EDGE BU CSE DIGITAL SKILLS TRAINING

Project
on
Database for E-commerce

SUBMITTED TO

Md. Samsuddoha Sams
Assistant Professor
Department of Computer Science & Engineering
University of Barishal

SUBMITTED BY

Md. Fahad Hossain
05-002-013
Database-2
Department of Chemistry
University of Barishal

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Database for E-commerce

Step-1: Identify the Entities Required
- Products
- Customers
- Categories
- Variants

Step-2: Identify the Attributes and Primary Key for Each Entity
1. Products(id, name, cat_id, description, status)
2. Customers(id, name, email, phone, address, status)
3. Categories(id, name)
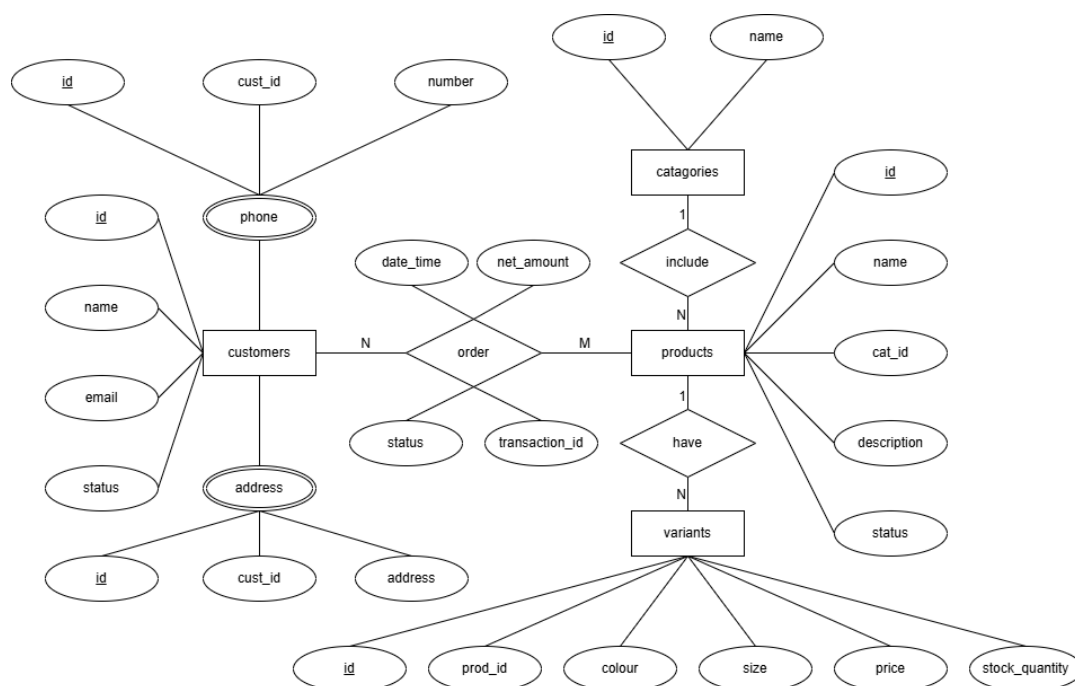4. Variants (id, prod_id, colour, size, price, stock_quantity)

Step-3: Identify the Relationship Needed
- Customers-order-Products
- Categories-include-Products
- Products-have-Variants

Step-4: Identify the Cardinality Ratio and Participation
a. Customers-order-Products (Many to Many)
b. Categories-include-Products (One to Many)
c. Products-have-Variants (One to Many)

Step-5: Drawing the Diagram

Reduction to Database Schema:

1. products(<u>id</u>, name, *cat_id*, description, status)
2. categories(<u>id</u>, name)
3. variants (<u>id</u>, *prod_id*, colour, size, price, stock_quantity)
4. customers(<u>id</u>, name, email, phone, address, status)
5. phone(<u>id</u>, *cust_id*, number)
6. address(<u>id</u>, *cust_id*, address)
7. orders(<u>id</u>, *cust_id*, total_amount, dis_amount, net_amount, status, pay_status, pay_type, transaction_id)

Implementing the database in MySQL:

All tables with sample data:

1. products(id, name, cat_id, description, status):

id	name	cat_id	description	status
1	Phone	1	NULL	available
2	Charger	1	NULL	unavailable
3	Laptop	1	NULL	available
4	Fan	1	NULL	unavailable
5	Light	1	NULL	available

2. categories(id, name):

id	name
1	Electrical
2	Clothing
3	Food
4	Healthcare
5	Pharmaceuticals

3. **variants (id, prod_id, colour, size, price, stock_quantity):**

id	prod_id	colour	size	price	stock_quantity
1	1	Black	6.5"	5500.00	567
2	1	Red	6.5"	56000.00	749
3	5	Blue	45	3000.00	675
4	5	Green	42	5000.00	765
5	2	White	34	700.00	500

4. **customers(id, name, email, phone, address, status):**

id	name	email	phone	address	status
1	Fahad Hossain	fhdhossin@exmple.com	NULL	NULL	active
2	Nizm Uddin	nzmuddin@exmple.com	NULL	NULL	inactive
3	Mehedi Nihn	mehidinihn@exmple.com	NULL	NULL	block
4	mhim Hssn	mhinhssn@exmple.com	NULL	NULL	active
5	Smim Hssn	smimhssn@exmple.com	NULL	NULL	block

5. **phone(id, cust_id, number):**

id	cust_id	number
1	3	0234579
2	1	2589965
3	4	09754322
4	4	098643
5	1	098642

6. address(id, cust_id, address):

id	cust_id	address
1	2	uyuyuijo, trxreju, yttuyo
2	2	ytfreso, ytdjk, ytrkm
3	3	iggtryt, uyfreuyo, uyyruy
4	2	buvhj, htry, hyuyhkj
5	3	utcch, tdyyuh, uytruy

7. orders(id, cust_id, total_amount, dis_amount, net_amount, status, pay_status, pay_type, transaction_id):

id	cust_id	total_amount	dis_amount	net_amount	status	pay_status	pay_type	transaction_id
1	5	5600.00	500.00	5550.00	shipping	unpaid	cash	hg45787bhnu
2	1	7880.00	578.00	8640.00	delivered	paid	online	ihbygctf6990
3	5	78400.00	600.00	78000.00	placed	paid	online	gcijj098532
4	3	98500.00	9000.00	89000.00	processing	unpaid	cash	uyvctfy0986543
5	3	99999.99	5000.00	99999.99	shipping	paid	cash	0uydrrwdup0864