**MÔ TẢ CƠ SỞ DỮ LIỆU (POSTGRESQL)**

# Mô hình ERD

A screenshot of a computer

Description automatically generated

# Thông tin các bảng

*-- Brand*

CREATE TABLE brand (

    id SERIAL PRIMARY KEY,

    name VARCHAR(255) NOT NULL

);

*-- Category*

CREATE TABLE category (

    id SERIAL PRIMARY KEY,

    name VARCHAR(255) NOT NULL

);

*-- Product*

CREATE TABLE product (

    id SERIAL PRIMARY KEY,

    name VARCHAR(255) NOT NULL,

    price NUMERIC(18, 2) NOT NULL,

    stock INTEGER NOT NULL,

    categoryid INTEGER NOT NULL REFERENCES category(id),

    brandid INTEGER REFERENCES brand(id)

);

*-- Employee*

CREATE TABLE employee (

    id SERIAL PRIMARY KEY,

    name VARCHAR(100),

    email VARCHAR(100),

    password VARCHAR(255)

);

*-- Invoice*

CREATE TABLE invoice (

    id SERIAL PRIMARY KEY,

    employeeid INTEGER REFERENCES employee(id),

    "timestamp" TIMESTAMPTZ,

    total INTEGER,

    ispaid BOOLEAN,

    employeename VARCHAR

);

*-- Invoiceitem*

CREATE TABLE invoiceitem (

    id SERIAL PRIMARY KEY,

    invoiceid INTEGER REFERENCES invoice(id),

    productid INTEGER REFERENCES product(id),

    quantity INTEGER,

    unitprice NUMERIC(18, 2),

    subtotal NUMERIC(18, 2)

);

# Dữ liệu mẫu

*-- brand*

INSERT INTO brand (name) VALUES

('Nike'),

('Adidas'),

('Puma'),

('Under Armour');

*-- category*

INSERT INTO category (name) VALUES

('Shoes'),

('Clothing'),

('Accessories');

*-- product*

INSERT INTO product (name, price, stock, categoryid, brandid) VALUES

('Running Shoes', 75.50, 100, 1, 1),

('T-Shirt', 25.00, 200, 2, 2),

('Backpack', 45.00, 50, 3, 3),

('Sports Cap', 20.00, 150, 3, 4);

*-- invoice*

INSERT INTO invoice (employeeid, "timestamp", total, ispaid, employeename) VALUES

(1, '2025-01-01 10:30:00+00', 145, true, 'Alice'),

(2, '2025-01-02 14:45:00+00', 200, false, 'Bob'),

(3, '2025-01-03 16:20:00+00', 90, true, 'Charlie');

*-- invoiceitem*

INSERT INTO invoiceitem (invoiceid, productid, quantity, unitprice, subtotal) VALUES

(1, 1, 2, 75.50, 151.00),

(2, 2, 4, 25.00, 100.00),

(2, 3, 2, 45.00, 90.00),

(3, 4, 1, 20.00, 20.00);