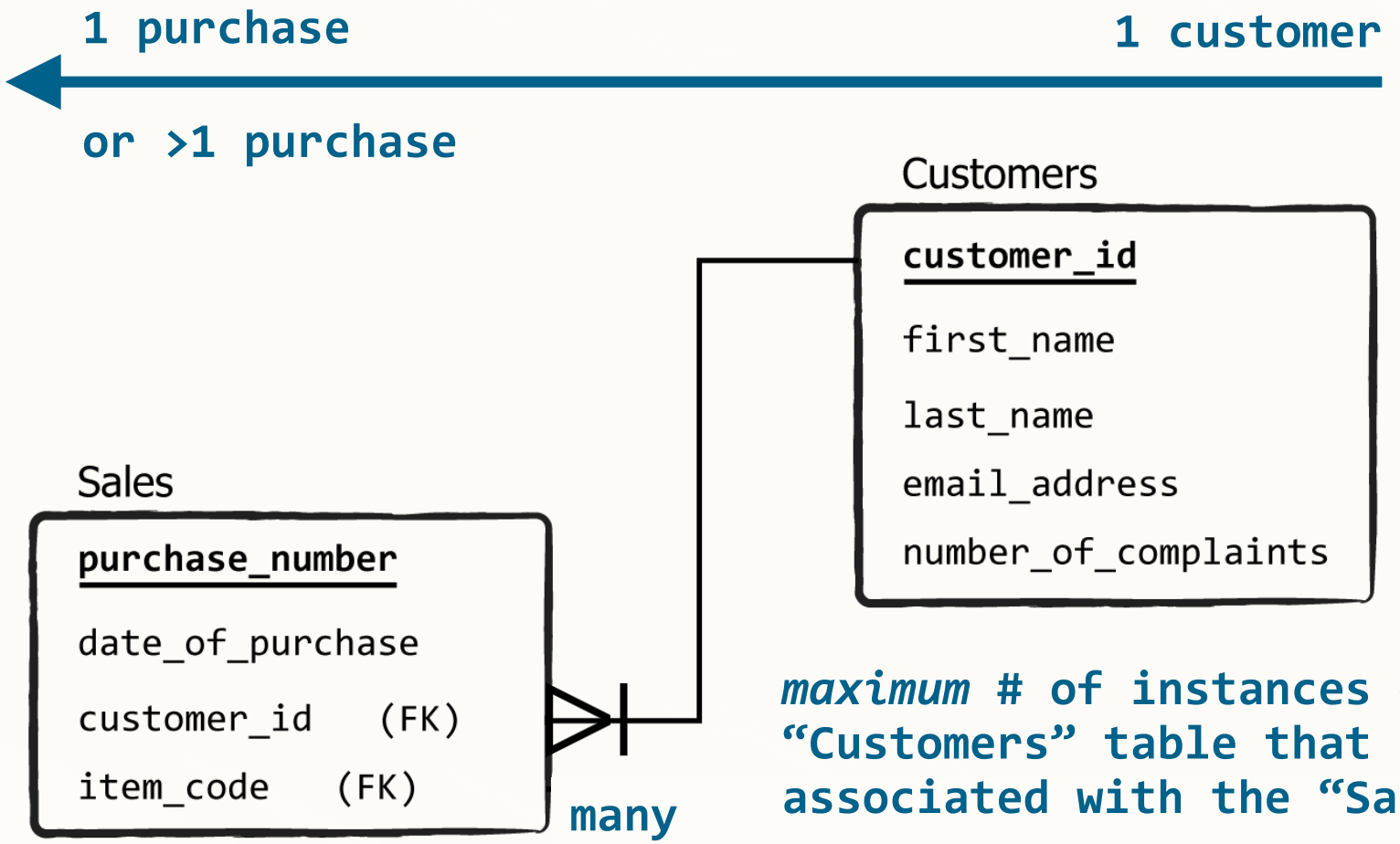

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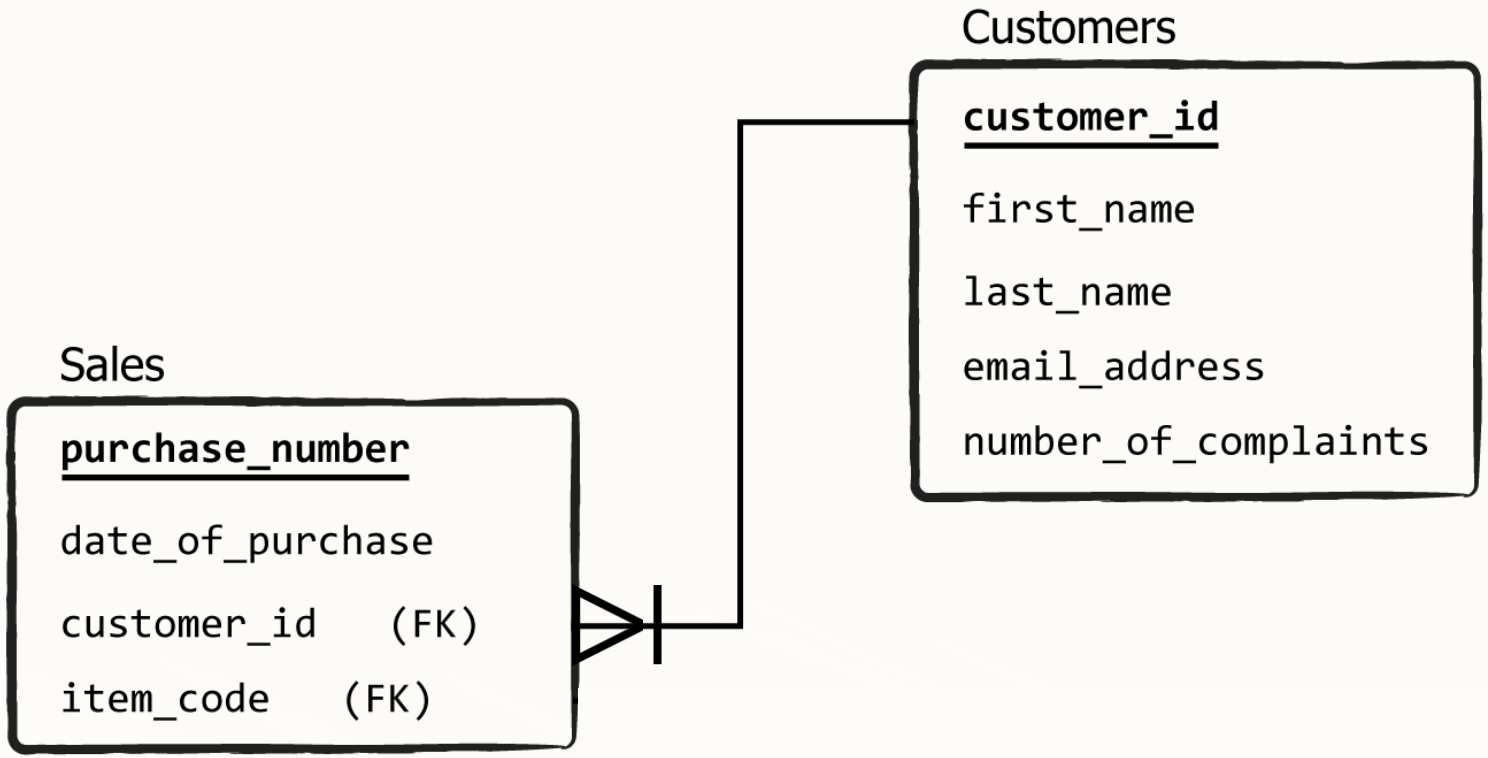

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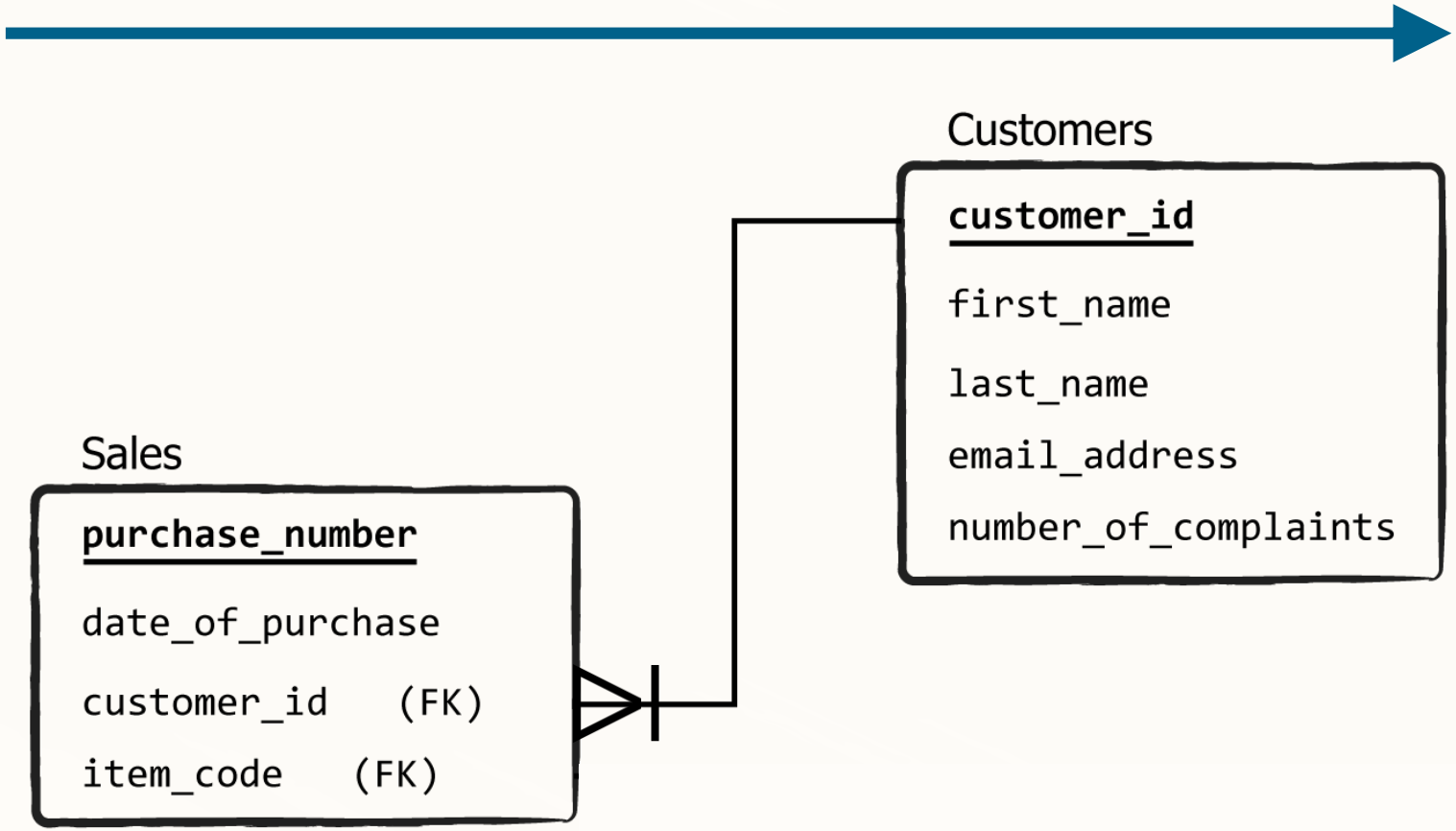
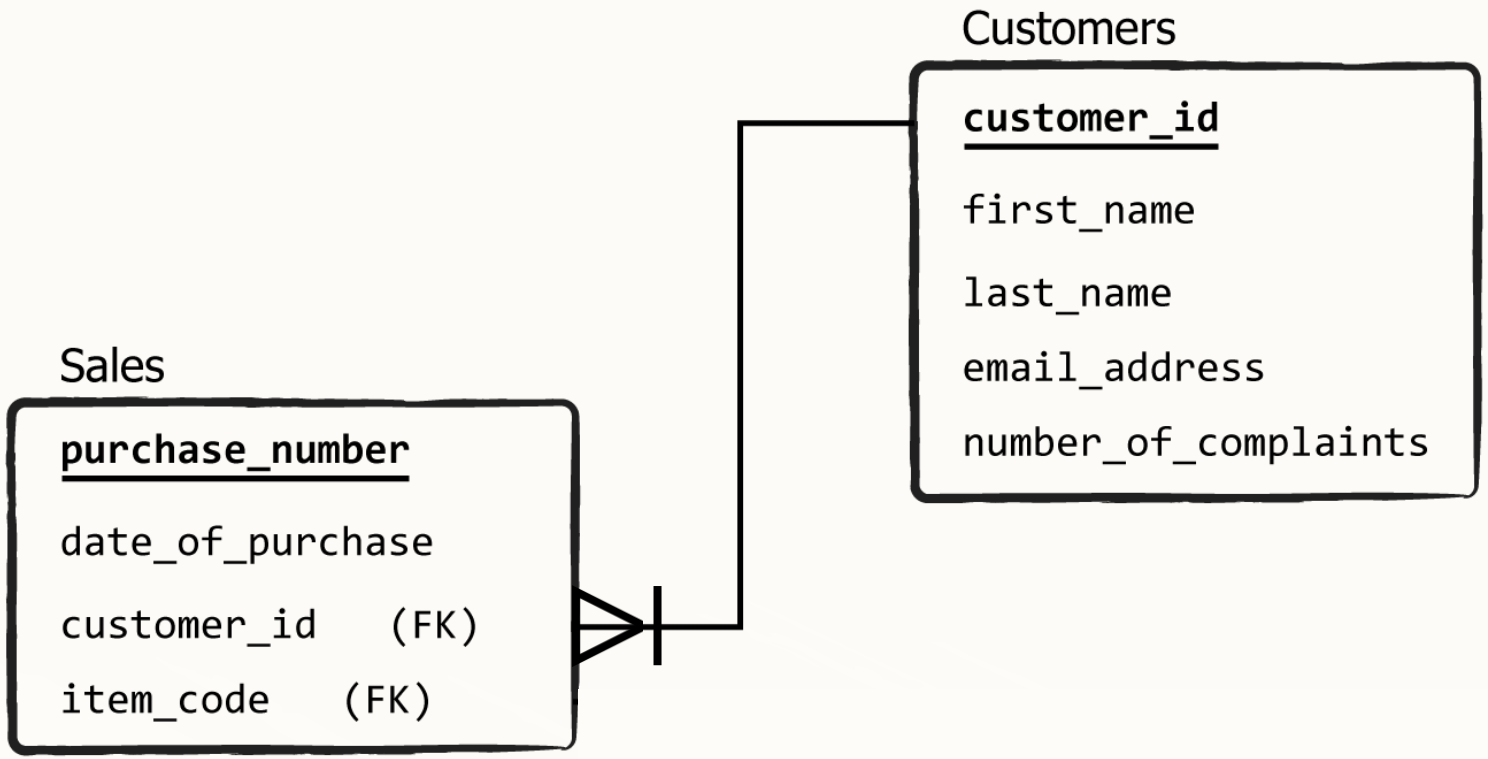


Relationships

1 purchase



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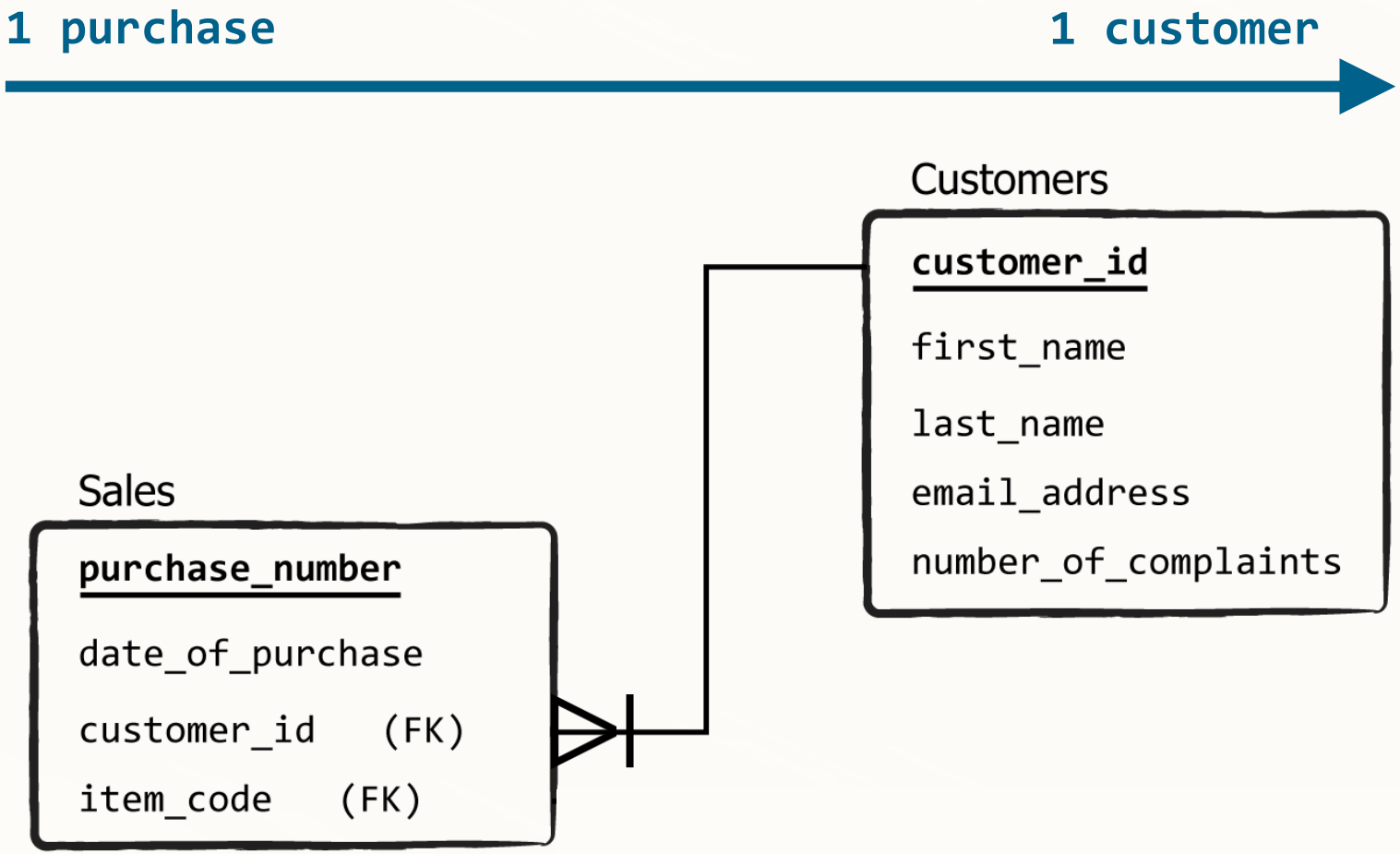

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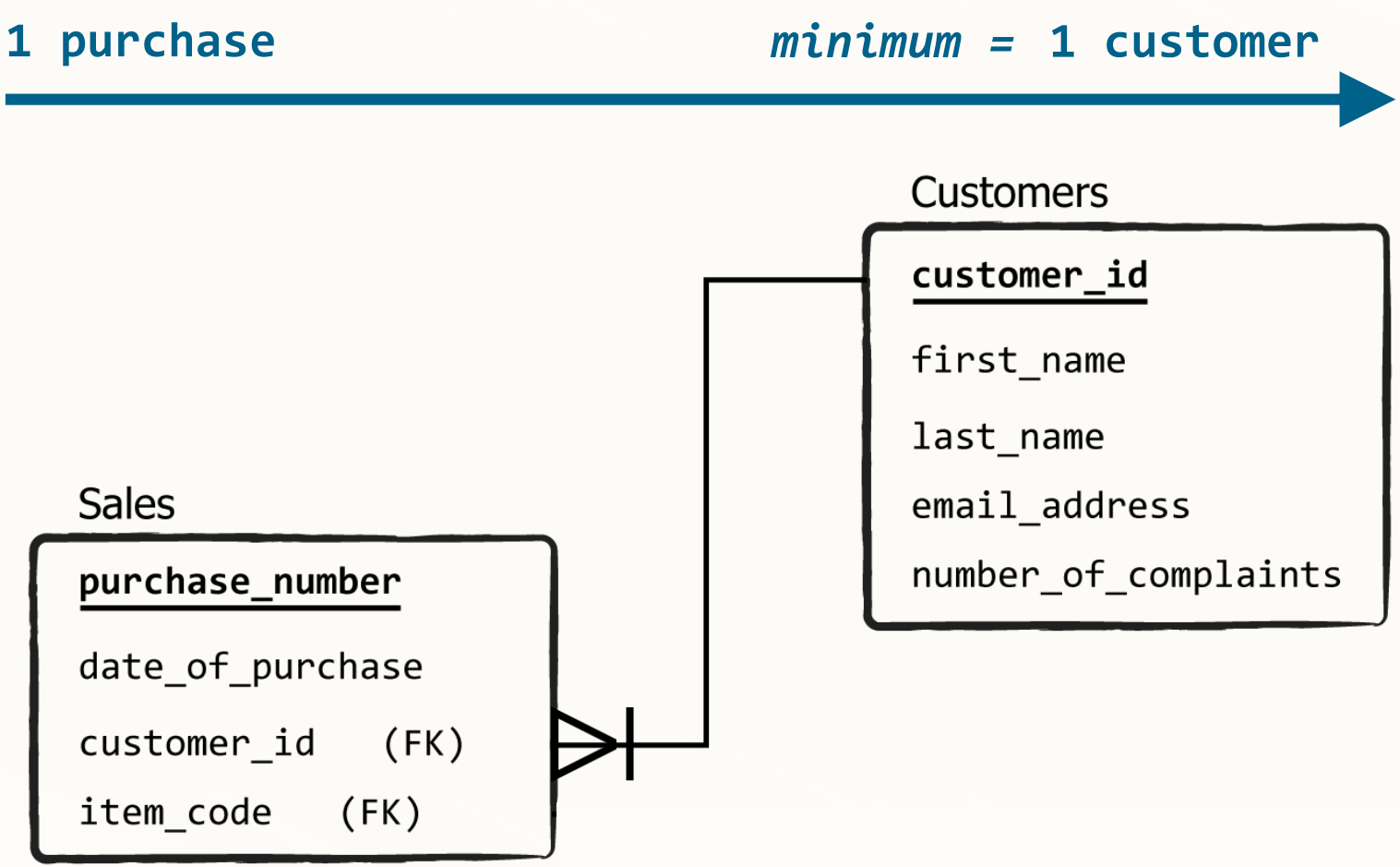

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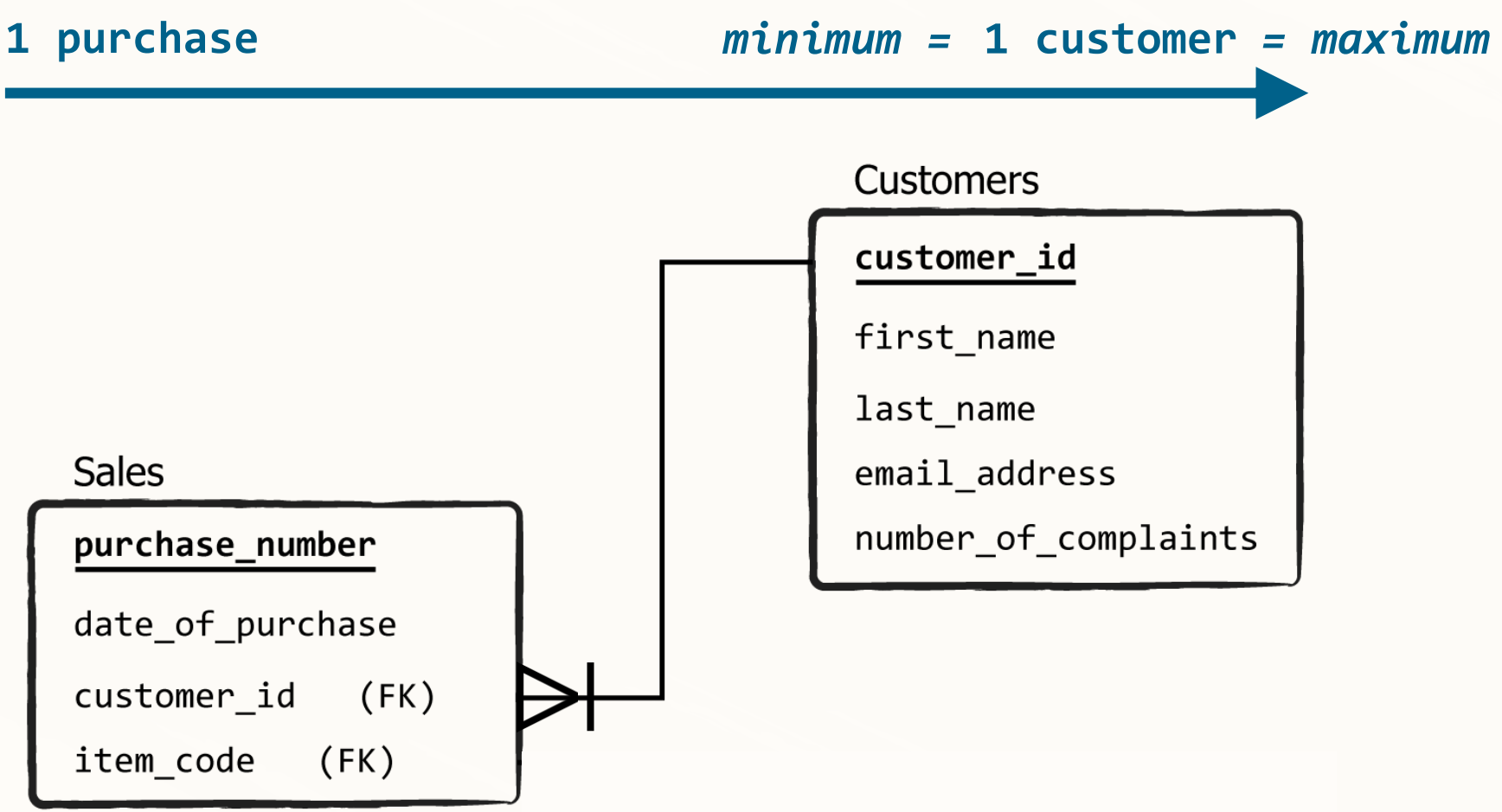
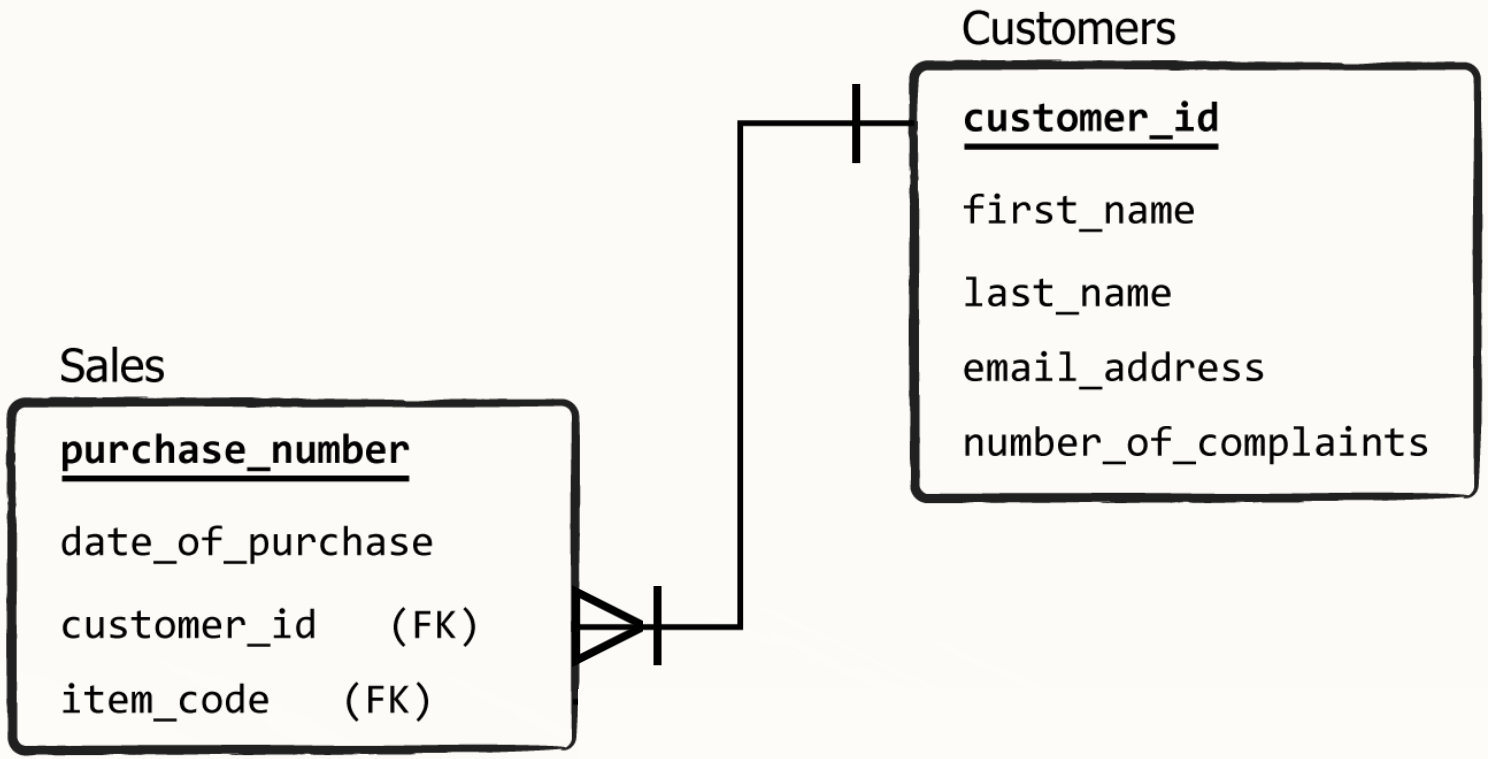


Relationships

1 purchase — *minimum* = 1 customer = *maximum*



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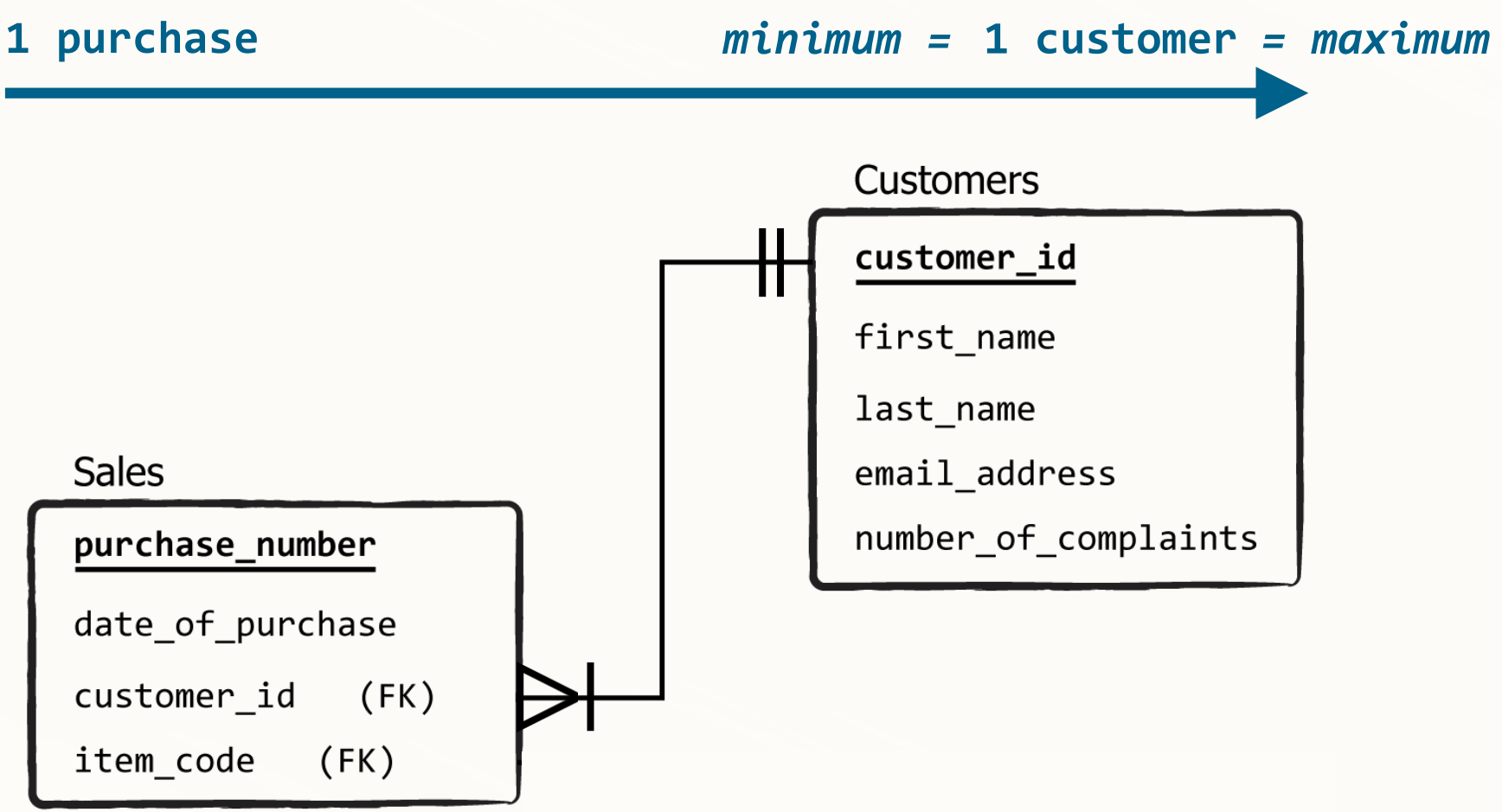

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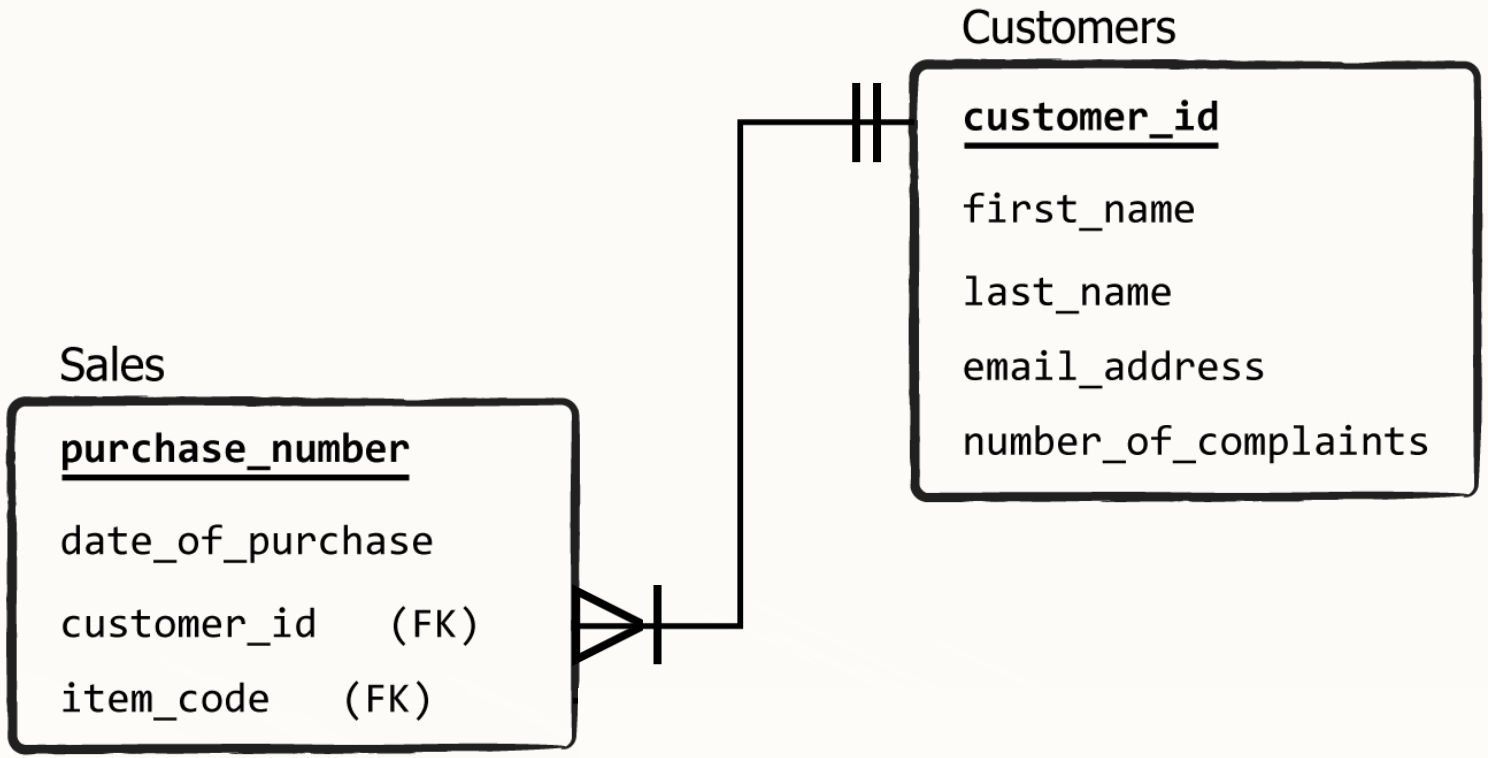

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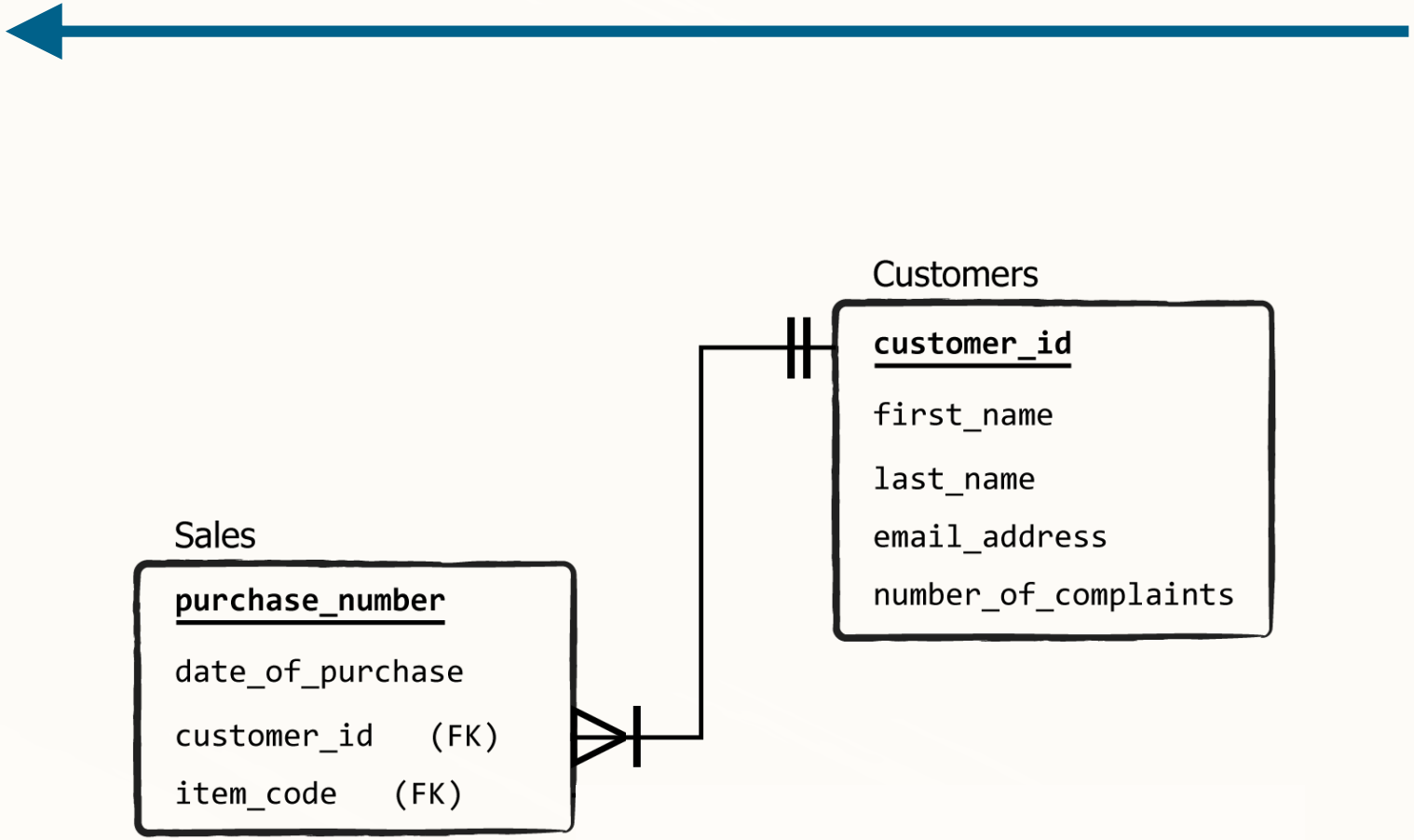

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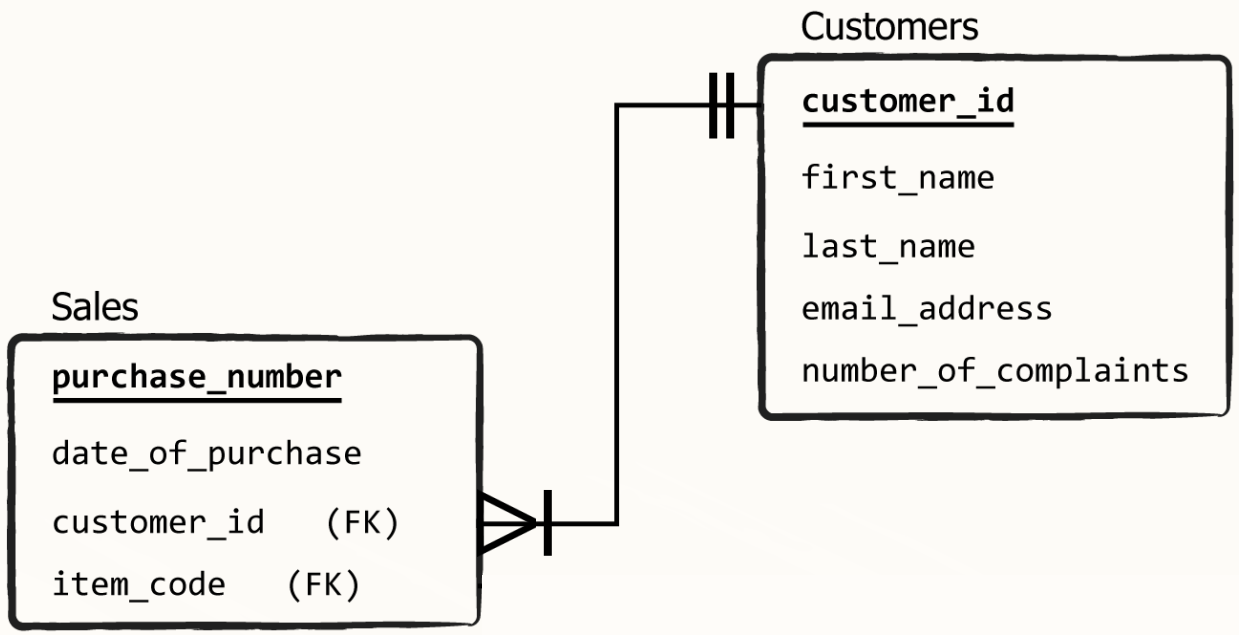
Customers to Sales: *one-to-many*



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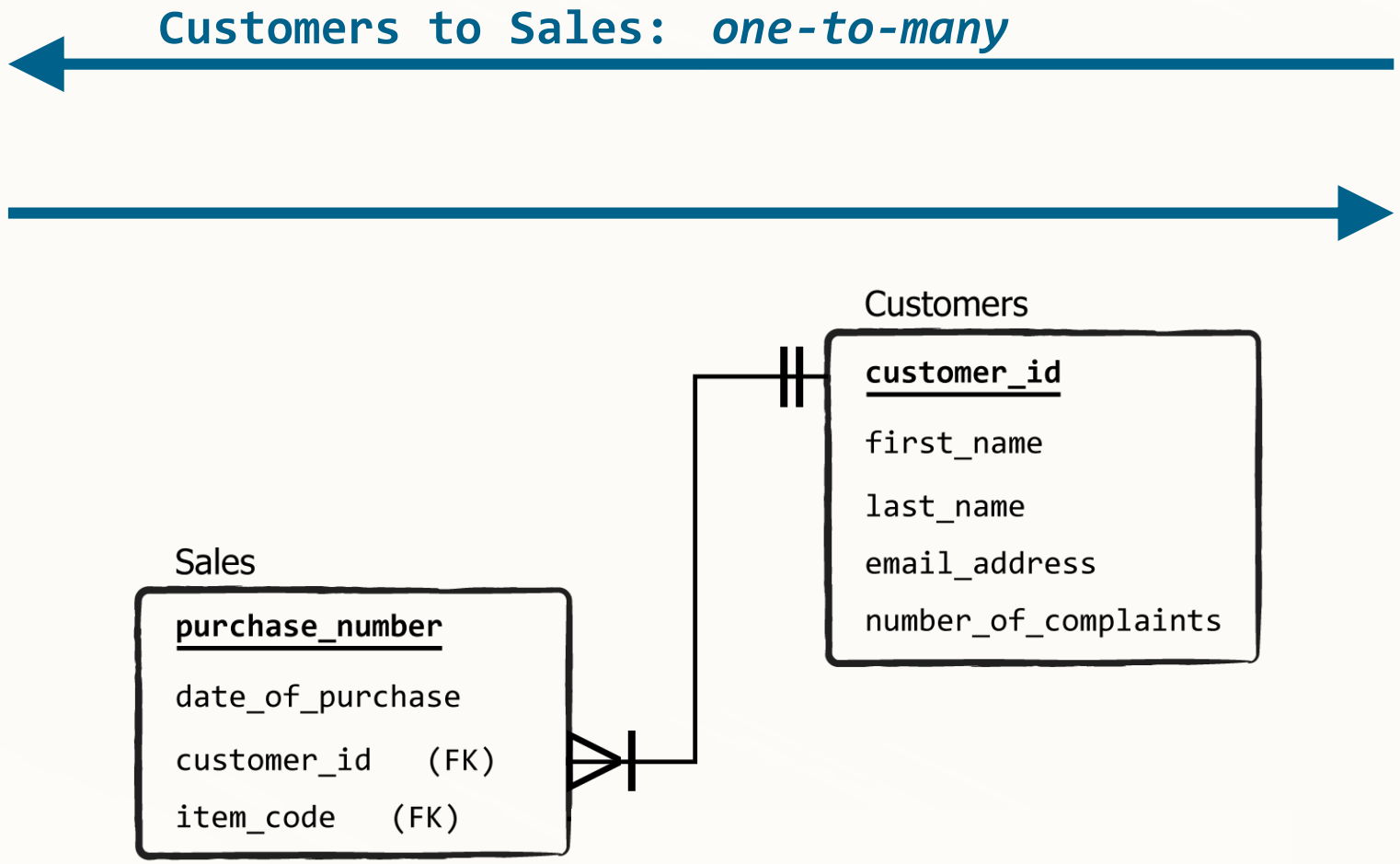

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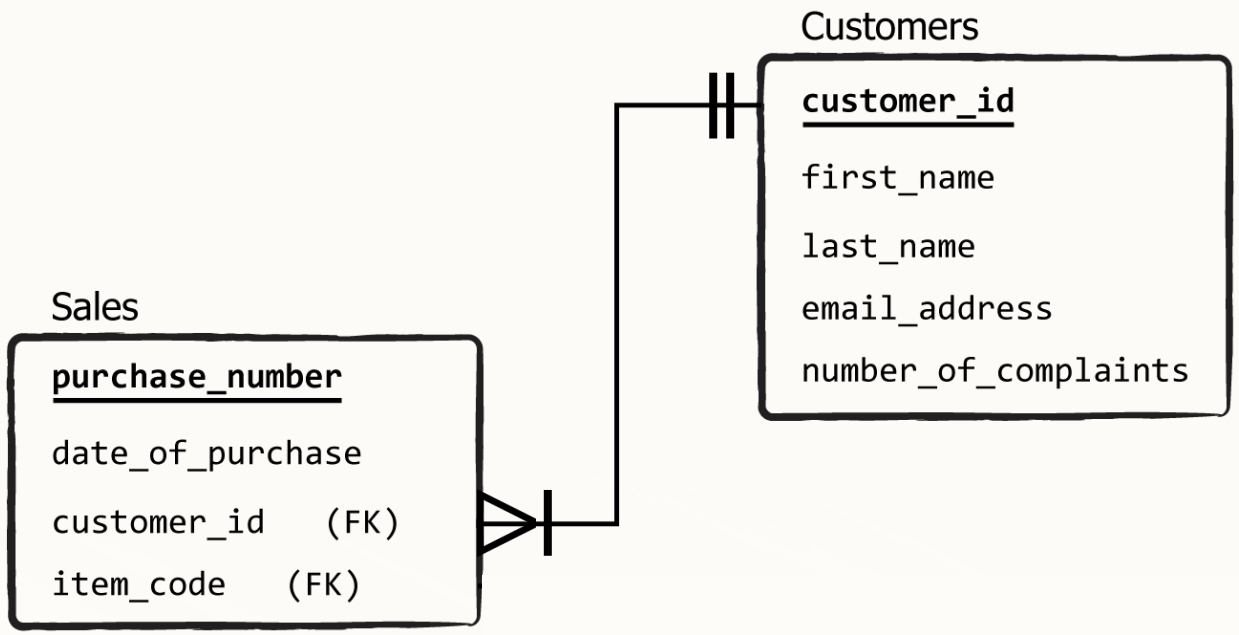
Customers to Sales: *one-to-many*

Sales to Customers: *many-to-one*



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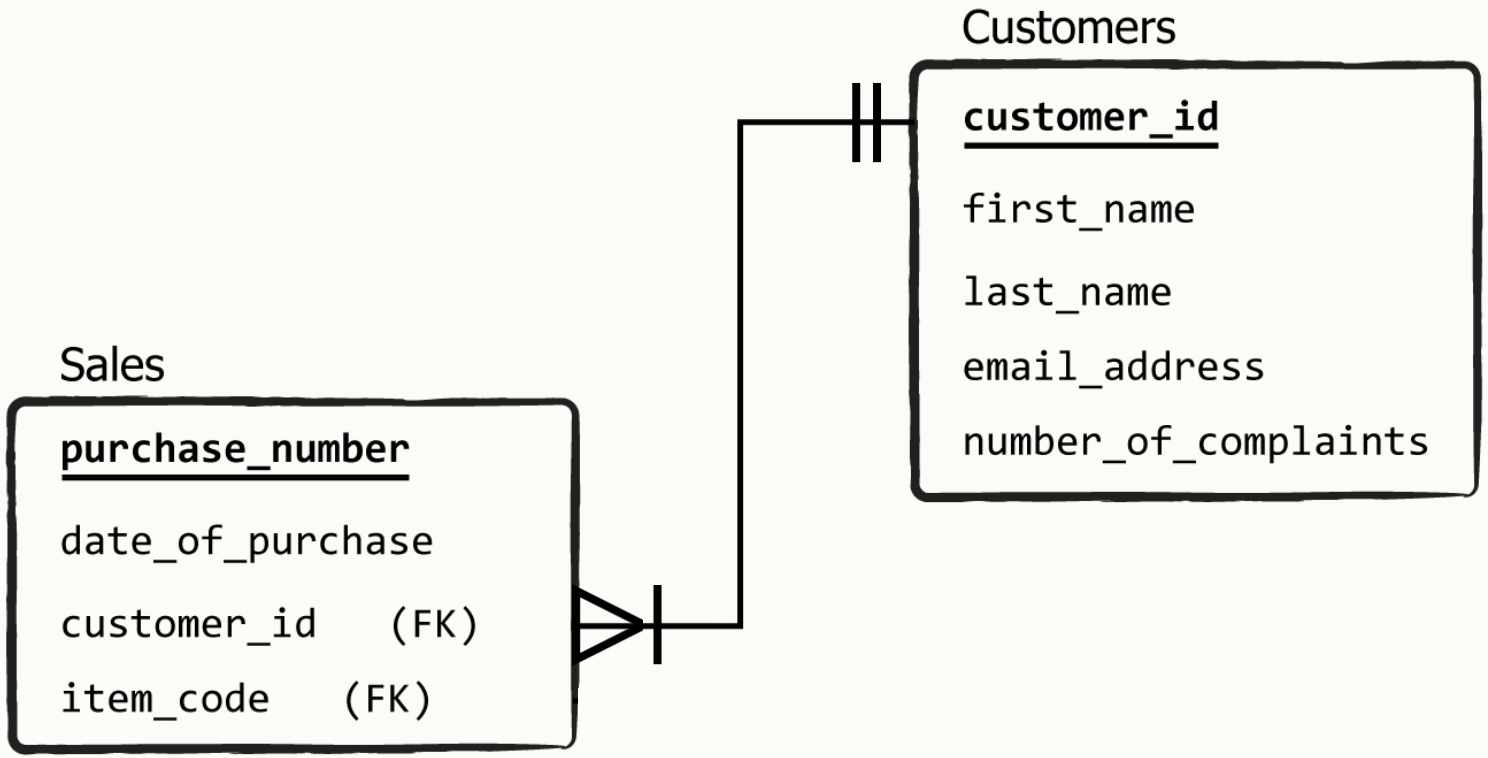

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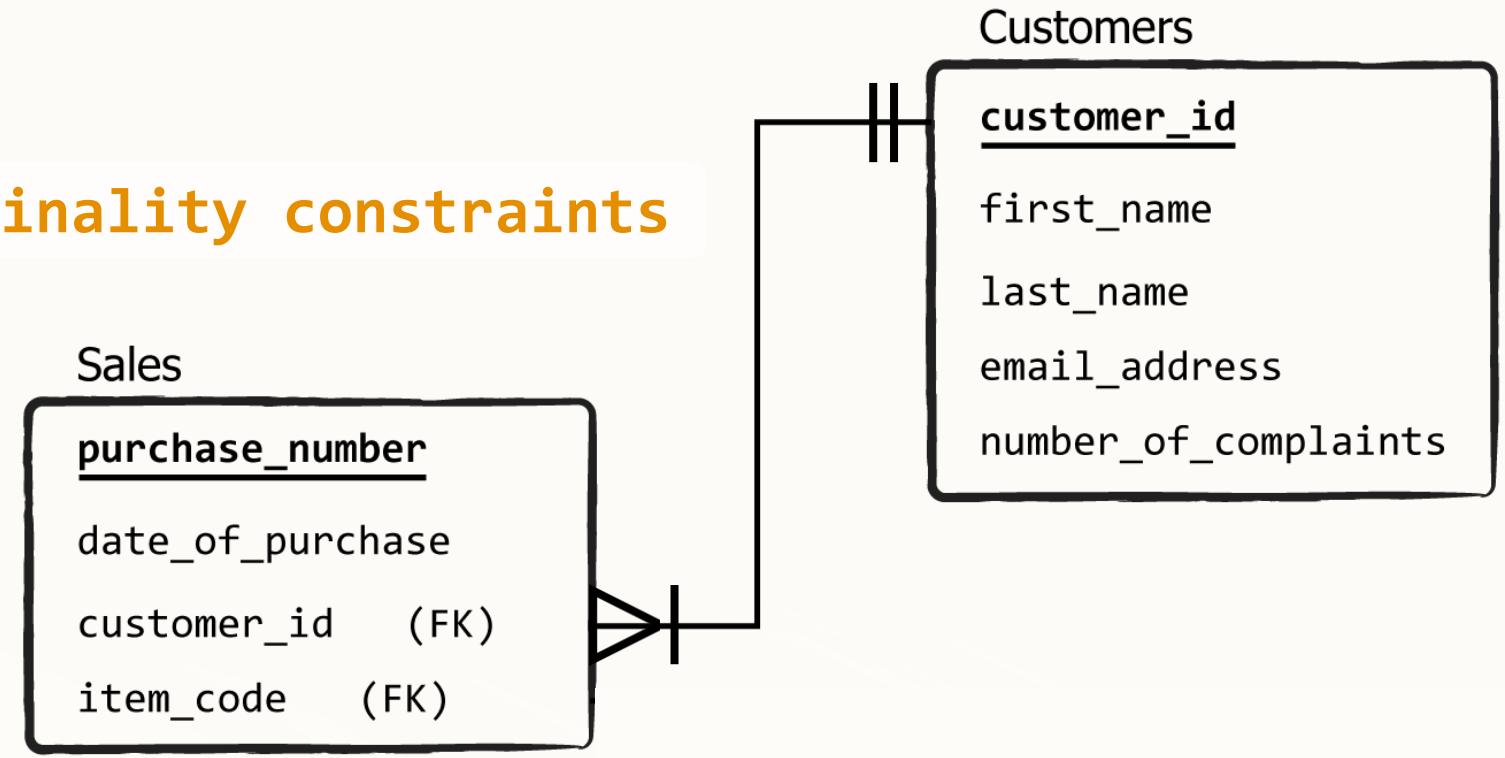
cardinality constraints



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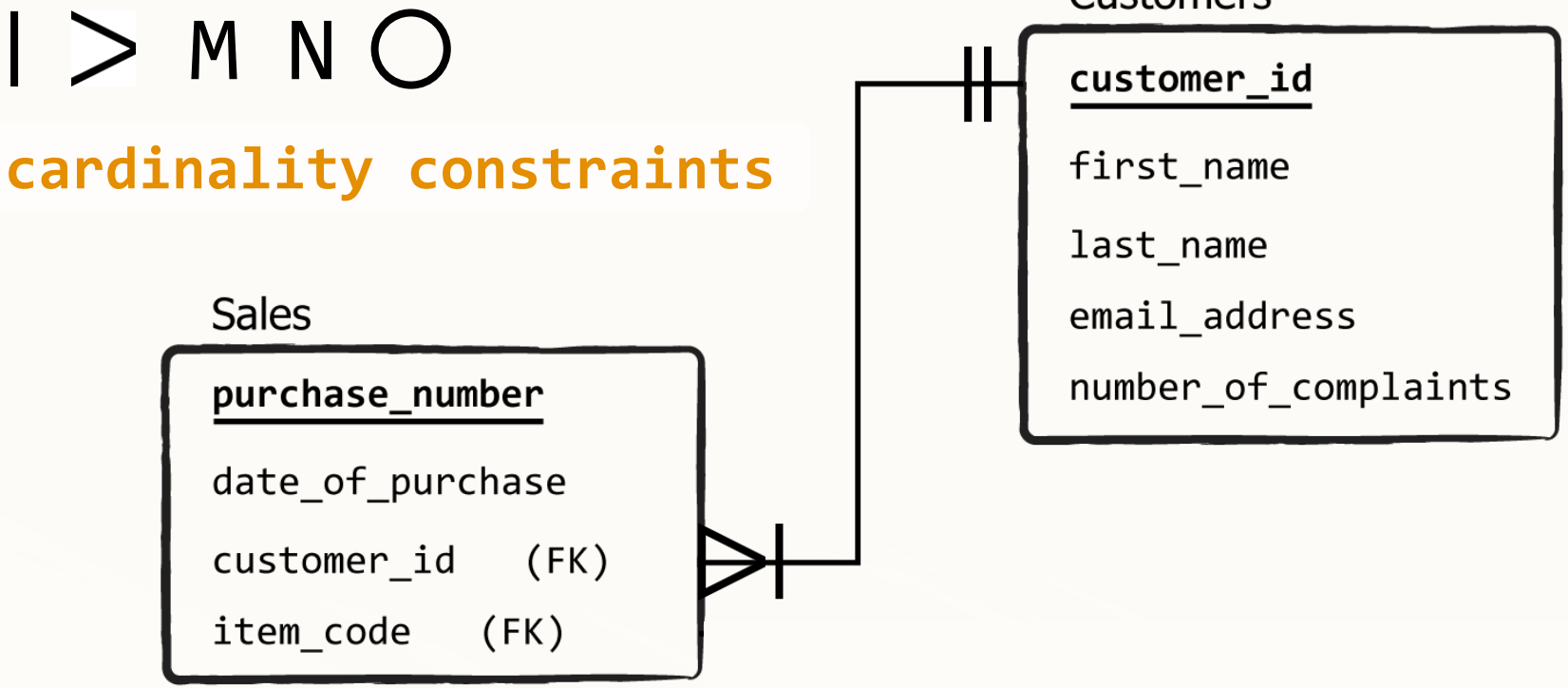

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- Relational schemas

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- *will help you immensely while writing your queries!*