**Database specifications for AIMS**

1. **ER-Diagram**

**Diagram

Description automatically generated**

1. **Table relationships**

**Chart, diagram, box and whisker chart

Description automatically generated**

1. **Table specifications**

**Customer**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x | x | customer\_id | int | X | ID of customer |
| 2 |  |  | name | varchar(256) | x | Name of customer |
| 3 |  |  | Phone\_number | varchar(11) |  | Phone number of customer |
| 4 |  |  | address | varchar(50) | x | Address of customer |

**AIMSOrder**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x | x | order\_id | int | x | ID of the order |
| 2 |  |  | customer\_id | int | x | ID of customer placed the order |
| 3 |  |  | Total\_cost | float | x | Cost of the order |
| 4 |  |  | is\_rush\_order | bit | x | 1 for rushed order, 0 otherwise |

**Credit card**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x | x | Credit\_number | varchar(20) | x | Number of creditcard |
| 2 |  |  | Card\_holder\_name | varchar(50) | x | Name of the cardholder |
| 3 |  |  | issuing\_bank | varchar(100) | x | Bank hosting the creditcard |
| 4 |  |  | expriration\_date | Date | x | Expriration date of the credit card |

**Media**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x | x | media\_id | varchar(4) | x | Id of the media item |
| 2 |  |  | title | varchar(128) | x | Name of the media item |
| 3 |  |  | price | float | x | Price of the media item |
| 4 |  |  | Available\_quantity | int | x | available quantity of media item |
| 5 |  |  | media\_rush\_support | bit | x | 1 if the media support rush order, 0 otherwise |
| 6 |  |  | order\_id | int |  | ID of the order corresponding to items |

**Book**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x | x | book\_id | varchar(4) | x | Id of the book. |
| 2 |  |  | author | Varchar(40) | x | Author of book |
| 3 |  |  | category | varchar(40) | x | Category of book |

**CD**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x |  | cd\_id | varchar(4) | x | Id of the CD |
| 2 |  |  | artist | varchar(40) | x | Artist of CD |
| 3 |  |  | Music\_type | Varchar(40) | x | Music type of CD |

**DVD**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x |  | dvd\_id | varchar(4) | x | ID of the DVD |
| 2 |  |  | Director | Varchar(40) | x | Director of DVD |
| 3 |  |  | runtime | float | x | Length of DVD |

**InterBankTransaction**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x |  | transaction\_id | int | x | Id of the transaction |
| 2 |  |  | transaction\_detail | varchar(256) |  | Detail of the transaction |
| 3 |  |  | Credit\_card\_number | varchar(20) | x | Number of the credit card |

**Invoice**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x |  | invoice\_id | int | x | ID of the invoice |
| 2 |  |  | order\_id | int | x | ID of the order corresponding to the invoice |
| 3 |  |  | transaction\_id | int | x | ID of the transaction used to pay the order |

DeliveryInfo

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **PK** | **FK** | **Name** | **Data type** | **Mandatory** | **Description** |
| 1 | x |  | Delivery\_info\_id | int | x | ID of the invoice |
| 2 |  |  | order\_id | int |  | ID of the order corresponding to the invoice |
| 3 |  |  | Customer\_name | Varchar(40) |  | Customer name |
| 4 |  |  | instruction | Varchar(100) |  | Delivery instruction |
| 5 |  |  | address | Varchar(40) |  | Address of customer |