**Bài thực hành 03 – Tuần 8, ngày 16/11/2021**

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# Link đã nộp bài lên Git/GitHub

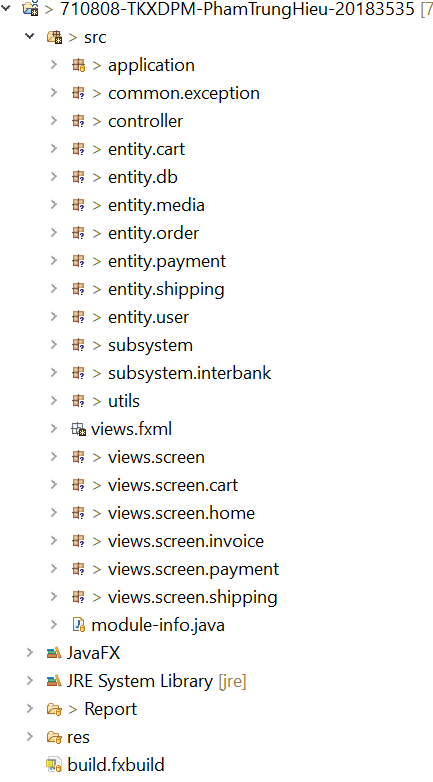
<https://github.com/HieuPham2000/710808-TKXDPM-PhamTrungHieu-20183535>

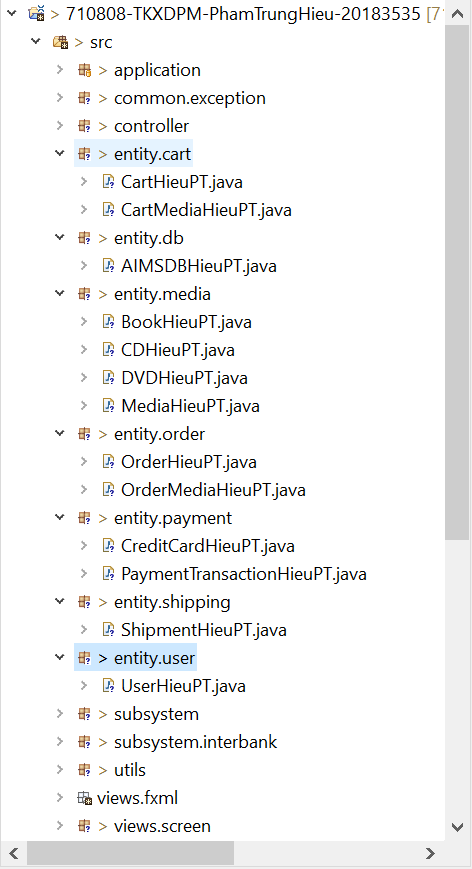
# Nội dung báo cáo kết quả thực hành

## Bài thực hành trên lớp

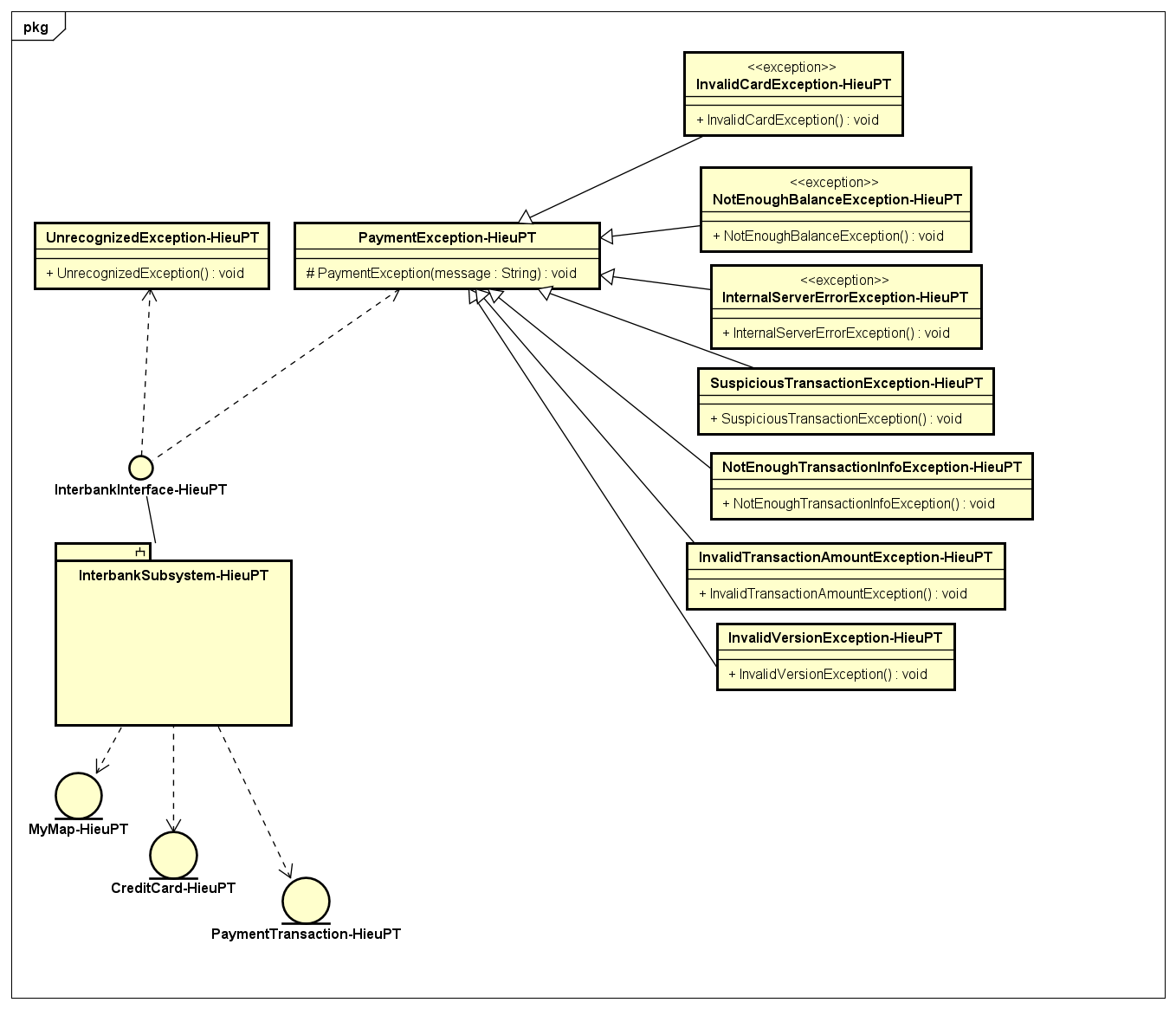
### Thiết kế lớp (Class Design)

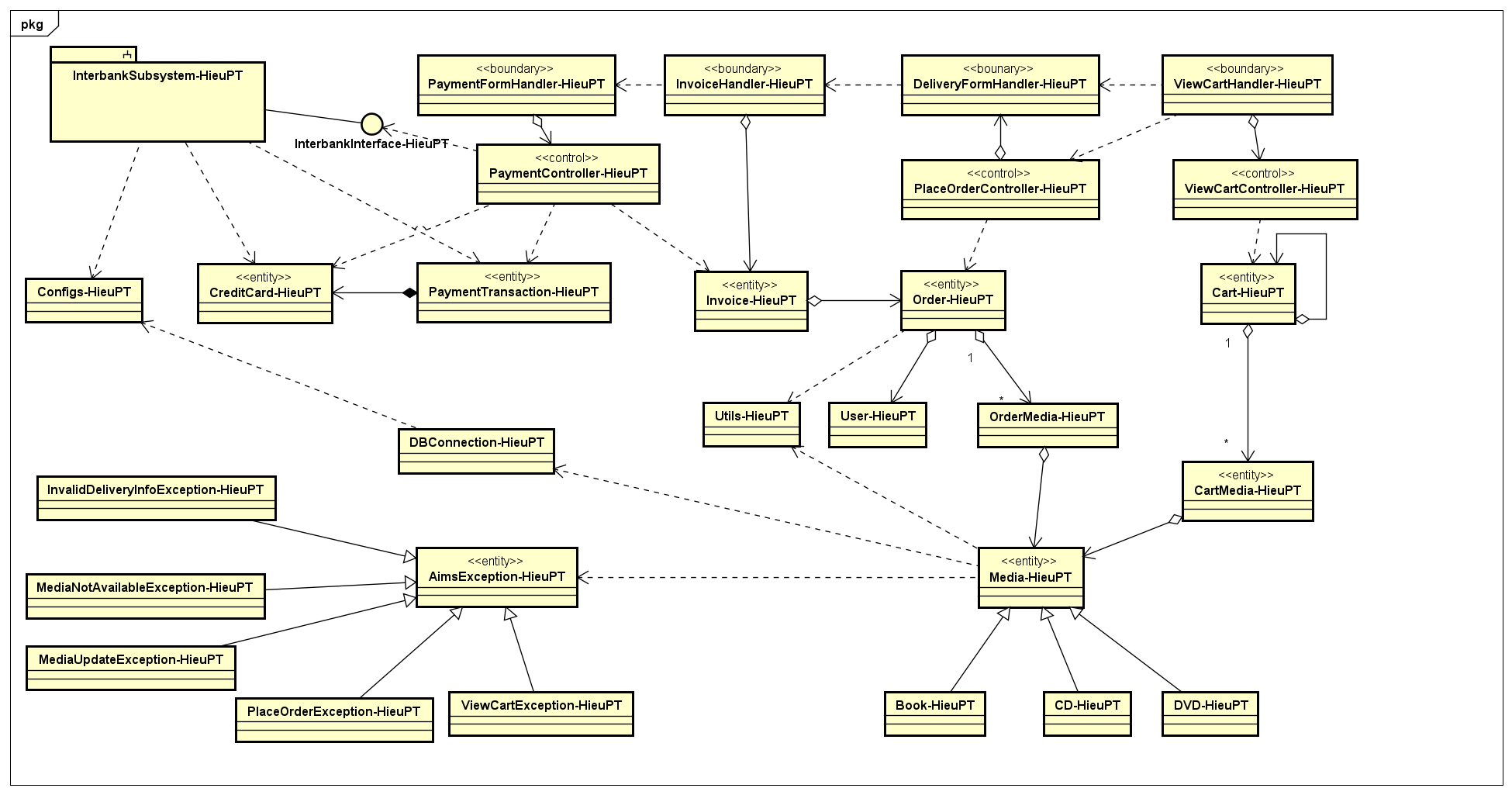
#### Bước đầu tạo các lớp thiết kế





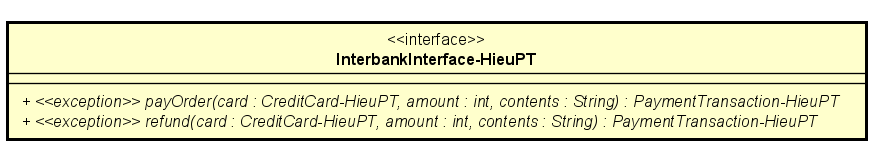
#### Xác định mối quan hệ giữa các lớp





#### Lớp thiết kế

1. Lớp “InterbankInterface-HieuPT”



***Attribute***

Không

***Operation***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 1 | payOrder | PaymentTransaction-HieuPT | Thanh toán đơn hàng và trả về giao dịch thanh toán |
| 2 | refund | PaymentTransaction-HieuPT | Hoàn tiền và trả về giao dịch thanh toán |

*Parameter:*

* card – thẻ tín dụng để giao dịch
* amount – số tiền giao dịch
* contents – nội dung giao dịch

*Exception:*

* PaymentException-HieuPT – nếu mã lỗi trả về đã biết
* UnrecognizedException-HieuPT – nếu không tìm thấy mã lỗi trả về hoặc có lỗi hệ thống

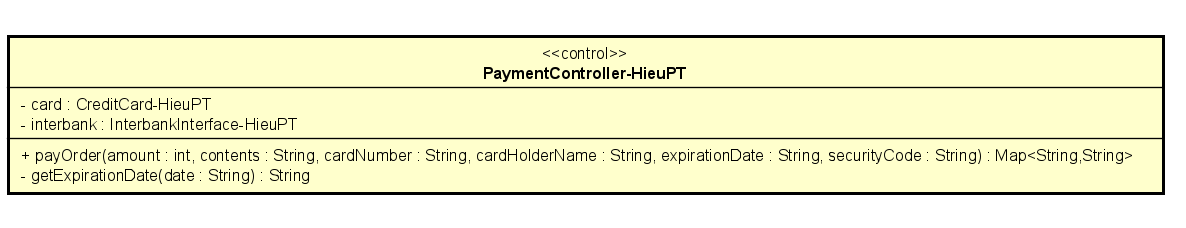
***Method***

Không

***State***

Không

1. Lớp “PaymentController-HieuPT”



***Attribute***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Giá trị mặc định* | *Mô tả* |
| 1 | card | CreditCard-HieuPT | NULL | Represent the card used for payment |
| 2 | interbank | InterbankInterface-HieuPT | NULL | Represent the Interbank subsystem |

***Operation***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 1 | payOrder | Map<String,String> | Thanh toán đơn hàng và trả về giao dịch thanh toán |

*Parameter:*

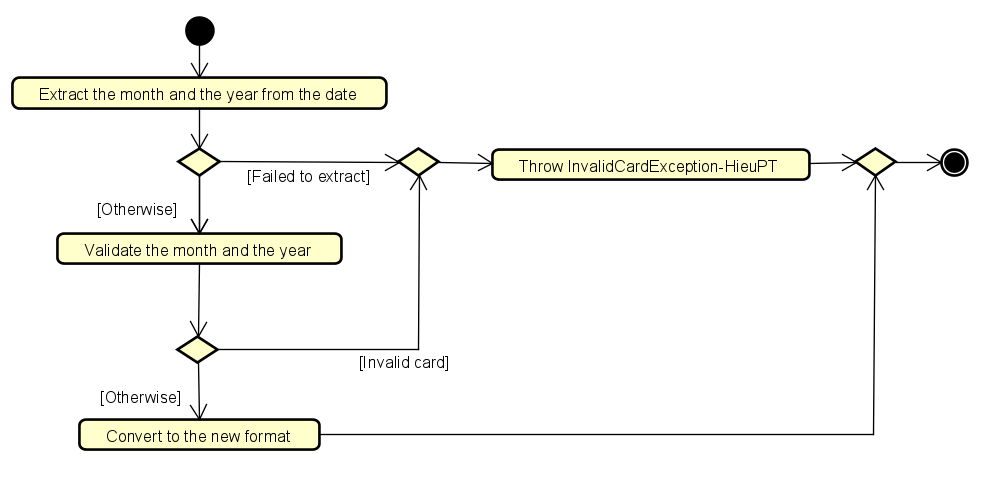
* amount – số tiền giao dịch
* contents – nội dung giao dịch
* cardNumber – số thẻ
* cardHolderName – tên chủ sở hữu
* expirationDate – ngày hết hạn theo định dạng "mm/yy"
* securityCode - mã bảo mật cvv/cvc

*Exception:*

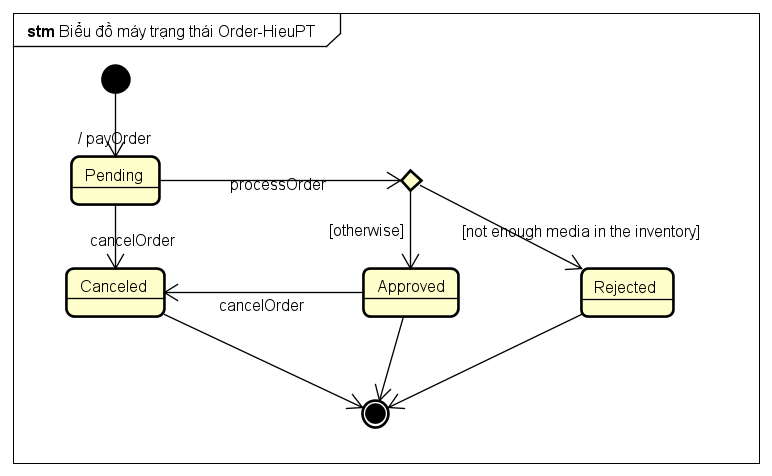
* Không

***Method***

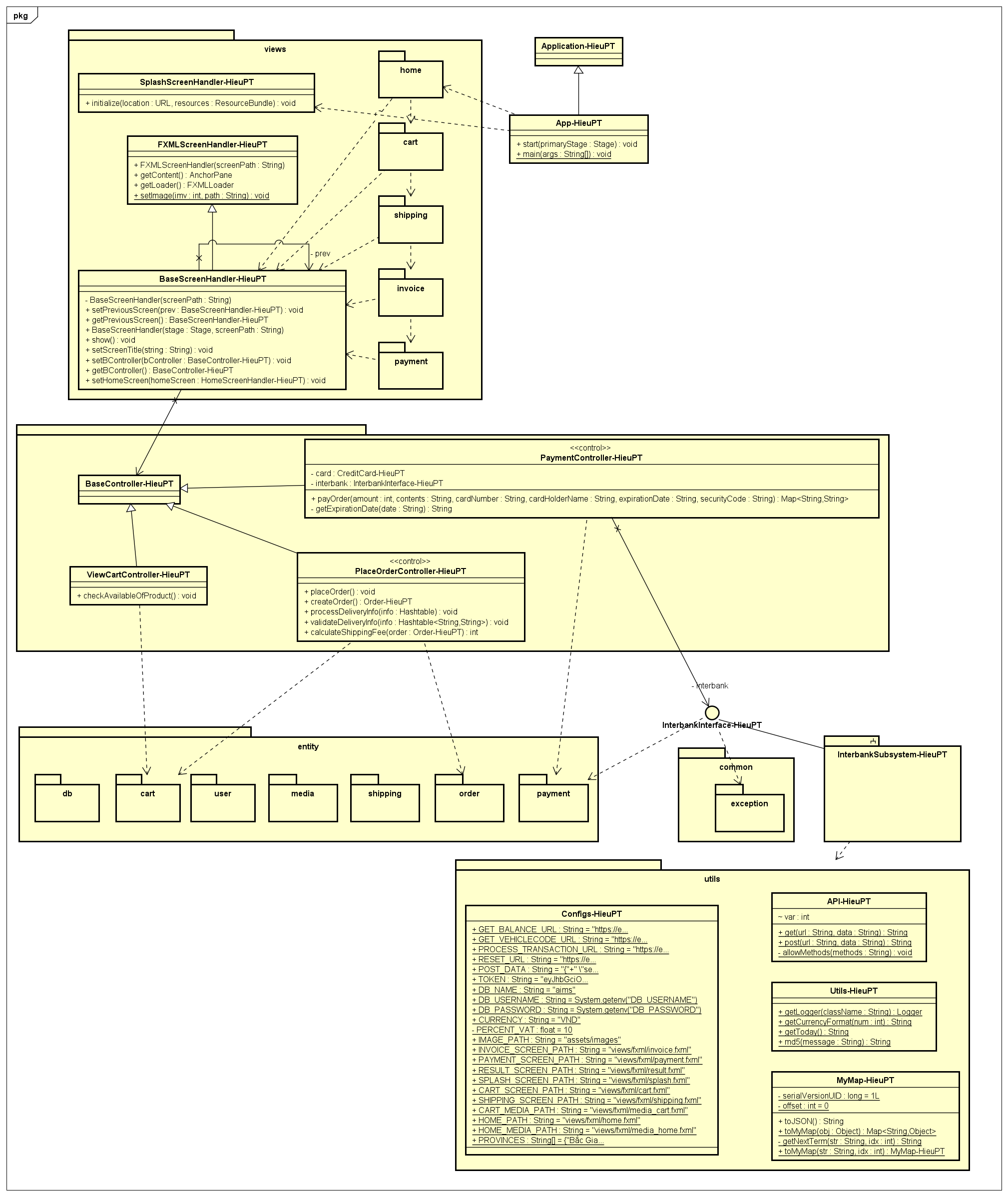
* getExpirationDate: Chuyển dữ liệu ngày từ định dạng “mm/yy” sang “mmyy”.



1. Biểu đồ trạng thái (state machine) cho đối tượng “Order-HieuPT”



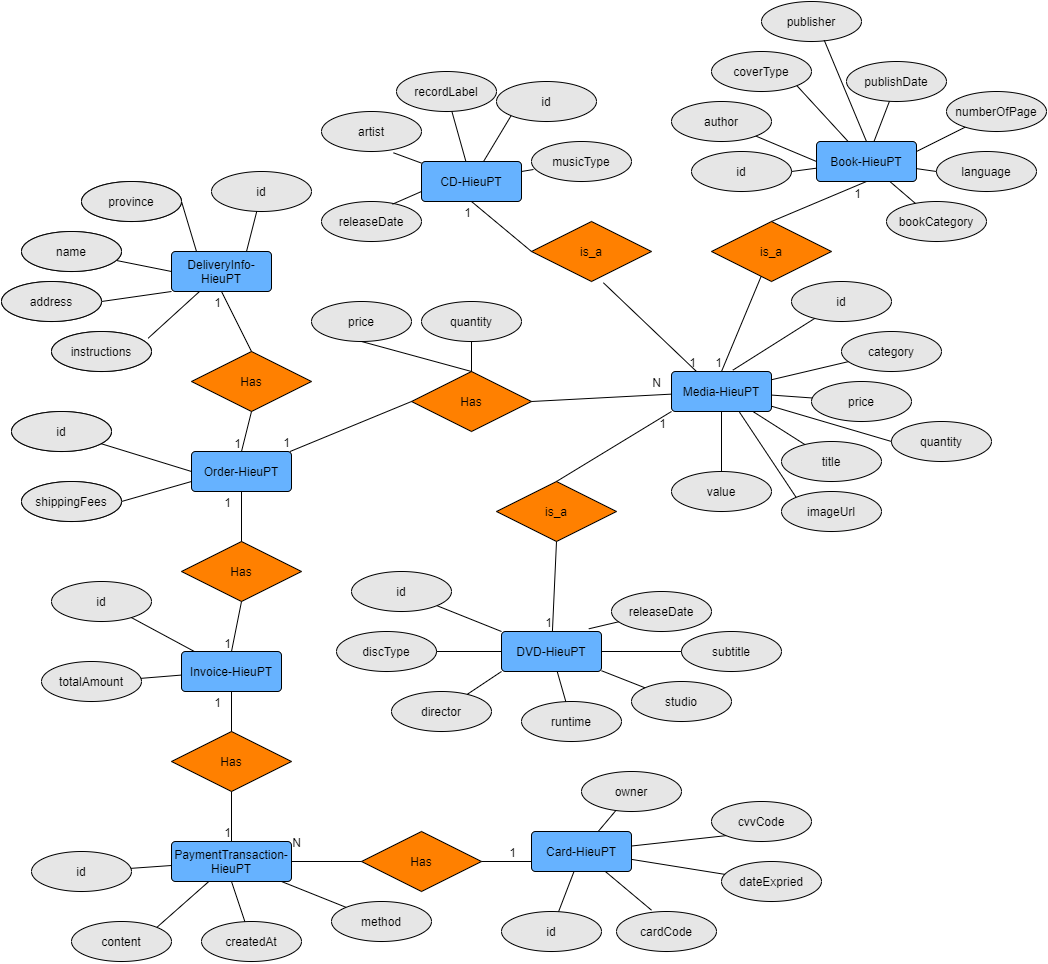
#### Biều đồ lớp thiết kế



### Mô hình hóa dữ liệu (Data Modeling)

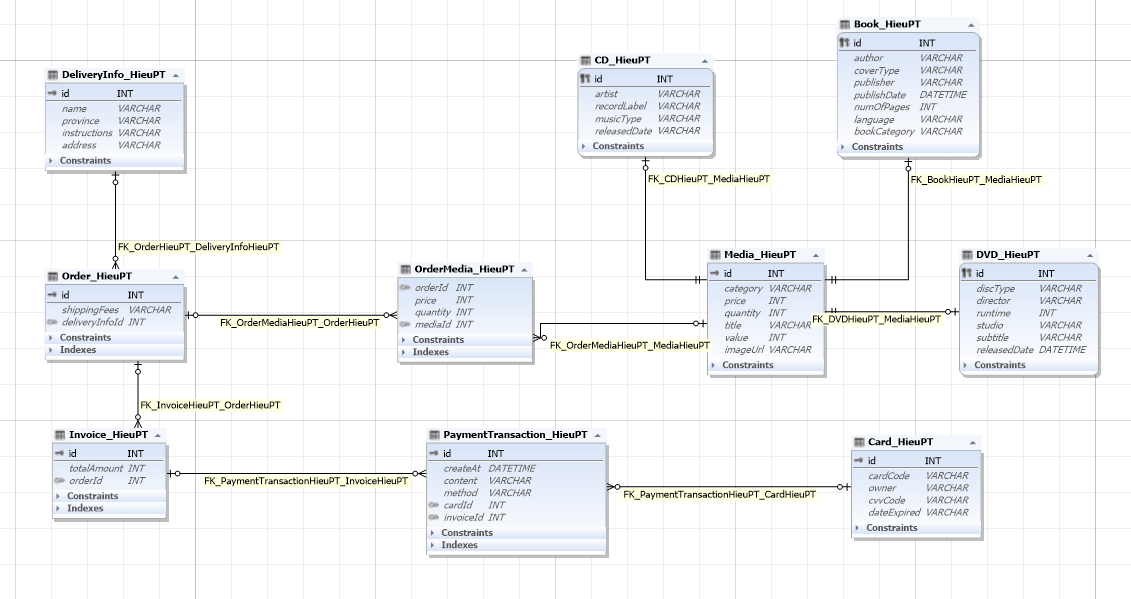
#### Mô hình khái niệm (Conceptual Data Model)

AIMS System ERD



#### Thiết kế cơ sở dữ liệu

##### Mô hình dữ liệu logic (Logical data model)



##### Mô hình dữ liệu vật lý

Chú thích:

PK: Primary Key

FK: Foreign Key

* **Media\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
|  | x |  | id | Integer | Yes | ID, auto increment |
|  |  |  | category | VARCHAR(45) | Yes | Media type, e.g., CD, DVD |
|  |  |  | price | Integer | Yes | Current price |
|  |  |  | quantity | Integer | Yes | Number of products |
|  |  |  | title | VARCHAR(45) | Yes | Product name |
|  |  |  | value | Integer | Yes | Value of the product |
|  |  |  | imageUrl | VARCHAR(45) | Yes | Product image path |

* **CD\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | x | id | Integer | Yes | ID, same as ID of Media of which type is CD |
|  |  |  | artist | VARCHAR(45) | Yes | Artist's name |
|  |  |  | recordLabel | VARCHAR(45) | Yes | Record label |
|  |  |  | musicType | VARCHAR(45) | Yes | Music genres |
|  |  |  | releasedDate | DATE | No | Release date |

* **Book\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | x | id | Integer | Yes | ID, same as ID of Media of which type is Book |
|  |  |  | author | VARCHAR(45) | Yes | Author |
|  |  |  | coverType | VARCHAR(45) | Yes | Cover type |
|  |  |  | Publisher | VARCHAR(45) | Yes | Publishing house |
|  |  |  | publishDate | DATETIME | Yes | Date of publishing |
|  |  |  | numOfPages | Integer | Yes | Page number |
|  |  |  | language | VARCHAR(45) | Yes | Language |
|  |  |  | bookCategory | VARCHAR(45) | Yes | Book category |

* **DVD\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  |  | x | id | Integer | Yes | ID, same as ID of Media of which type is DVD |
|  |  |  | discType | VARCHAR(45) | Yes | Disc type |
|  |  |  | director | VARCHAR(45) | Yes | Director |
|  |  |  | runtime | Integer | Yes | Duration |
|  |  |  | studio | VARCHAR(45) | Yes | Manufacturer |
|  |  |  | subtitle | VARCHAR(45) | Yes | Subtitles |
|  |  |  | releasedDate | DATETIME | Yes | Release date |

* **Card\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
|  | x |  | id | Integer | Yes | ID, auto increment |
|  |  |  | cardCode | VARCHAR(45) | Yes | Card code |
|  |  |  | owner | VARCHAR(45) | Yes | Cardholders |
|  |  |  | cvvCode | VARCHAR(3) | Yes | CVV code |
|  |  |  | dateExpired | VARCHAR(4) | Yes | Expiration date |

* **DeliveryInfo\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  | X |  | id | Integer | Yes | ID, auto increment |
|  |  |  | name | VARCHAR(45) | Yes | Receiver name |
|  |  |  | province | VARCHAR(45) | Yes | Provinces |
|  |  |  | instructions | VARCHAR(200) | No | Delivery instructions |
|  |  |  | address | VARCHAR(100) | Yes | Delivery address |

* **Order\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  | X |  | id | Integer | Yes | ID |
|  |  |  | shippingFees | VARCHAR(45) | Yes | Shipping fee |
|  |  | X | deliveryInfoId | Integer | Yes | Delivery Info ID (DeliveryInfo\_HieuPT ID) |

* **OrderMedia\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  |  | X | mediaID | Integer | Yes | Media ID (Media\_HieuPT ID) |
|  |  | X | orderID | Integer | Yes | Order ID (Order\_HieuPT ID) |
|  |  |  | price | Integer | Yes | Selling price |
|  |  |  | quantity | Integer | Yes | Number |

* **Invoice\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  | x |  | id | Integer | Yes | ID |
|  |  |  | totalAmount | Integer | Yes | Total |
|  |  | x | orderId | Integer | Yes | Order ID (Order\_HieuPT ID) |

* **PaymentTransaction\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
|  | x |  | id | Integer | Yes | ID |
|  |  |  | createAt | DATETIME | Yes | Date of creation |
|  |  |  | content | VARCHAR(45) | Yes | Transaction contents |
|  |  |  | method | VARCHAR(45) | Yes | Payment methods |
|  |  | x | cardId | Integer | Yes | ID of used card (Cart\_HieuPT ID) |
|  |  | x | invoiceId | Integer | Yes | Invoice ID (Invoice\_HieuPT ID) |

**Script:**

--

-- Set default database

--

USE AIMS;

--

-- Create table `DeliveryInfo\_HieuPT`

--

CREATE TABLE DeliveryInfo\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

name varchar(45) NOT NULL,

province varchar(45) NOT NULL,

instructions varchar(200) DEFAULT NULL,

address varchar(100) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `Order\_HieuPT`

--

CREATE TABLE Order\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

shippingFees varchar(45) NOT NULL,

deliveryInfoId int(11) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Order\_HieuPT

ADD CONSTRAINT FK\_OrderHieuPT\_DeliveryInfoHieuPT FOREIGN KEY (deliveryInfoId)

REFERENCES DeliveryInfo\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Invoice\_HieuPT`

--

CREATE TABLE Invoice\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

totalAmount int(11) NOT NULL,

orderId int(11) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Invoice\_HieuPT

ADD CONSTRAINT FK\_InvoiceHieuPT\_OrderHieuPT FOREIGN KEY (orderId)

REFERENCES Order\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Card\_HieuPT`

--

CREATE TABLE Card\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

cardCode varchar(15) NOT NULL,

owner varchar(45) NOT NULL,

cvvCode varchar(3) NOT NULL,

dateExpired varchar(4) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `PaymentTransaction\_HieuPT`

--

CREATE TABLE PaymentTransaction\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

createAt datetime NOT NULL,

content varchar(45) NOT NULL,

method varchar(45) NOT NULL,

cardId int(11) NOT NULL,

invoiceId int(11) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE PaymentTransaction\_HieuPT

ADD CONSTRAINT FK\_PaymentTransactionHieuPT\_CardHieuPT FOREIGN KEY (cardId)

REFERENCES Card\_HieuPT (id) ON DELETE NO ACTION;

ALTER TABLE PaymentTransaction\_HieuPT

ADD CONSTRAINT FK\_PaymentTransactionHieuPT\_InvoiceHieuPT FOREIGN KEY (invoiceId)

REFERENCES Invoice\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Media\_HieuPT`

--

CREATE TABLE Media\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

category varchar(45) NOT NULL,

price int(11) NOT NULL,

quantity int(11) NOT NULL,

title varchar(45) NOT NULL,

value int(11) NOT NULL,

imageUrl varchar(45) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `OrderMedia\_HieuPT`

--

CREATE TABLE OrderMedia\_HieuPT (

orderId int(11) NOT NULL,

price int(11) NOT NULL,

quantity int(11) NOT NULL,

mediaId int(11) NOT NULL

)

ALTER TABLE OrderMedia\_HieuPT

ADD CONSTRAINT FK\_OrderMediaHieuPT\_MediaHieuPT FOREIGN KEY (mediaId)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

ALTER TABLE OrderMedia\_HieuPT

ADD CONSTRAINT FK\_OrderMediaHieuPT\_OrderHieuPT FOREIGN KEY (orderId)

REFERENCES Order\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `DVD\_HieuPT`

--

CREATE TABLE DVD\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

discType varchar(255) NOT NULL,

director varchar(45) NOT NULL,

runtime int(11) NOT NULL,

studio varchar(45) NOT NULL,

subtitle varchar(45) NOT NULL,

releasedDate datetime NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE DVD\_HieuPT

ADD CONSTRAINT FK\_DVDHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `CD\_HieuPT`

--

CREATE TABLE CD\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

artist varchar(45) NOT NULL,

recordLabel varchar(45) NOT NULL,

musicType varchar(45) NOT NULL,

releasedDate varchar(255) DEFAULT NULL,

PRIMARY KEY (id)

)

ALTER TABLE CD\_HieuPT

ADD CONSTRAINT FK\_CDHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Book\_HieuPT`

--

CREATE TABLE Book\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

author varchar(45) NOT NULL,

coverType varchar(45) NOT NULL,

publisher varchar(45) NOT NULL,

publishDate datetime NOT NULL,

numOfPages int(11) NOT NULL,

language varchar(45) NOT NULL,

bookCategory varchar(45) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Book\_HieuPT

ADD CONSTRAINT FK\_BookHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

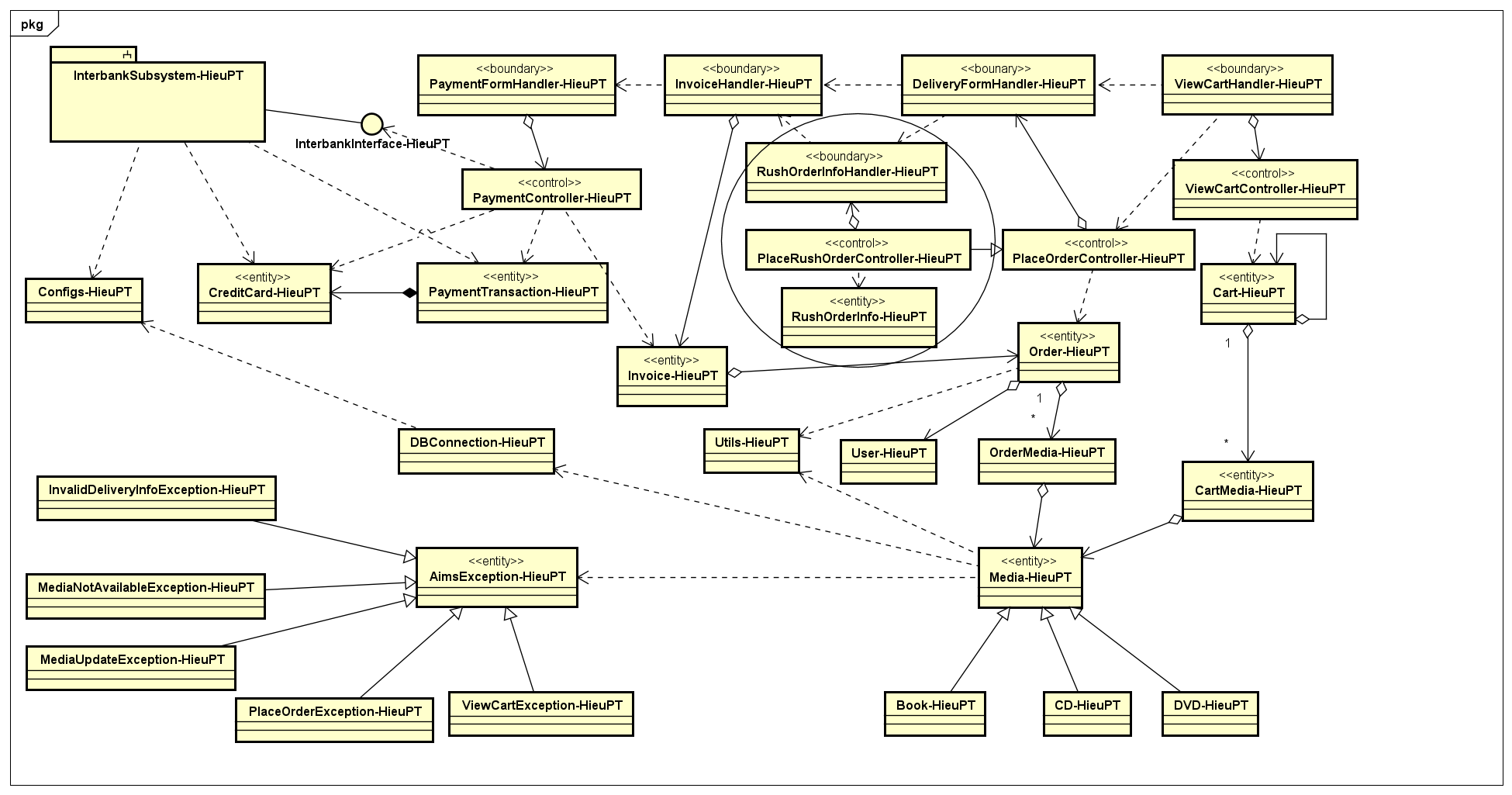
## Bài tập

Hãy thiết kế lớp chi tiết và mô hình hóa dữ liệu cho Use case “Place Rush Order”.

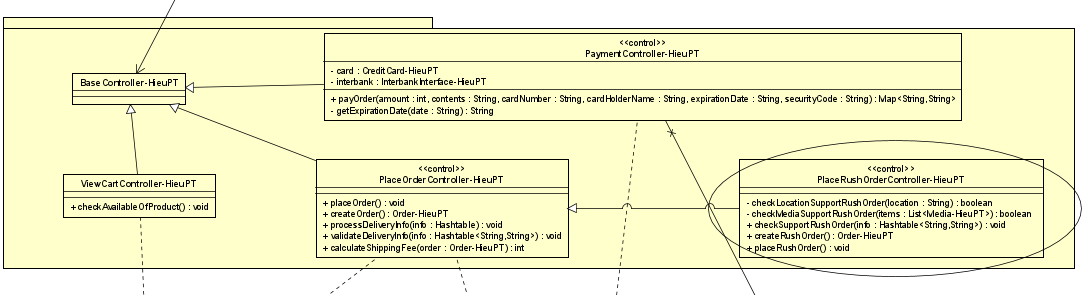
### Thiết kế lớp

#### Bổ sung mối quan hệ giữa các lớp

Bổ sung PlaceRushOrderController-HieuPT, RushOrderInfo-HieuPT, RushOrderInfoHandler-HieuPT vào biểu đồ mối quan hệ giữa các lớp.

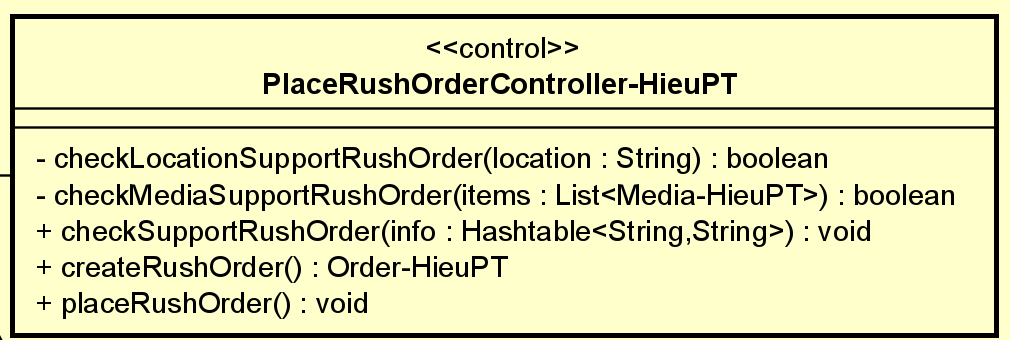


Bổ sung PlaceRushOrderController-HieuPT vào biểu đồ lớp thiết kế.



#### Lớp thiết kế

##### Lớp PlaceRushOrderController-HieuPT



***Attribute:*** Không

***Operation 1:***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 1 | checkLocationSupportRushOrder | boolean | Kiểm tra địa chỉ có hỗ trợ giao hàng nhanh hay không |

*Parameter:*

* location: địa chị đặt hàng

*Exception:*

* Không

***Operation 2:***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 2 | checkMediaSupportRushOrder | boolean | Kiểm tra sản phẩm có hỗ trợ giao hàng nhanh hay không |

*Parameter:*

* items: danh sách tất cả sản phẩm đặt hàng

*Exception:*

* Không

***Operation 3:***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 3 | checkSupportRushOrder | void | Kiểm tra điều kiện giao hàng nhanh |

*Parameter:*

* info: thông tin đặt hàng

*Exception:*

* Không

***Operation 4:***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 4 | createRushOrder | Order | Tạo đơn giao hàng nhanh |

*Parameter:*

* Không

*Exception:*

* Không

***Operation 5:***

|  |  |  |  |
| --- | --- | --- | --- |
| *#* | *Tên* | *Kiểu dữ liệu trả về* | *Mô tả (mục đích)* |
| 4 | placeRushOrder | void | Tiến hành điều hướng thông tin đặt hàng nhanh để tiếp tục xử lý |

*Parameter:*

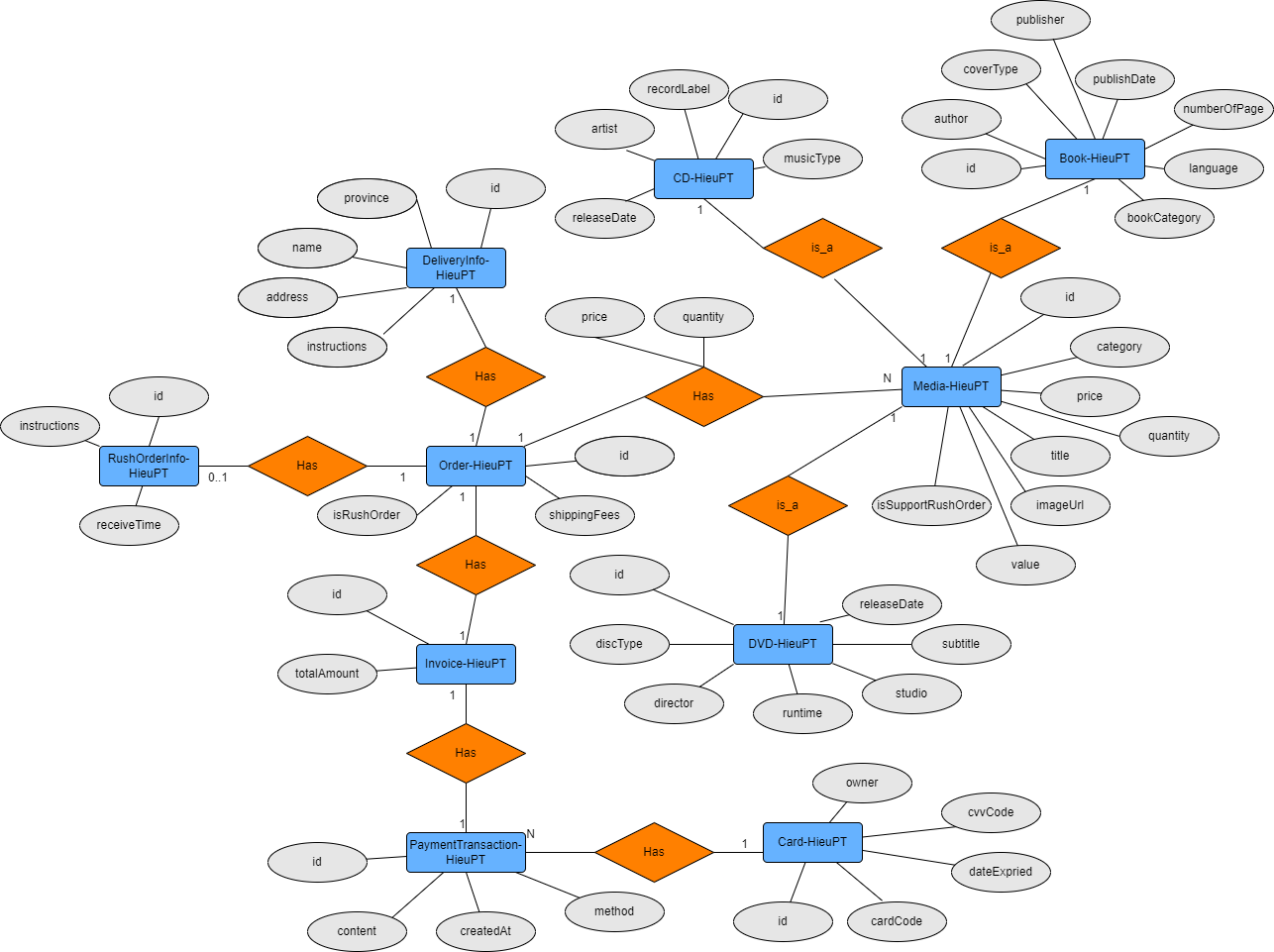
* Không

*Exception:*

* Không

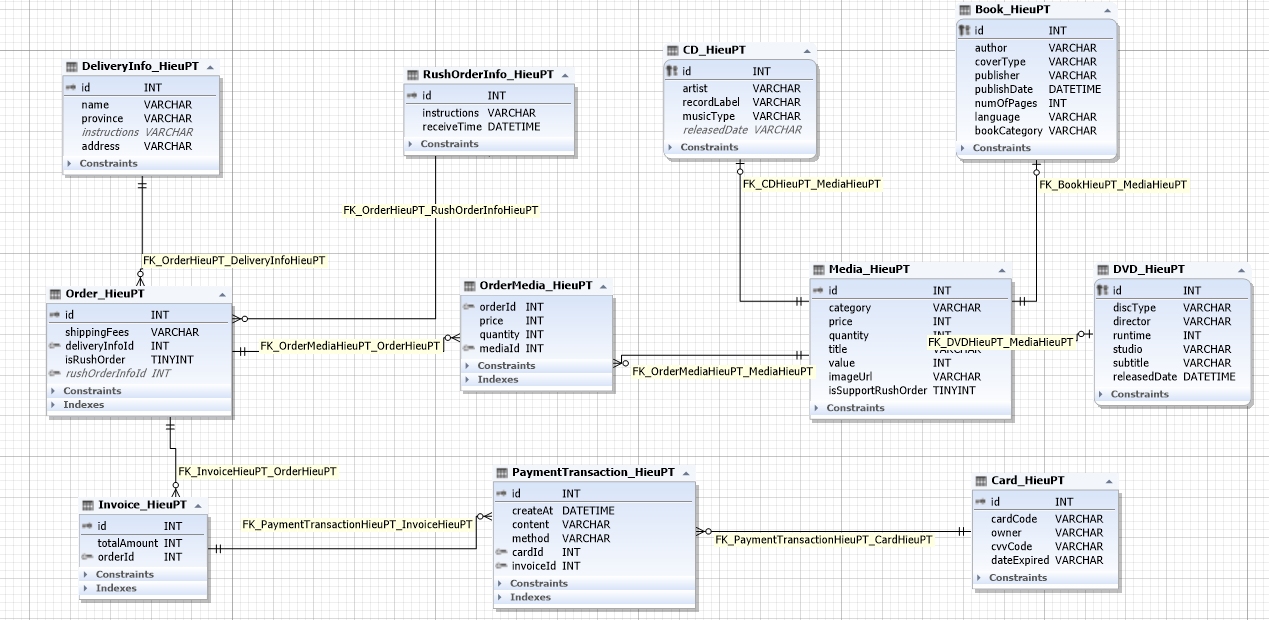
### Mô hình hóa dữ liệu

#### Mô hình khái niệm



#### Thiết kế cơ sở dữ liệu

##### Mô hình dữ liệu logic



##### Mô hình dữ liệu vật lý

Chú thích:

PK: Primary Key

FK: Foreign Key

Dưới đây có thêm bảng RushOrderInfo-HieuPT và cập nhật thông tin của bảng Media-HieuPT và Order-HieuPT

* **Media\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | x |  | id | Integer | Yes | ID, auto increment |
| 2 |  |  | category | VARCHAR(45) | Yes | Media type, e.g., CD, DVD |
| 3 |  |  | price | Integer | Yes | Current price |
| 4 |  |  | quantity | Integer | Yes | Number of products |
| 5 |  |  | title | VARCHAR(45) | Yes | Product name |
| 6 |  |  | value | Integer | Yes | Value of the product |
| 7 |  |  | imageUrl | VARCHAR(45) | Yes | Product image path |
| 8 |  |  | isSupportRushOrder | TINYINT(1) | Yes | Sản phẩm có hỗ trợ giao hàng nhanh hay không: 0 – Không, 1 - Có |

* **RushOrderInfo\_HieuPT**

| # | PK | FK | Column Name | Data type | Mandatory | Description |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | x |  | id | Integer | Yes | ID |
| 2 |  |  | instructions | VARCHAR(255) | Yes | Chỉ dẫn giao hàng nhanh |
| 3 |  |  | receiveTime | DATETIME | Yes | Thời gian nhận hàng |

* **Order\_HieuPT**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| # | PK | FK | Column Name | Data type | Mandatory | Description |
| 1 | X |  | id | Integer | Yes | ID |
| 2 |  |  | shippingFees | VARCHAR(45) | Yes | Shipping fee |
| 3 |  | X | deliveryInfoId | Integer | Yes | Delivery Info ID (DeliveryInfo\_HieuPT ID) |
| 4 |  |  | isRushOrder | TINYINT(1) | Yes | Có phải giao hàng nhanh không: 0 – Không, 1 - Có |
|  |  | X | rushOrderInfoId | Integer | No | RushOrderInfo ID (RushOrderInfo-HieuPT ID) |

**Script:**

--

-- Set default database

--

USE AIMS;

--

-- Create table `RushOrderInfo\_HieuPT`

--

CREATE TABLE AIMS.RushOrderInfo\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

instructions varchar(255) NOT NULL,

receiveTime datetime NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `DeliveryInfo\_HieuPT`

--

CREATE TABLE DeliveryInfo\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

name varchar(45) NOT NULL,

province varchar(45) NOT NULL,

instructions varchar(200) DEFAULT NULL,

address varchar(100) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `Order\_HieuPT`

--

CREATE TABLE Order\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

shippingFees varchar(45) NOT NULL,

deliveryInfoId int(11) NOT NULL,

isRushOrder tinyint(1) NOT NULL,

rushOrderInfoId int(11) DEFAULT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Order\_HieuPT

ADD CONSTRAINT FK\_OrderHieuPT\_DeliveryInfoHieuPT FOREIGN KEY (deliveryInfoId)

REFERENCES DeliveryInfo\_HieuPT (id) ON DELETE NO ACTION;

ALTER TABLE AIMS.Order\_HieuPT

ADD CONSTRAINT FK\_OrderHieuPT\_RushOrderInfoHieuPT FOREIGN KEY (rushOrderInfoId)

REFERENCES AIMS.RushOrderInfo\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Invoice\_HieuPT`

--

CREATE TABLE Invoice\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

totalAmount int(11) NOT NULL,

orderId int(11) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Invoice\_HieuPT

ADD CONSTRAINT FK\_InvoiceHieuPT\_OrderHieuPT FOREIGN KEY (orderId)

REFERENCES Order\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Card\_HieuPT`

--

CREATE TABLE Card\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

cardCode varchar(15) NOT NULL,

owner varchar(45) NOT NULL,

cvvCode varchar(3) NOT NULL,

dateExpired varchar(4) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `PaymentTransaction\_HieuPT`

--

CREATE TABLE PaymentTransaction\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

createAt datetime NOT NULL,

content varchar(45) NOT NULL,

method varchar(45) NOT NULL,

cardId int(11) NOT NULL,

invoiceId int(11) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE PaymentTransaction\_HieuPT

ADD CONSTRAINT FK\_PaymentTransactionHieuPT\_CardHieuPT FOREIGN KEY (cardId)

REFERENCES Card\_HieuPT (id) ON DELETE NO ACTION;

ALTER TABLE PaymentTransaction\_HieuPT

ADD CONSTRAINT FK\_PaymentTransactionHieuPT\_InvoiceHieuPT FOREIGN KEY (invoiceId)

REFERENCES Invoice\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Media\_HieuPT`

--

CREATE TABLE Media\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

category varchar(45) NOT NULL,

price int(11) NOT NULL,

quantity int(11) NOT NULL,

title varchar(45) NOT NULL,

value int(11) NOT NULL,

imageUrl varchar(45) NOT NULL,

isSupportRushOrder tinyint(1) NOT NULL,

PRIMARY KEY (id)

)

--

-- Create table `OrderMedia\_HieuPT`

--

CREATE TABLE OrderMedia\_HieuPT (

orderId int(11) NOT NULL,

price int(11) NOT NULL,

quantity int(11) NOT NULL,

mediaId int(11) NOT NULL

)

ALTER TABLE OrderMedia\_HieuPT

ADD CONSTRAINT FK\_OrderMediaHieuPT\_MediaHieuPT FOREIGN KEY (mediaId)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

ALTER TABLE OrderMedia\_HieuPT

ADD CONSTRAINT FK\_OrderMediaHieuPT\_OrderHieuPT FOREIGN KEY (orderId)

REFERENCES Order\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `DVD\_HieuPT`

--

CREATE TABLE DVD\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

discType varchar(255) NOT NULL,

director varchar(45) NOT NULL,

runtime int(11) NOT NULL,

studio varchar(45) NOT NULL,

subtitle varchar(45) NOT NULL,

releasedDate datetime NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE DVD\_HieuPT

ADD CONSTRAINT FK\_DVDHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `CD\_HieuPT`

--

CREATE TABLE CD\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

artist varchar(45) NOT NULL,

recordLabel varchar(45) NOT NULL,

musicType varchar(45) NOT NULL,

releasedDate varchar(255) DEFAULT NULL,

PRIMARY KEY (id)

)

ALTER TABLE CD\_HieuPT

ADD CONSTRAINT FK\_CDHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;

--

-- Create table `Book\_HieuPT`

--

CREATE TABLE Book\_HieuPT (

id int(11) NOT NULL AUTO\_INCREMENT,

author varchar(45) NOT NULL,

coverType varchar(45) NOT NULL,

publisher varchar(45) NOT NULL,

publishDate datetime NOT NULL,

numOfPages int(11) NOT NULL,

language varchar(45) NOT NULL,

bookCategory varchar(45) NOT NULL,

PRIMARY KEY (id)

)

ALTER TABLE Book\_HieuPT

ADD CONSTRAINT FK\_BookHieuPT\_MediaHieuPT FOREIGN KEY (id)

REFERENCES Media\_HieuPT (id) ON DELETE NO ACTION;