

## Tables (7)

Name	Type	Schema
<b>customers</b>		CREATE TABLE customers ( customer_id INTEGER PRIMARY KEY AUTOINCREMENT, full_name TEXT NOT NULL, email TEXT NOT NULL UNIQUE, gender TEXT NOT NULL, -- "Male", "Female", "Non- binary" birthdate TEXT NOT NULL, -- YYYY-MM-DD format created_at TEXT NOT NULL, city TEXT, state TEXT, zip_code TEXT, customer_segment TEXT, -- e.g., "budget", "standard", "premium" loyalty_tier TEXT, -- e.g., "none", "silver", "gold" is_active INTEGER NOT NULL DEFAULT 1 )
customer_id	INTEGER	"customer_id" INTEGER
full_name	TEXT	"full_name" TEXT NOT NULL
email	TEXT	"email" TEXT NOT NULL UNIQUE
gender	TEXT	"gender" TEXT NOT NULL
birthdate	TEXT	"birthdate" TEXT NOT NULL
created_at	TEXT	"created_at" TEXT NOT NULL
city	TEXT	"city" TEXT
state	TEXT	"state" TEXT
zip_code	TEXT	"zip_code" TEXT
customer_segment	TEXT	"customer_segment" TEXT
loyalty_tier	TEXT	"loyalty_tier" TEXT
is_active	INTEGER	"is_active" INTEGER NOT NULL DEFAULT 1
<b>order_items</b>		CREATE TABLE order_items ( order_item_id INTEGER PRIMARY KEY AUTOINCREMENT, order_id

Name	Type	Schema
		INTEGER NOT NULL, product_id INTEGER NOT NULL, quantity INTEGER NOT NULL, unit_price REAL NOT NULL, line_total REAL NOT NULL, FOREIGN KEY (order_id) REFERENCES orders(order_id), FOREIGN KEY (product_id) REFERENCES products(product_id) )
order_item_id	INTEGER	"order_item_id" INTEGER
order_id	INTEGER	"order_id" INTEGER NOT NULL
product_id	INTEGER	"product_id" INTEGER NOT NULL
quantity	INTEGER	"quantity" INTEGER NOT NULL
unit_price	REAL	"unit_price" REAL NOT NULL
line_total	REAL	"line_total" REAL NOT NULL
<b>orders</b>		CREATE TABLE orders ( order_id INTEGER PRIMARY KEY AUTOINCREMENT, customer_id INTEGER NOT NULL, order_datetime TEXT NOT NULL, billing_zip TEXT, shipping_zip TEXT, shipping_state TEXT, payment_method TEXT NOT NULL, -- "card", "paypal", "bank", "crypto" device_type TEXT NOT NULL, -- "mobile", "desktop", "tablet" ip_country TEXT NOT NULL, -- "US", "CA", "NG", etc. promo_used INTEGER NOT NULL DEFAULT 0, promo_code TEXT, order_subtotal REAL NOT NULL, shipping_fee REAL NOT NULL, tax_amount REAL NOT NULL, order_total REAL NOT NULL, -- Labels / targets risk_score REAL NOT NULL, -- 0-100

Name	Type	Schema
		is_fraud INTEGER NOT NULL DEFAULT 0, FOREIGN KEY (customer_id) REFERENCES customers(customer_id) )
order_id	INTEGER	"order_id" INTEGER
customer_id	INTEGER	"customer_id" INTEGER NOT NULL
order_datetime	TEXT	"order_datetime" TEXT NOT NULL
billing_zip	TEXT	"billing_zip" TEXT
shipping_zip	TEXT	"shipping_zip" TEXT
shipping_state	TEXT	"shipping_state" TEXT
payment_method	TEXT	"payment_method" TEXT NOT NULL
device_type	TEXT	"device_type" TEXT NOT NULL
ip_country	TEXT	"ip_country" TEXT NOT NULL
promo_used	INTEGER	"promo_used" INTEGER NOT NULL DEFAULT 0
promo_code	TEXT	"promo_code" TEXT
order_subtotal	REAL	"order_subtotal" REAL NOT NULL
shipping_fee	REAL	"shipping_fee" REAL NOT NULL
tax_amount	REAL	"tax_amount" REAL NOT NULL
order_total	REAL	"order_total" REAL NOT NULL
risk_score	REAL	"risk_score" REAL NOT NULL
is_fraud	INTEGER	"is_fraud" INTEGER NOT NULL DEFAULT 0
<b>product_reviews</b>		CREATE TABLE product_reviews ( review_id INTEGER PRIMARY KEY AUTOINCREMENT, customer_id INTEGER NOT NULL, product_id INTEGER NOT NULL, rating INTEGER NOT NULL CHECK (rating BETWEEN 1 AND 5), review_datetime TEXT NOT NULL, review_text TEXT, FOREIGN KEY

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		(customer_id) REFERENCES customers(customer_id), FOREIGN KEY (product_id) REFERENCES products(product_id), -- A customer can rate a product multiple times in real life, -- but for simplicity in class, keep it unique: UNIQUE(customer_id, product_id) )
review_id	INTEGER	"review_id" INTEGER
customer_id	INTEGER	"customer_id" INTEGER NOT NULL
product_id	INTEGER	"product_id" INTEGER NOT NULL
rating	INTEGER	"rating" INTEGER NOT NULL CHECK("rating" BETWEEN 1 AND 5)
review_datetime	TEXT	"review_datetime" TEXT NOT NULL
review_text	TEXT	"review_text" TEXT
<b>products</b>		CREATE TABLE products ( product_id INTEGER PRIMARY KEY AUTOINCREMENT, sku TEXT NOT NULL UNIQUE, product_name TEXT NOT NULL, category TEXT NOT NULL, price REAL NOT NULL, cost REAL NOT NULL, is_active INTEGER NOT NULL DEFAULT 1 )
product_id	INTEGER	"product_id" INTEGER
sku	TEXT	"sku" TEXT NOT NULL UNIQUE
product_name	TEXT	"product_name" TEXT NOT NULL
category	TEXT	"category" TEXT NOT NULL
price	REAL	"price" REAL NOT NULL
cost	REAL	"cost" REAL NOT NULL
is_active	INTEGER	"is_active" INTEGER NOT NULL DEFAULT 1

Name	Type	Schema
<b>shipments</b>		CREATE TABLE shipments ( shipment_id INTEGER PRIMARY KEY AUTOINCREMENT, order_id INTEGER NOT NULL UNIQUE, ship_datetime TEXT NOT NULL, carrier TEXT NOT NULL, -- "UPS", "FedEx", "USPS" shipping_method TEXT NOT NULL, -- "standard", "expedited", "overnight" distance_band TEXT NOT NULL, -- "local", "regional", "national" promised_days INTEGER NOT NULL, actual_days INTEGER NOT NULL, -- Label / target late_delivery INTEGER NOT NULL DEFAULT 0, FOREIGN KEY (order_id) REFERENCES orders(order_id) )
shipment_id	INTEGER	"shipment_id" INTEGER
order_id	INTEGER	"order_id" INTEGER NOT NULL UNIQUE
ship_datetime	TEXT	"ship_datetime" TEXT NOT NULL
carrier	TEXT	"carrier" TEXT NOT NULL
shipping_method	TEXT	"shipping_method" TEXT NOT NULL
distance_band	TEXT	"distance_band" TEXT NOT NULL
promised_days	INTEGER	"promised_days" INTEGER NOT NULL
actual_days	INTEGER	"actual_days" INTEGER NOT NULL
late_delivery	INTEGER	"late_delivery" INTEGER NOT NULL DEFAULT 0
<b>sqlite_sequence</b>		CREATE TABLE sqlite_sequence(name,seq)
name		"name"
seq		"seq"

## Indices (7)

Name	Type	Schema
<b>idx_items_order</b>		CREATE INDEX idx_items_order ON order_items(order_id)
order_id		"order_id"
<b>idx_items_product</b>		CREATE INDEX idx_items_product ON order_items(product_id)
product_id		"product_id"
<b>idx_orders_customer</b>		CREATE INDEX idx_orders_customer ON orders(customer_id)
customer_id		"customer_id"
<b>idx_orders_datetime</b>		CREATE INDEX idx_orders_datetime ON orders(order_datetime)
order_datetime		"order_datetime"
<b>idx_reviews_customer</b>		CREATE INDEX idx_reviews_customer ON product_reviews(customer_id)
customer_id		"customer_id"
<b>idx_reviews_product</b>		CREATE INDEX idx_reviews_product ON product_reviews(product_id)
product_id		"product_id"
<b>idx_shipments_late</b>		CREATE INDEX idx_shipments_late ON shipments(late_delivery)
late_delivery		"late_delivery"

## Views (0)

Name	Type	Schema
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# Triggers (0)

Name	Type	Schema
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