**PHYSICAL DATA MODEL**

* **User**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | username |  |  | Text | Yes | Username |
| **3.** | password |  |  | Text | Yes | Password |
| **4.** | name |  |  | Text | Yes | Name of user |
| **5.** | birthdate |  |  | Text | Yes | Birthdate of user |
| **6.** | phoneNumber |  |  | Text | Yes | Phone number of user |
| **7.** | role |  |  | Integer | Yes | Role of user |

* **Card**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | cardNumber |  |  | Varchar(45) | Yes | Card number |
| **3.** | holderName |  |  | Varchar(45) | Yes | Name of the holder of the card |
| **4.** | expirationDate |  |  | Date | Yes | The expiration date of the card |
| **5.** | securityCode |  |  | Varchar(45) | Yes | The security code of the Card |

* **Media**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | type |  |  | Varchar(45) | Yes | Type of media |
| **3.** | category |  |  | Varchar(45) | Yes | Category type |
| **4.** | quantity |  |  | Integer | Yes | The remain quantity of media |
| **5.** | price |  |  | Integer | Yes | Price |
| **6.** | title |  |  | Varchar(45) | Yes | Title of media |
| **7.** | value |  |  | Integer | Yes | The weight of the media |
| **8.** | imageUrl |  |  | Varchar(45) | Yes | Image Url of media |

* **Book**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x | x | Integer | Yes | ID, auto increment |
| **2.** | author |  |  | Varchar(45) | Yes | Author |
| **3.** | coverType |  |  | Varchar(45) | Yes | Cover name |
| **4.** | publisher |  |  | Varchar(45) | Yes | Publisher |
| **5.** | publicationDate |  |  | Date | Yes | Publication date |
| **6.** | language |  |  | Varchar(45) | Yes | Language |
| **7.** | numOfPages |  |  | Integer | Yes | Number page of the media |
| **8.** | genres |  |  | Varchar(45) | Yes | Genres |
| **9.** | bookCategory |  |  | Varchar(45) | Yes | Id from Media table |

* **DVD**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x | x | Integer | Yes | ID, auto increment |
| **2.** | discType |  |  | Varchar(45) | Yes | DVD type |
| **3.** | director |  |  | Varchar(45) | Yes | Director’s name |
| **4.** | runtime |  |  | Integer | Yes | Duration |
| **5.** | studio |  |  | Varchar(45) | Yes | Studio |
| **6.** | subtitles |  |  | Varchar(45) | Yes | Subtitles |
| **7.** | releaseDate |  |  | Date | Yes | Release date |
| **8.** | filmType |  |  | Varchar(45) | Yes | genres |

* **CD**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x | x | Integer | Yes | ID, auto increment |
| **2.** | artists |  |  | Varchar(45) | Yes | Artists |
| **3.** | recordLabels |  |  | Varchar(45) | Yes | Record labels |
| **4.** | musicType |  |  | Varchar(45) | Yes | Type of music |
| **5.** | releaseDate |  |  | Date | Yes | Release date of the CD |

* **Order**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | name |  |  | Varchar(45) | Yes | Name of custormer |
| **3.** | address |  |  | Varchar(45) | Yes | Address of customer |
| **4.** | phone |  |  | Varchar(45) | Yes | Phone number of customer |
| **5.** | shippingFees |  |  | Integer | Yes | Shipping fees |
| **6.** | instruction |  |  | Varchar(45) | Yes | Shipping instruction |
| **7.** | province |  |  | Varchar(45) | Yes | The province of customer |
| **8.** | status |  |  | Integer | Yes | Order status |
| **9.** | amount |  |  | Integer | Yes | Amount of media |
| **10.** | payDate |  |  | Varchar(45) | Yes | The date of payment |

* **OrderMedia**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | media\_id | x | x | Integer | Yes | Id from Media table |
| **2.** | order\_id | x | x | Integer | Yes | Id from order table |
| **3.** | price |  |  | Integer | Yes | Price |
| **4.** | quantity |  |  | Integer | Yes | Quantity of media |

* **PaymentTransaction**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | orderID |  | x | Integer | Yes | Id from Order table |
| **3.** | createAt |  |  | Datetime | Yes | Time create of the payment |
| **4.** | content |  |  | Varchar(45) | Yes | Content of the transaction |
| **5.** | txnRef |  |  | Varchar(45) | Yes | txnRef |
| **6.** | cardType |  |  | Varchar(45) | Yes | Type of card |
| **7.** | amount |  |  | Integer | Yes | Amount of payment |
| **8.** | transactionNo |  |  | Varchar(45) | Yes | Transaction |

* **Shipment**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Column Name** | **PK** | **FK** | **Data type** | **Mandatory** | **Description** |
| **1.** | id | x |  | Integer | Yes | ID, auto increment |
| **2.** | shipType |  |  | Integer | Yes | Shipping type |
| **3.** | deliveryInstruction |  |  | Varchar(45) | No | Delivery instruction |
| **4.** | deliveryTime |  |  | Varchar(45) | No | Delivery time |
| **5.** | shipmentDetail |  |  | Varchar(45) | Yes | Detail of shipment |
| **6** | orderId |  | X | Integer | Yes | Id from Order table |