SOFTWARE DEVELOPMENT

Data Modeling for Place Rush Order

1. **Conceptual Data Model**

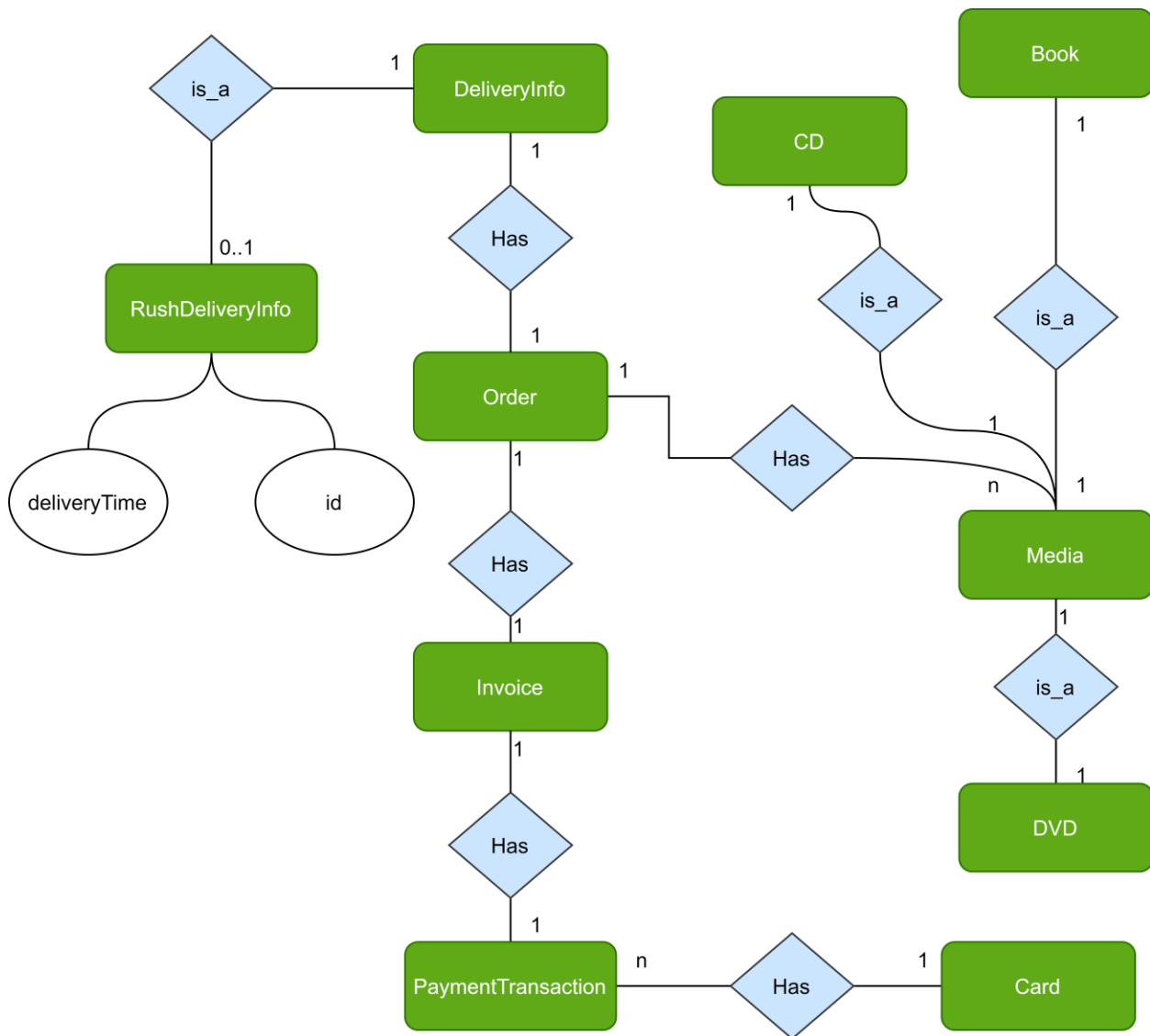*Figure1. ER Diagram*

Add new entity **RushDeliveryInfo** with attribute **id** and **deliveryTime**
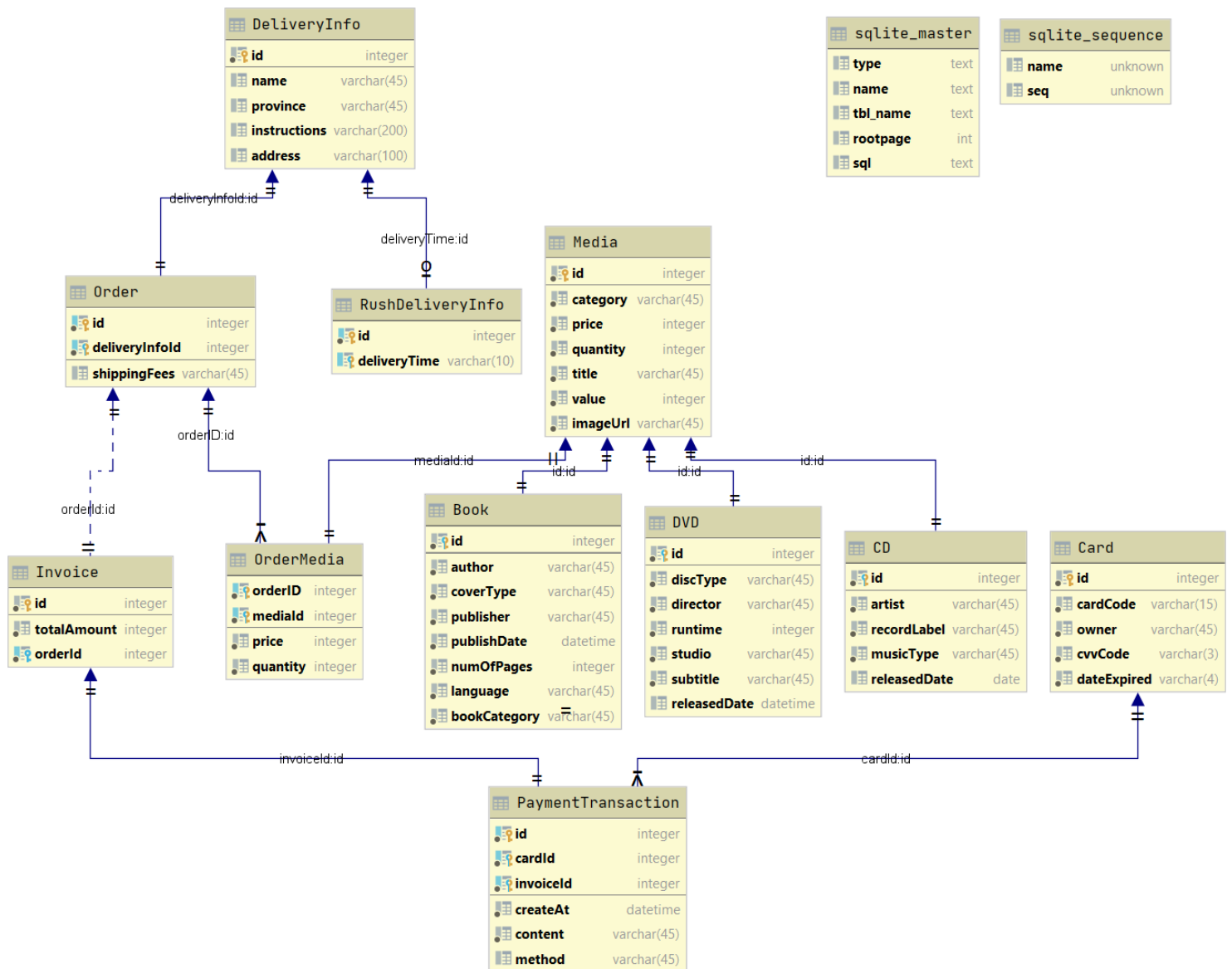
2. Logical Data Model

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")
);
```