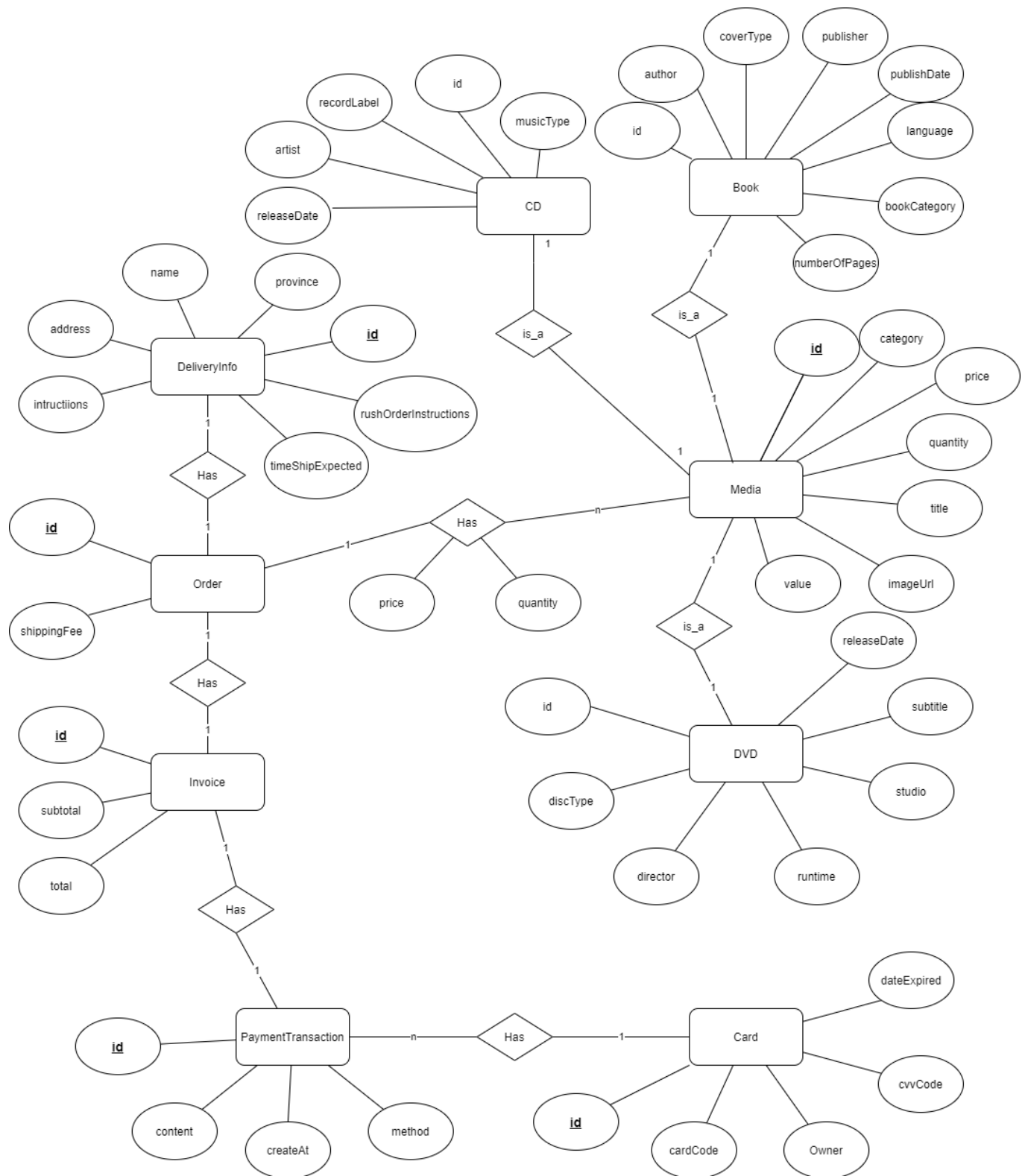
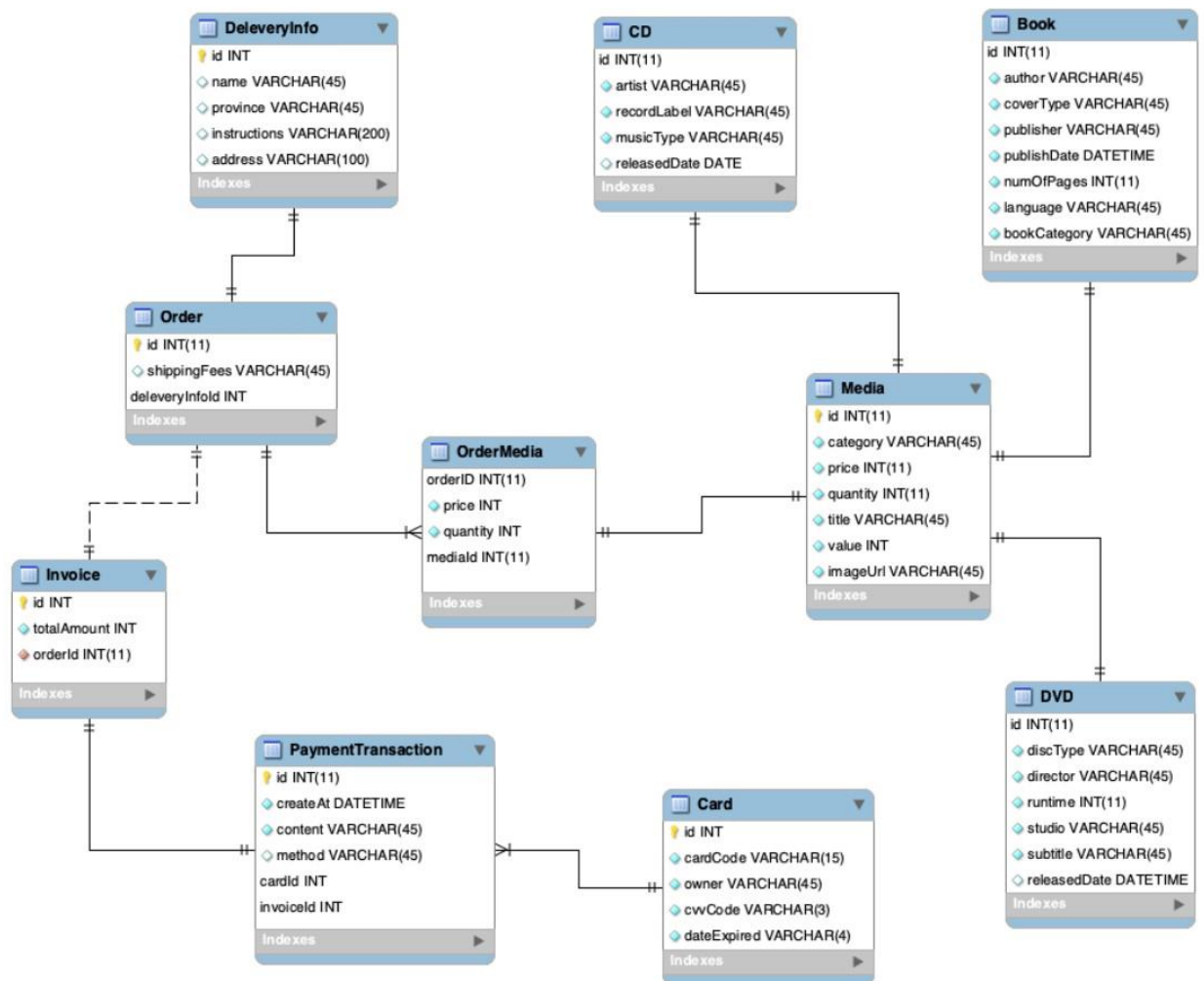


# Data Modeling

## 1. Conceptual data model



## 2. Logical data model



## 3. Physical data model

### - Media

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID, auto increment
2.			category	VARCHAR(45)	Yes	Media type: CD, DVD, Book, ...
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

### - CD

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.		x	id	Integer	Yes	ID, same as ID of Media of which type is CD

2.			artist	VARCHAR(45)	Yes	Record label
3.			recordLabel	VARCHAR(45)	Yes	Current price
4.			musicType	VARCHAR(45)	Yes	Music genres
5.			releaseDate	Date	Yes	Release date

- **Book**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.		x	id	Integer	Yes	ID, same as ID of Media of which type is Book
2.			author	VARCHAR(45)	Yes	Author
3.			coverType	VARCHAR(45)	Yes	Cover type
4.			Publisher	VARCHAR(45)	Yes	Publishing house
5.			PublishDate	DATETIME	Yes	Date of publishing
6.			numberOfPages	Integer	Yes	Page number
7.			language	VARCHAR(45)	Yes	Language
8.			bookCategory	VARCHAR(45)	Yes	Book category

- **DVD**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.		x	id	Integer	Yes	ID, same as ID of Media of which type is DVD
2.			discType	VARCHAR(45)	Yes	Media type: CD, DVD, Book, ...
3.			Director	VARCHAR(45)	Yes	Director
4.			Runtime	Integer	Yes	Duration
5.			Studio	VARCHAR(45)	Yes	Manufacturer
6.			Subtitle	VARCHAR(45)	Yes	Subtitles
7.			releaseDate	DATETIME	Yes	Release date
8.			filmType	VARCHAR(45)	Yes	Genres

- **Card**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID, auto increment
2.			cardCode	VARCHAR(45)	Yes	Card code
3.			Owner	VARCHAR(45)	Yes	Card holders
4.			cvvCode	VARCHAR(45)	Yes	CVV code
5.			dateExpired	DATE	Yes	Expiration date

- **DeliveryInfo**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID, auto increment
2.			Name	VARCHAR(45)	Yes	Receiver name
3.			Province	VARCHAR(45)	Yes	Provinces
4.			Instructions	VARCHAR(45)	Yes	Delivery info
5.			address	VARCHAR(45)	Yes	Delivery address
6.			rushOrderInstructions	VARCHAR(45)	No	Rush order instructions

7.			timeShipExpected	DATETIME	No	
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- **Order**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID
2.			ShippingFee	VARCHAR(45)	Yes	Shipping fee
3.		x	deliveryInfold	Integer	Yes	Delivery info

- **OrderMedia**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.		X	mediaID	Integer	Yes	Media ID
2.		x	prderID	Integer	Yes	Order ID
3.			Price	Integer	Yes	Selling price
4.			Quantity	Integer	Yes	Number of products

- **Invoice**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID
2.			subtotal	Integer	Yes	Sub total
			total	Integer	Yes	Toal
3.		x	orderID	Integer	Yes	Order ID

- **PaymentTransaction**

#	PK	FK	Column Name	Data Type	Mandatory	Description
1.	x		id	Integer	Yes	ID
2.			createAt	DATETIME	Yes	Transaction contents
3.			Content	VARCHAR(45)	Yes	Payment methods
4.			Method	VARCHAR(45)	Yes	Number of products
5.			cardID	Integer	Yes	ID of user card
6.			invoiceID	Integer	Yes	Invoice ID