**Mô hình hoá dữ liệu cho UC đặt hàng**

1. **Mô hình ERD**

**A diagram of a network

Description automatically generated**

1. **Database design**
   1. **Logical Data Model**

**A computer screen shot of a computer

Description automatically generated**

* 1. **Physical Data Model**

**database script:**

CREATE TABLE aims.Media (

id INT AUTO\_INCREMENT PRIMARY KEY,

category VARCHAR(45) NOT NULL,

price INT NOT NULL,

quantity INT NOT NULL,

title VARCHAR(45) NOT NULL,

value INT NOT NULL,

imageUrl VARCHAR(45) NOT NULL

);

-- Bảng "CD"

CREATE TABLE aims.CD (

id INT PRIMARY KEY,

artist VARCHAR(45) NOT NULL,

recordLabel VARCHAR(45) NOT NULL,

musicType VARCHAR(45) NOT NULL,

releasedDate DATE,

CONSTRAINT fk\_CD\_Media1 FOREIGN KEY (id) REFERENCES Media (id)

);

-- Bảng "Book"

CREATE TABLE aims.Book (

id INT PRIMARY KEY,

author VARCHAR(45) NOT NULL,

coverType VARCHAR(45) NOT NULL,

publisher VARCHAR(45) NOT NULL,

publishDate DATETIME NOT NULL,

numOfPages INT NOT NULL,

language VARCHAR(45) NOT NULL,

bookCategory VARCHAR(45) NOT NULL,

CONSTRAINT fk\_Book\_Media1 FOREIGN KEY (id) REFERENCES Media (id)

);

-- Bảng "DeliveryInfo"

CREATE TABLE aims.DeliveryInfo (

id INT AUTO\_INCREMENT PRIMARY KEY,

name VARCHAR(45),

province VARCHAR(45),

instructions VARCHAR(200),

address VARCHAR(100)

);

-- Bảng "Card"

CREATE TABLE aims.Card (

id INT AUTO\_INCREMENT PRIMARY KEY,

cardCode VARCHAR(15) NOT NULL,

owner VARCHAR(45) NOT NULL,

cvvCode VARCHAR(3) NOT NULL,

dateExpired VARCHAR(4) NOT NULL

);

-- Bảng "DVD"

CREATE TABLE aims.DVD (

id INT PRIMARY KEY,

discType VARCHAR(45) NOT NULL,

director VARCHAR(45) NOT NULL,

runtime INT NOT NULL,

studio VARCHAR(45) NOT NULL,

subtitle VARCHAR(45) NOT NULL,

releasedDate DATETIME,

CONSTRAINT fk\_DVD\_Media1 FOREIGN KEY (id) REFERENCES Media (id)

);

CREATE TABLE aims.Order (

id INT NOT NULL,

shippingFees VARCHAR(45),

deleveryInfoId INT NOT NULL,

PRIMARY KEY (id, deleveryInfoId),

CONSTRAINT fk\_Order\_DeliveryInfo1 FOREIGN KEY (deleveryInfoId) REFERENCES DeliveryInfo (id)

);

-- Bảng "OrderMedia"

CREATE TABLE aims.OrderMedia (

orderID INT NOT NULL,

price INT NOT NULL,

quantity INT NOT NULL,

mediaId INT NOT NULL,

PRIMARY KEY (orderID, mediaId),

CONSTRAINT fk\_OrderMedia\_Order FOREIGN KEY (orderID) REFERENCES aims.Order (id),

CONSTRAINT fk\_OrderMedia\_Media1 FOREIGN KEY (mediaId) REFERENCES Media (id)

);

-- Bảng "Invoice"

CREATE TABLE aims.Invoice (

id INT PRIMARY KEY,

totalAmount INT NOT NULL,

orderId INT NOT NULL,

CONSTRAINT fk\_Invoice\_Order1 FOREIGN KEY (orderId) REFERENCES aims.Order (id)

);

-- Bảng "PaymentTransaction"

CREATE TABLE aims.PaymentTransaction (

id INT NOT NULL,

createAt DATETIME NOT NULL,

content VARCHAR(45) NOT NULL,

method VARCHAR(45),

cardId INT NOT NULL,

invoiceId INT NOT NULL,

PRIMARY KEY (id, cardId, invoiceId),

CONSTRAINT fk\_PaymentTransaction\_Card1 FOREIGN KEY (cardId) REFERENCES Card (id),

CONSTRAINT fk\_PaymentTransaction\_Invoice1 FOREIGN KEY (invoiceId) REFERENCES Invoice (id)

);