

SOFTWARE DEVELOPMENT

Data Modeling for Place Rush Order

1. Conceptual Data Model

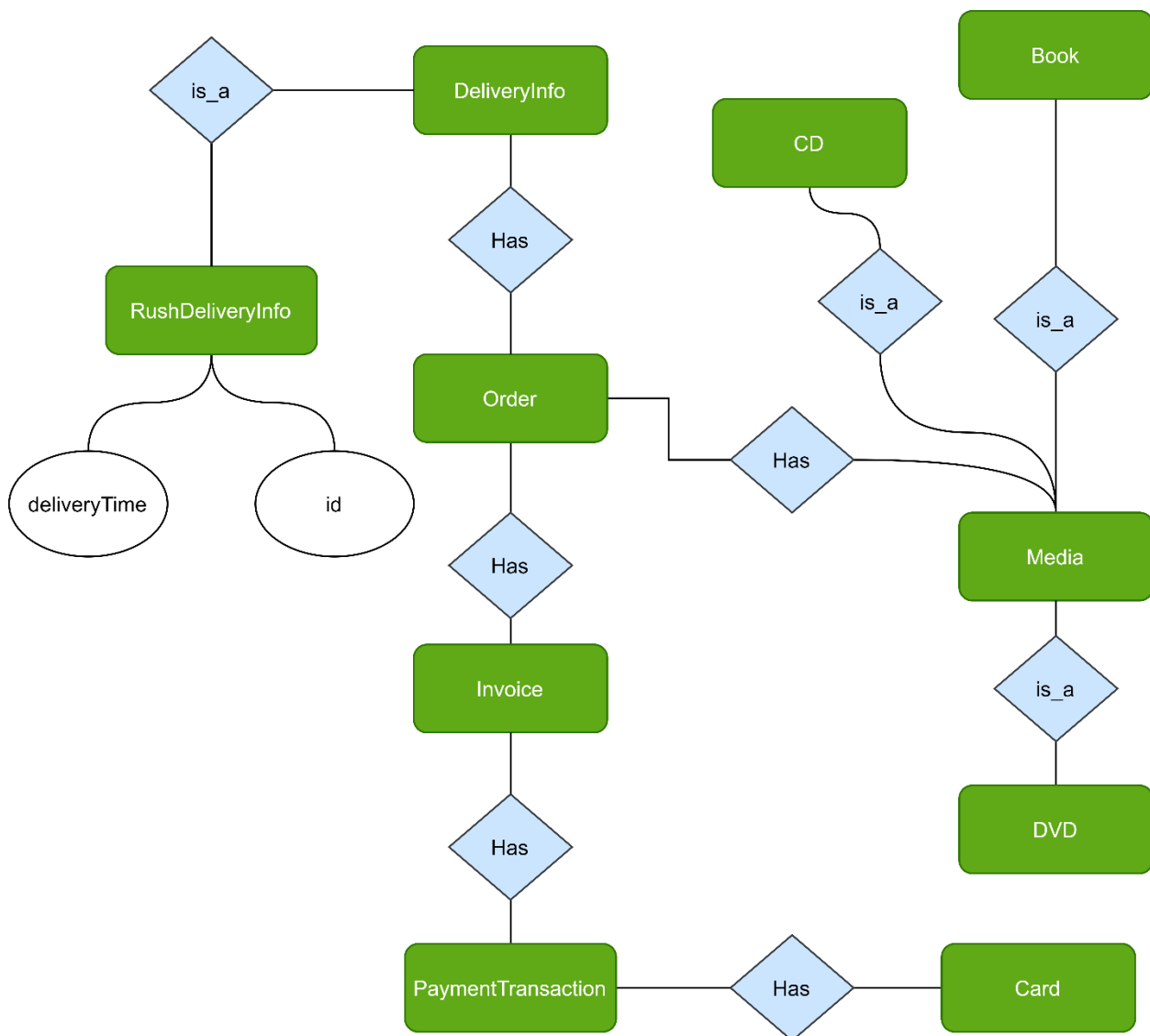


Figure1. ER Diagram

Add new entity ***RushDeliveryInfo*** with attribute ***id*** and ***deliveryTime***

2. Logical Data Model

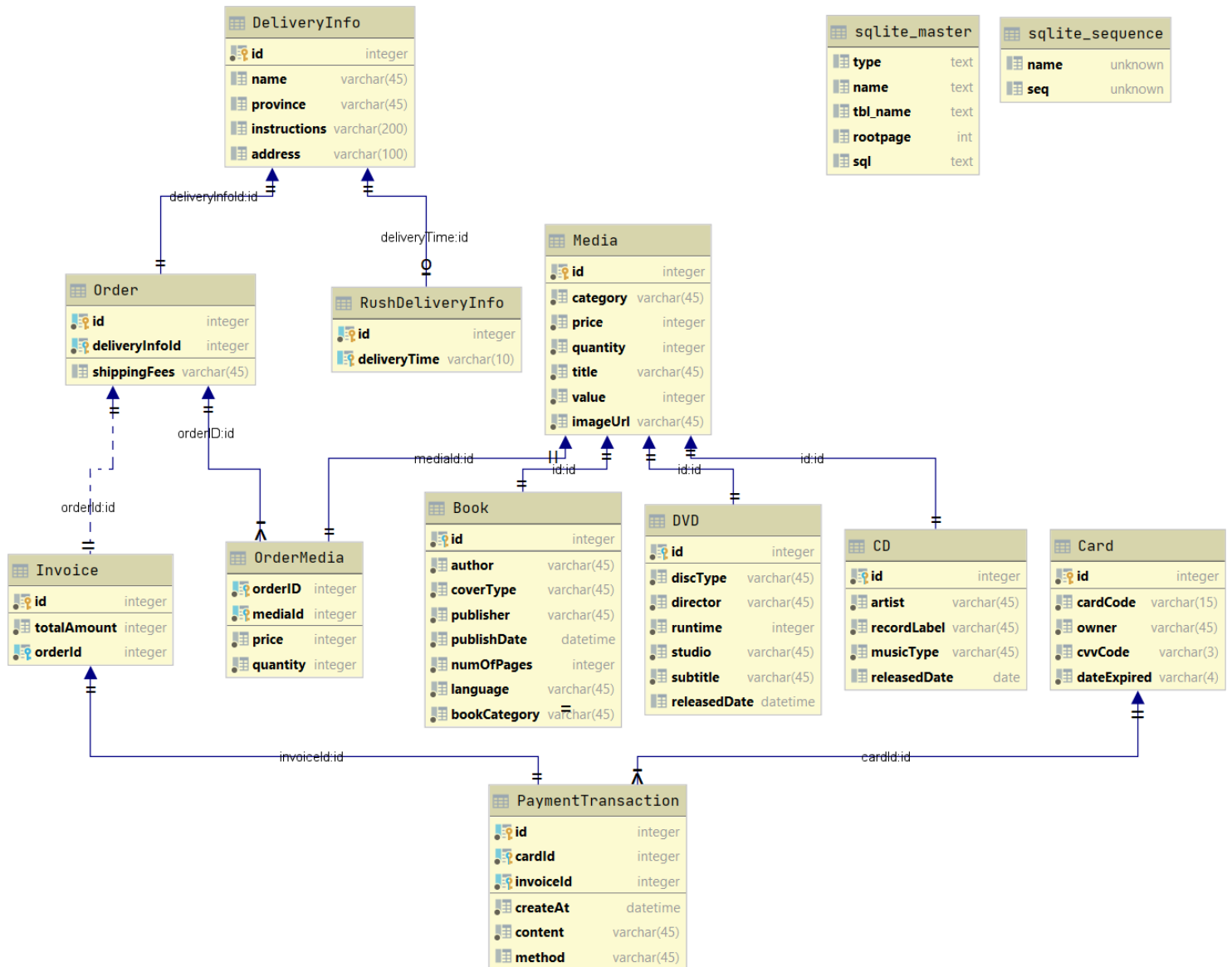


Figure2. Relational Diagram

Create new table **RushDeliveryInfo** with Primary key (**id**, **deliveryTime**), Foreign key **id** references **DeliveryInfo** (**id**)

3. Physical Data Model

- **RushDeliveryInfo**

#	PK	FK	Column name	Data type	Mandatory	Description
1	x	x	id	Integer	Yes	ID, same as ID of DeliveryInfo which type is Rush Order
2	x		deliveryTime	Varchar(10)	Yes	Delivery time which Customer requested

- **Database script**

```
CREATE TABLE "RushDeliveryInfo"(  
    "id" INTEGER NOT NULL,  
    "deliveryTime" VARCHAR(10),  
    PRIMARY KEY("id","deliveryTime"),  
    CONSTRAINT "fk_Rush_DeliveryInfo" FOREIGN KEY("deliveryTime")  
    REFERENCES "DeliveryInfo"("id")  
);
```