DATA DEFINITION LANGUAGE AND MANIPULATION LANGUAGE IN MYSQL

-- creating a new database 'AmazonDB'

CREATE DATABASE AmazonDB;

-- creating tables within AmazonDB database

-- I can use the USE syntax or select the database in the SCHEMAS page.

USE AmazonDB;

CREATE TABLE Users(

user_id INT PRIMARY KEY AUTO_INCREMENT,

user_name VARCHAR(100) NOT NULL,

email VARCHAR(150) UNIQUE NOT NULL,

registered_date DATE NOT NULL,

membership ENUM('Basic','Prime') DEFAULT 'Basic'

);

DESCRIBE Users;

CREATE TABLE Products(

product_id INT PRIMARY KEY AUTO_INCREMENT,

product_name VARCHAR(200) NOT NULL,

price DECIMAL(10,2) NOT NULL,

category VARCHAR(100) NOT NULL,

stock INT NOT NULL

);

CREATE TABLE Orders(

order_id INT PRIMARY KEY AUTO_INCREMENT,

user_id INT,

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order_date TIMESTAMP DEFAULT CURRENT_TIMESTAMP NOT NULL,

total_amount DECIMAL(10,2) NOT NULL,

FOREIGN KEY (user_id) REFERENCES Users(user_id)

);


CREATE TABLE Order_details(

order_details_id INT PRIMARY KEY AUTO_INCREMENT,

order_id INT,

product_id INT,

quantity INT NOT NULL CHECK(quantity>0),

unit_price DECIMAL(10,2) NOT NULL CHECK(unit_price>0),

FOREIGN KEY (order_id) REFERENCES Orders(order_id) ON DELETE CASCADE,

FOREIGN KEY (product_id) REFERENCES Products(product_id)

);


-- DATA MANIPULATION LANGUAGE

-- Creating records for each table


INSERT INTO Users (user_name, email, registered_date, membership) VALUES

('Alice Johnson', 'alice.j@example.com', '2024-01-15', 'Prime'),

('Bob Smith', 'bob.s@example.com', '2024-02-01', 'Basic'),

('Charlie Brown', 'charlie.b@example.com', '2024-03-10', 'Prime'),

('Daisy Ridley', 'daisy.r@example.com', '2024-04-12', 'Basic');


select * from Users;


INSERT INTO Products (product_name, price, category, stock) VALUES

('Echo Dot', 49.99, 'Electronics', 120),
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('Kindle Paperwhite', 129.99, 'Books', 50),

('Fire Stick', 39.99, 'Electronics', 80),

('Yoga Mat', 19.99, 'Fitness', 200),

('Wireless Mouse', 24.99, 'Electronics', 150);


-- to remove the unit_price column from Order_details table
ALTER TABLE Order_details
DROP COLUMN unit_price;


INSERT INTO Orders (user_id, order_date, total_amount) VALUES
(1, '2024-05-01', 79.98),
(2, '2024-05-03', 129.99),
(1, '2024-05-04', 49.99),
(3, '2024-05-05', 24.99);


INSERT INTO Order_Details (order_id, product_id, quantity) VALUES
(1, 1, 2),
(2, 2, 1),
(3, 1, 1),
(4, 5, 1);


-- to rename the table name Order_details to "OrderDetails"


RENAME TABLE Order_details TO OrderDetails;
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