Basic Principles in Database Design
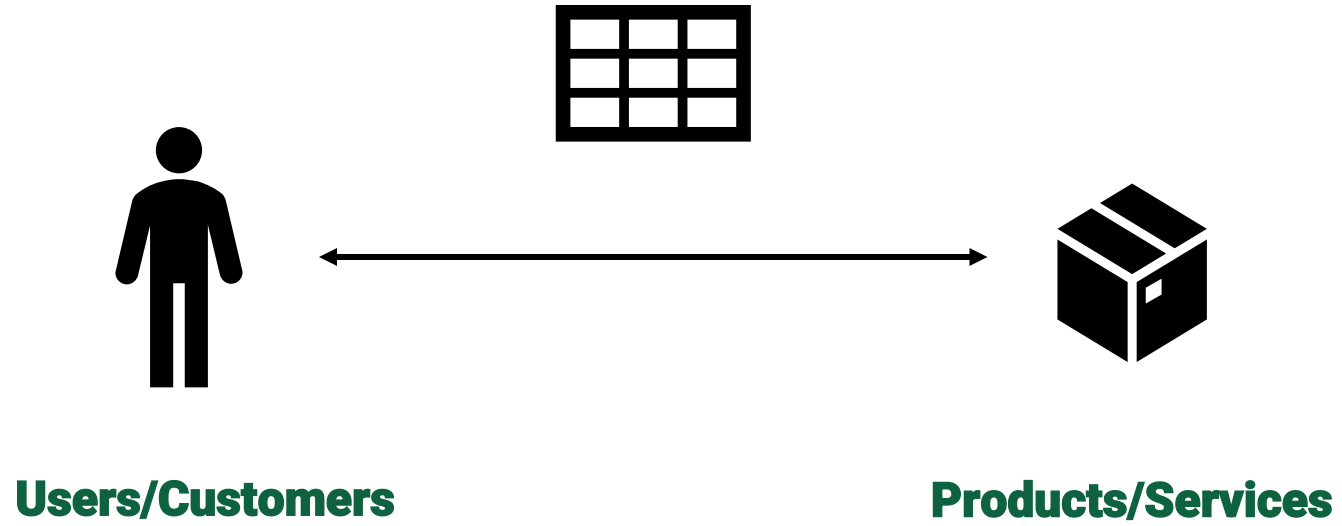
Quick check list

1. Your table name can represent an object

2. Every column/field in your table can represent a property

3. Every table should have a primary key field called "id"

4. Use snake_case for table name or column name

5. Every column/field name is unique (cannot be the same) in every table in your database, except the column/field is a foreign key

6. Primary key that becomes a field/column in other table called foreign key and should be written as [original_table_name]_id (example: product_id)
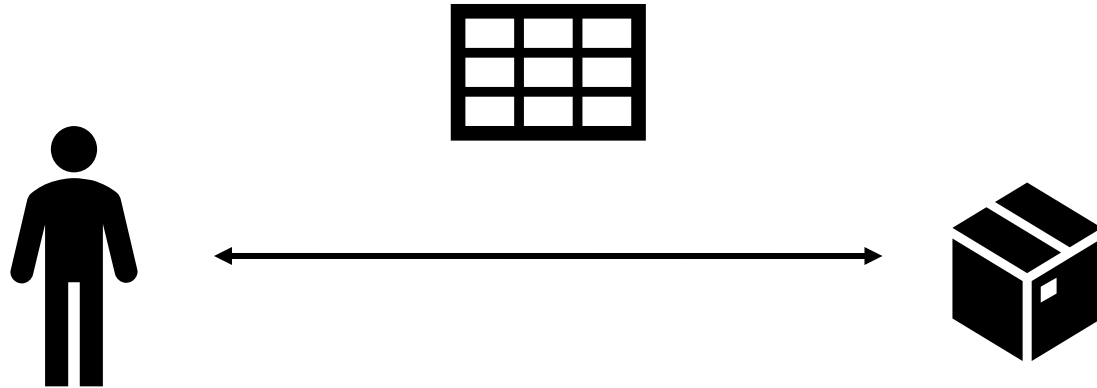
Record of transactions

Users/Customers   Products/Services

orders

users

id (PK)	username	email	password	product_id
1	One valdo	123	abc	1, 1,1 2, 3, 4,
2	Ade	321	abc	
3	Anne	456	abc	
4	Ferona	789	abc	

products

id	product_name	price
1	T-Shirt	20.00
2	Hoodie	35.00
3	Hat	15.00
4	Mug	10.00

INFORMATION
TECHNOLOGY
Universitas Advent Indonesia

orders

id	customer_id	product_id	order_date
1	1	1	2/15/2024
2	2	3	2/15/2024
3	3	2	2/15/2024
1	1	4	2/15/2024

customers

id	name	email
1	Alice	alice@example.com
2	Bob	bob@example.com
3	Charlie	charlie@example.com
4	Darryl	darry@example.com

products

id	product_name	price
1	T-Shirt	20.00
2	Hoodie	35.00
3	Hat	15.00
4	Mug	10.00
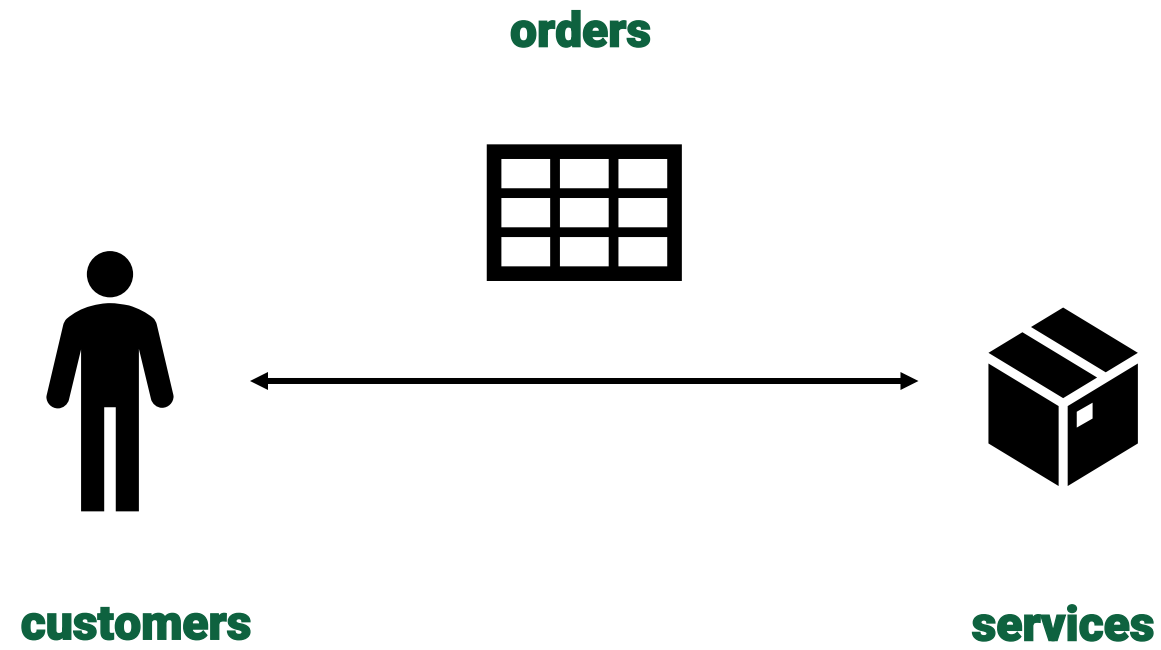
orders

id (PK)	customer_id (FK)	service_id (FK)	order_date
1	3	1	2023-02-17
2	2	4	2023-02-17
3	1	2	2023-02-17
4	4	3	2023-02-17

customers

Id (PK)	customer_name	phone_number	address
1	Joefins	123	Kampus UNAI
2	TJ	321	Parongpong
3	Christian	456	Bandung
4	Arthur	789	Bandung Barat

services

Id (PK)	service_name	Price
1	Oil change	10000
2	Tyre change	20000
3	Engine cleaning	30000
4	General check up	1000
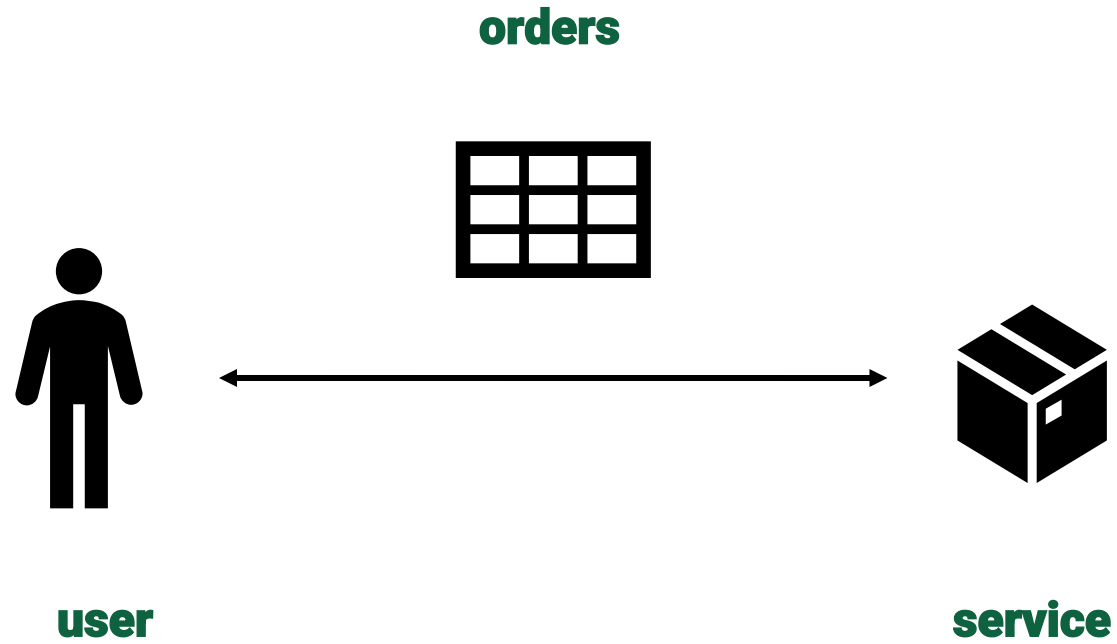
orders

id (PK)	customer_id	service_id	order_date
1	1	1	2023-02-17
2	1	2	2023-02-17

customers

Id (PK)	customer_name	phone_number	address
1	Joefins	123	Kampus UNAI
2	TJ	321	Parongpong
3	Christian	456	Bandung
4	Arthur	789	Bandung Barat

services

Id (PK)	service_name	Price
1	Small box	10000
2	Large box	30000
3	Small bag	5000
4	Large bag	10000