

A modern conference room with large windows and a long table. The room is empty, with several office chairs arranged around the table. The view outside the windows shows a cityscape. The text "Relational Schemas: Foreign Key" is overlaid in the center.

Relational Schemas: Foreign Key

Relational Schemas: Foreign Key

Sales				
purchase_number	date_of_purchase	customer_id	item_code	
1	9/3/2016	1	A_1	
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	

Relational Schemas: Foreign Key

Customers				
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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Relational Schemas: Foreign Key

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Sales

purchase number

date_of_purchase

customer_id

item_code

Customers

customer id

first_name

last_name

email_address

number_of_complaints

Relational Schemas: Foreign Key

Sales

purchase number

date_of_purchase

customer_id

item_code

Customers

customer id

first_name

last_name

email_address

number_of_complaints

always look for the foreign keys, as
they show us where the relations are

Relational Schemas: Foreign Key

Sales

purchase number

date_of_purchase

customer_id (FK)

item_code

Customers

customer id

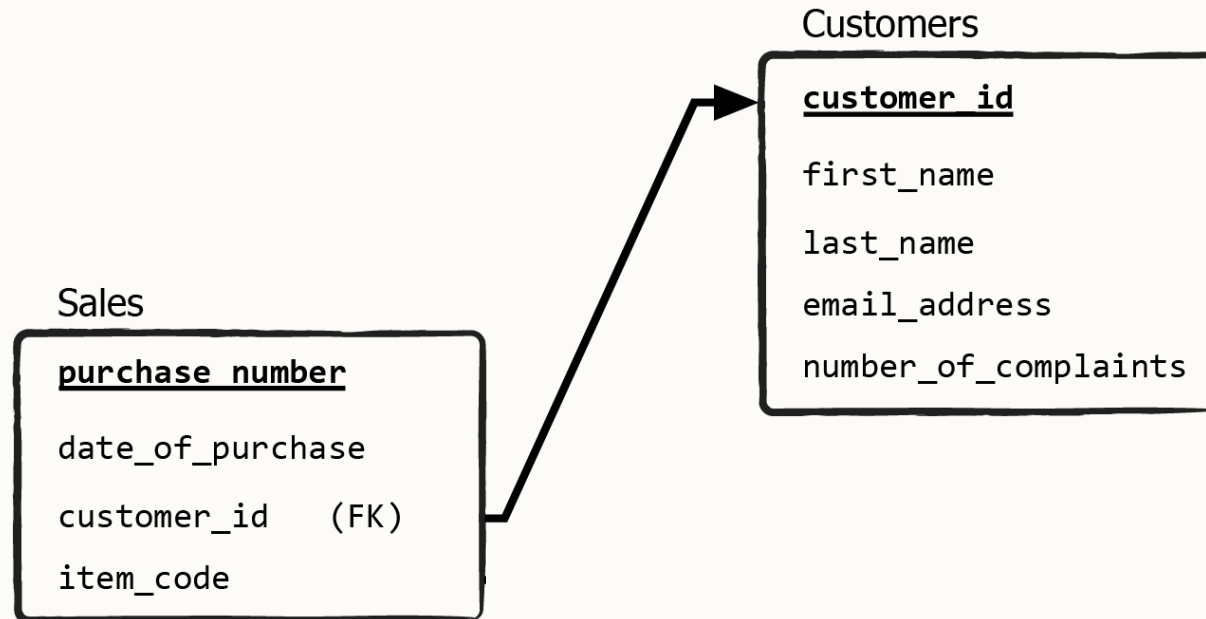
first_name

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Relational Schemas: Foreign Key



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no repeating and missing values

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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

Items					
item_code	item	unit_price_usd	company_id	company	headquarters_phone_number
A_1	Lamp	20	1	Company A	+1 (202) 555-0196
A_2	Desk	250	1	Company A	+1 (202) 555-0196
B_1	Lamp	30	2	Company B	+1 (202) 555-0152
B_2	Desk	350	2	Company B	+1 (202) 555-0152
C_1	Chair	150	3	Company C	+1 (229) 853-9913
D_1	Loudspeakers	400	4	Company D	+1 (618) 369-7392

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item_code	item	unit_price_usd	company_id	company	headquarters_phone_number	
A_1	Lamp	20	1	Company A	+1 (202) 555-0196	
A_2	Desk	250	1	Company A	+1 (202) 555-0196	
B_1	Lamp	30	2	Company B	+1 (202) 555-0152	
B_2	Desk	350	2	Company B	+1 (202) 555-0152	
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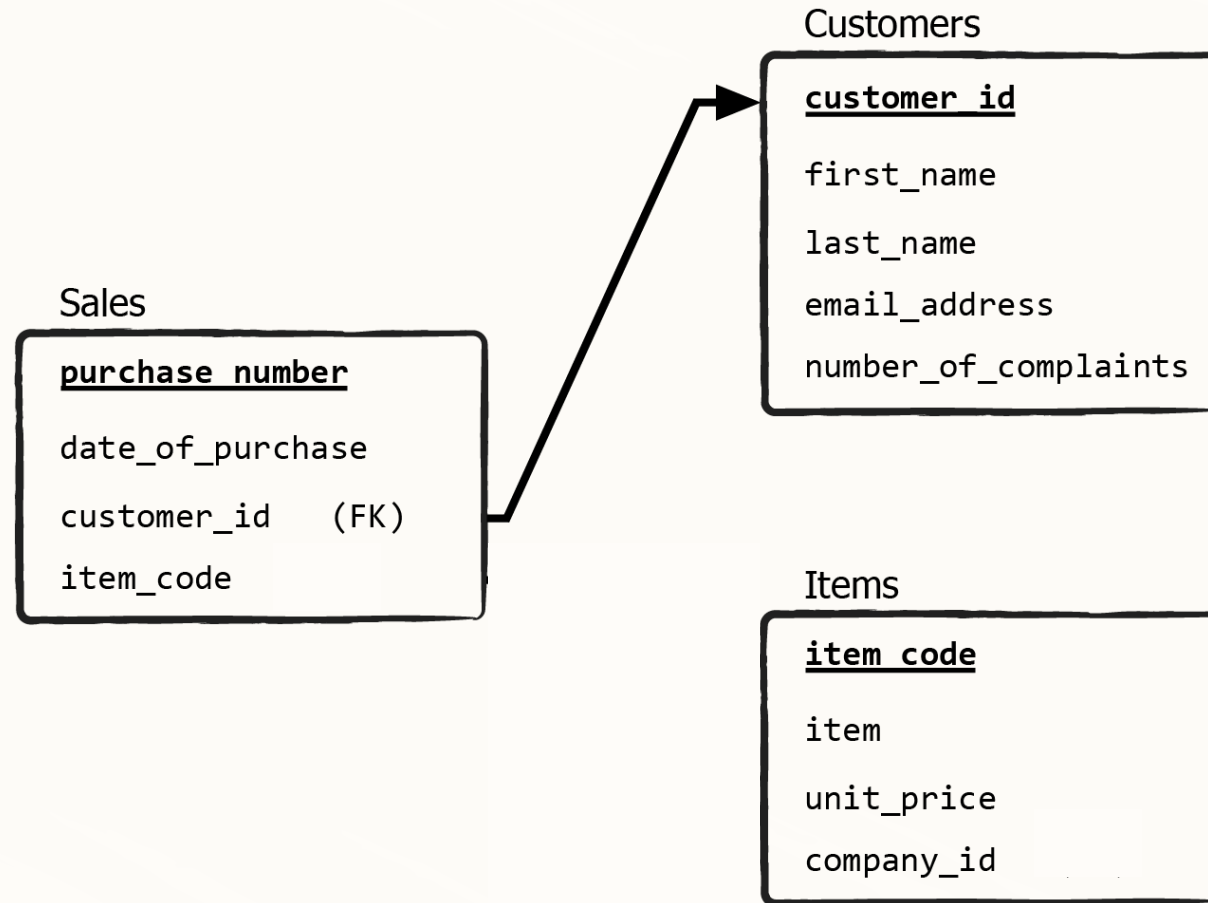
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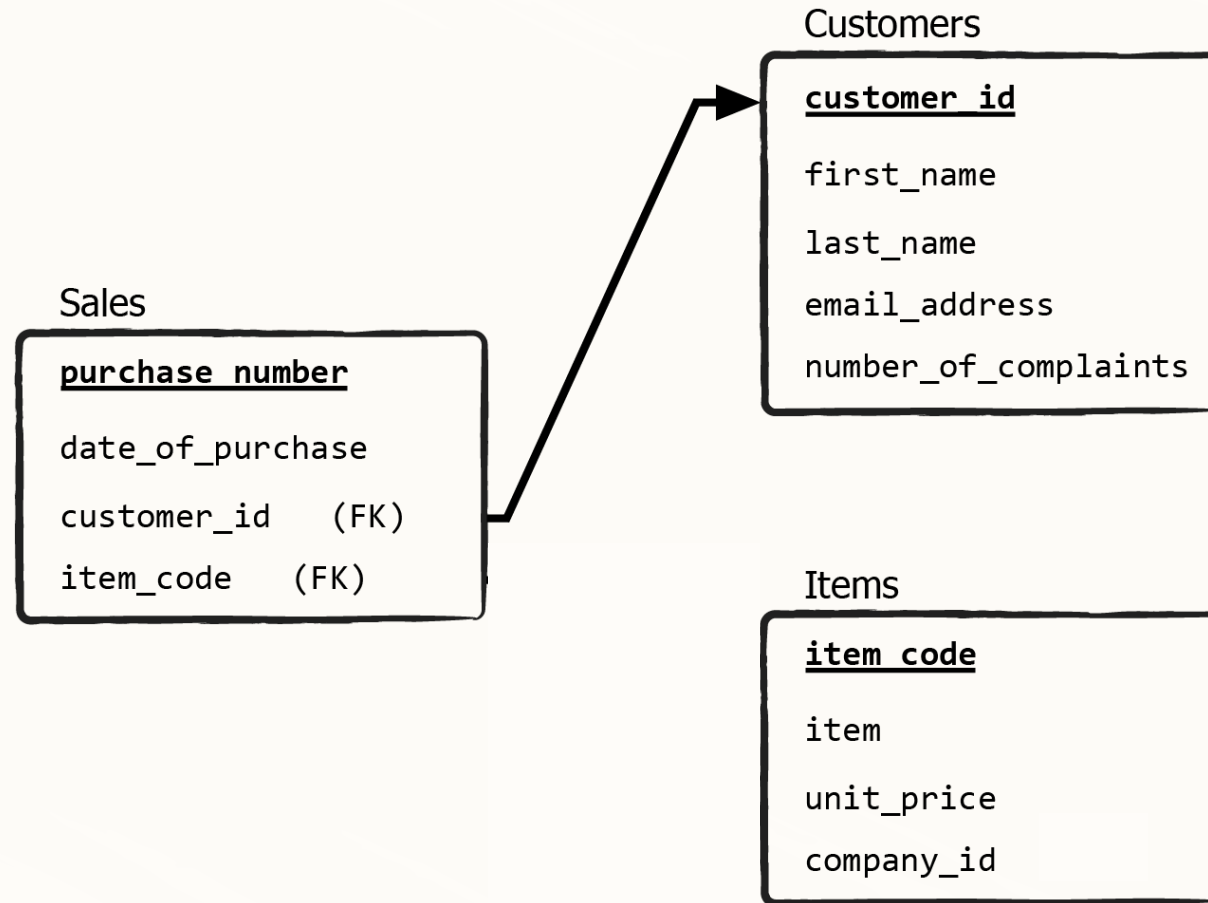
no repeating and missing values

repeating and missing values

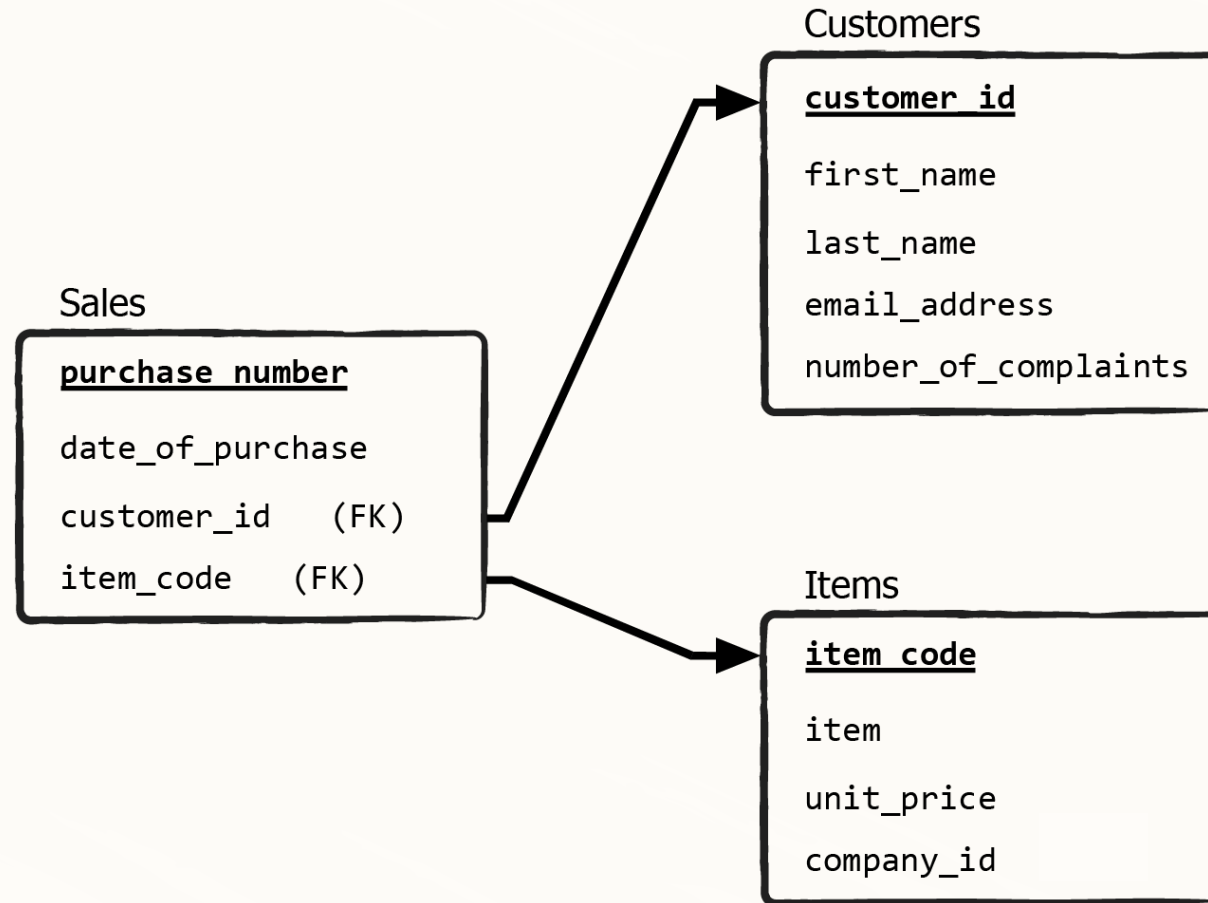
Relational Schemas: Foreign Key



Relational Schemas: Foreign Key



Relational Schemas: Foreign Key



Relational Schemas: Foreign Key

foreign key

identifies the relationships between tables, not the tables themselves

Relational Schemas: Foreign Key

