Database: Library

Table: patrons

p\_id <INT, NOT NULL, PK>

uname <TEXT, NOT NULL>

dob <DATE, NOT NULL>

password <TEXT, NOT NULL>

email <TEXT, NOT NULL>

Table: books

b\_id <INT, NOT NULL, PK>

title <TEXT, NOT NULL>

pdate <DATE, NOT NULL>

author <TEXT, NOT NULL>

publisher <TEXT, NOT NULL>

b\_condition <TEXT>

Table: transactions

t\_id <INT, NOT NULL, PK>

p\_id <INT, NOT NULL>

b\_id <INT, NOT NULL>

ttime <DATETIME, NOT NULL>

t\_type <INT, NOT NULL>

Table: tran\_types

t\_type <INT, NOT NULL, PK>

t\_name <TEXT, NOT NULL, UNIQUE>

Table explanations:

Table: patrons: list of library members

p\_id <INT, NOT NULL, PK>: unique ID and primary key for table

uname <TEXT, NOT NULL>: name of the patron

dob <DATE, NOT NULL>: date of birth

password <TEXT, NOT NULL>: password for no reason (don’t really need one in a library, but whatever)

email <TEXT, NOT NULL>: email address of patron

Table: books: all books owned by the library

b\_id <INT, NOT NULL, PK>: unique book id – MULTIPLE COPIES OF THE SAME BOOK HAVE DIFFERENT IDS

title <TEXT, NOT NULL>: title of book

pdate <DATE, NOT NULL>: publishing date

author <TEXT, NOT NULL>: author of book

publisher <TEXT, NOT NULL>: publisher of book

b\_condition <TEXT>: short text descriptions of any damage to book

Table: tran\_types: transaction types – the types of transactions that can be logged in the transaction table. This table should contain just a few rows that specify which types of transactions will tracked. Might contain entries like “checkout”, “return”, “purchase”, “sale”.

t\_type <INT, NOT NULL, PK>: unique transaction type id and primary key

t\_name <TEXT, NOT NULL, UNIQUE>: name of the transaction type

Table: transactions: a log of all the transactions involving the books and patrons of the library

t\_id <INT, NOT NULL, PK>: unique transaction ID and primary key

p\_id <INT, NOT NULL>: patron id – id of the patron involved in this transaction – corresponds to appropriate patron from patrons table

b\_id <INT, NOT NULL>: book id – id of the book involved in this transaction – corresponds to appropriate book from books table

ttime <DATETIME, NOT NULL>: transaction time – date and time when this transaction occurred

t\_type <INT, NOT NULL>: transaction type – corresponds to a transaction type from the tran\_types table.

Mr. Kramer’s notes:

Your schema may take more than one page. In that case, a line may be labeled with a letter of the alphabet. A line on another page can be labeled with the same letter to represent a continuation of the same line.

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