**DOMAIN TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **Attribute** | **Domain Name** | **Meaning** | **Domain Definition** |
| ISBN | ISBN | The set of all possible ISBN IDs | Character : size 13 |
| Category | bookCategory | The set of all possible categories that book can has | Character : size 8  Values : Fantasy, Sci-Fi, Criminal, Science, Drama, Children, Horror, Poetry |
| BookStoreID | bookstoreid | The set of all possible bookstoreids | Character: size 36 |
| LibraryID | libraryid | The set of all possible libraryids | Character: size 36 |
| bookID | bookid | The set of all possible bookids | Character: size 36 |
| dateOfOrder, returnDate | bookDate | The set of all possible date that book can be ordered on and returned | Date |
| orderid | Orderid | The set of all possible order’s ids | Character: size 36 |
| Userid | userid | The set of all possible user ids | Character: size 36 |

**LOGICAL DATA MODEL**

Book(ISBN, title, author, category, year)

PK: ISBN

Customer(customerid, name, email, address, phoneNum, password)

PK: customerid

LibraryAdministrator(admind, libraryId, name, email, password, serverUrl)

FK: libraryid

PK: adminid

BookStoreAdministrator(admind, bookstoreId, name, email, password, serverUrl)

FK: bookstoreid

PK: adminid

BookStore(bookstoreid, name)

PK: bookstoreid

Library(libraryid, name)

PK: libraryid

BookStoreStorage(isbn, bookstoreid)

FK: isbn, bookstoreid

PK: isbn

LibraryStorage(isbn, libraryid, bookid)

FK: isbn, bookstoreid

PK: bookid

BookStoreOrder(orderid, isbn, bookstoreid, customerid)

FK: isbn, bookstoreid, customerid

PK orderid

LibraryOrder(orderid, isbn, bookstoreid, customerid, dateOfOrder, returnDate)

FK: isbn, bookstoreid, customerid

PK: orderid