# Library Application

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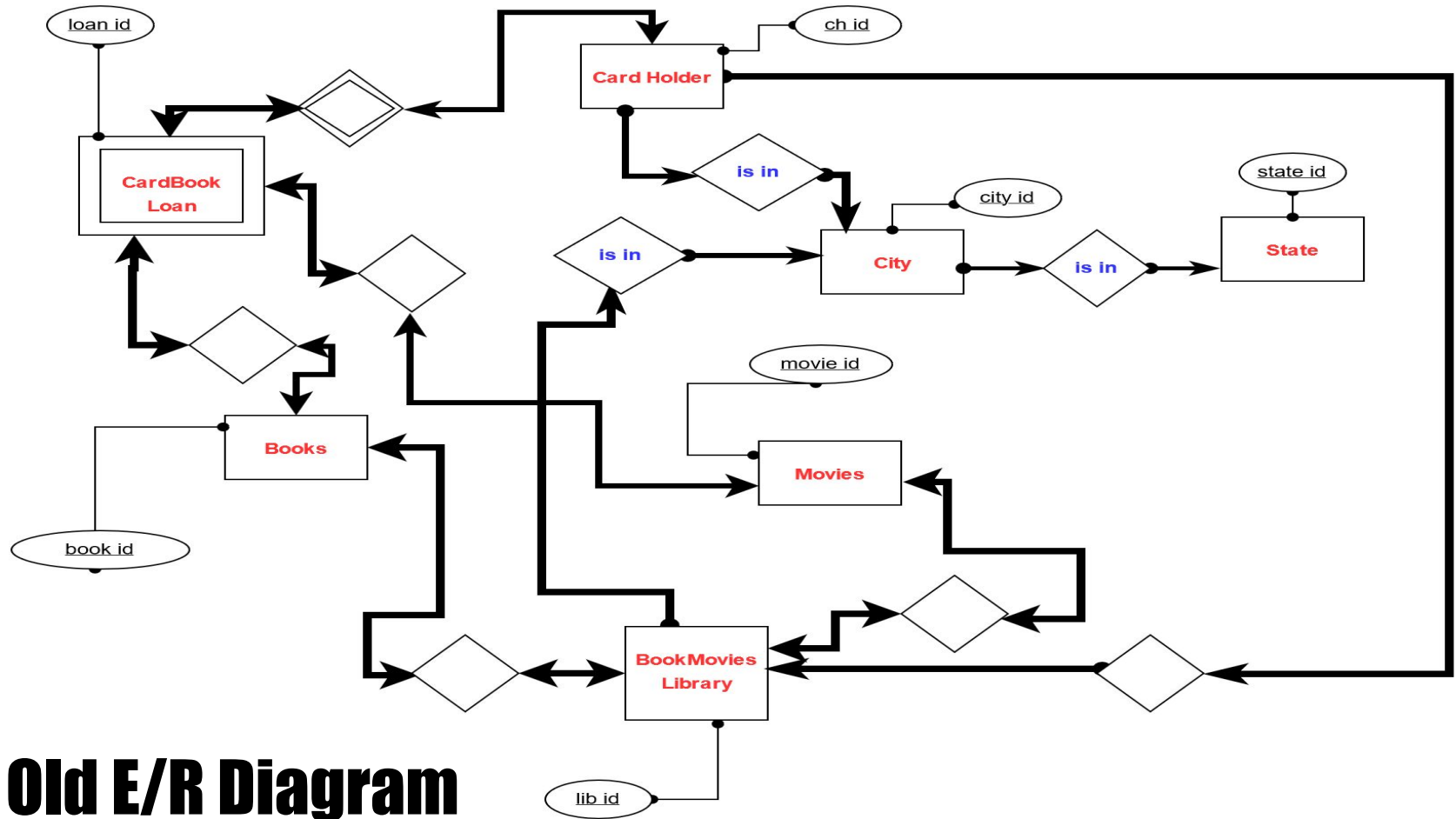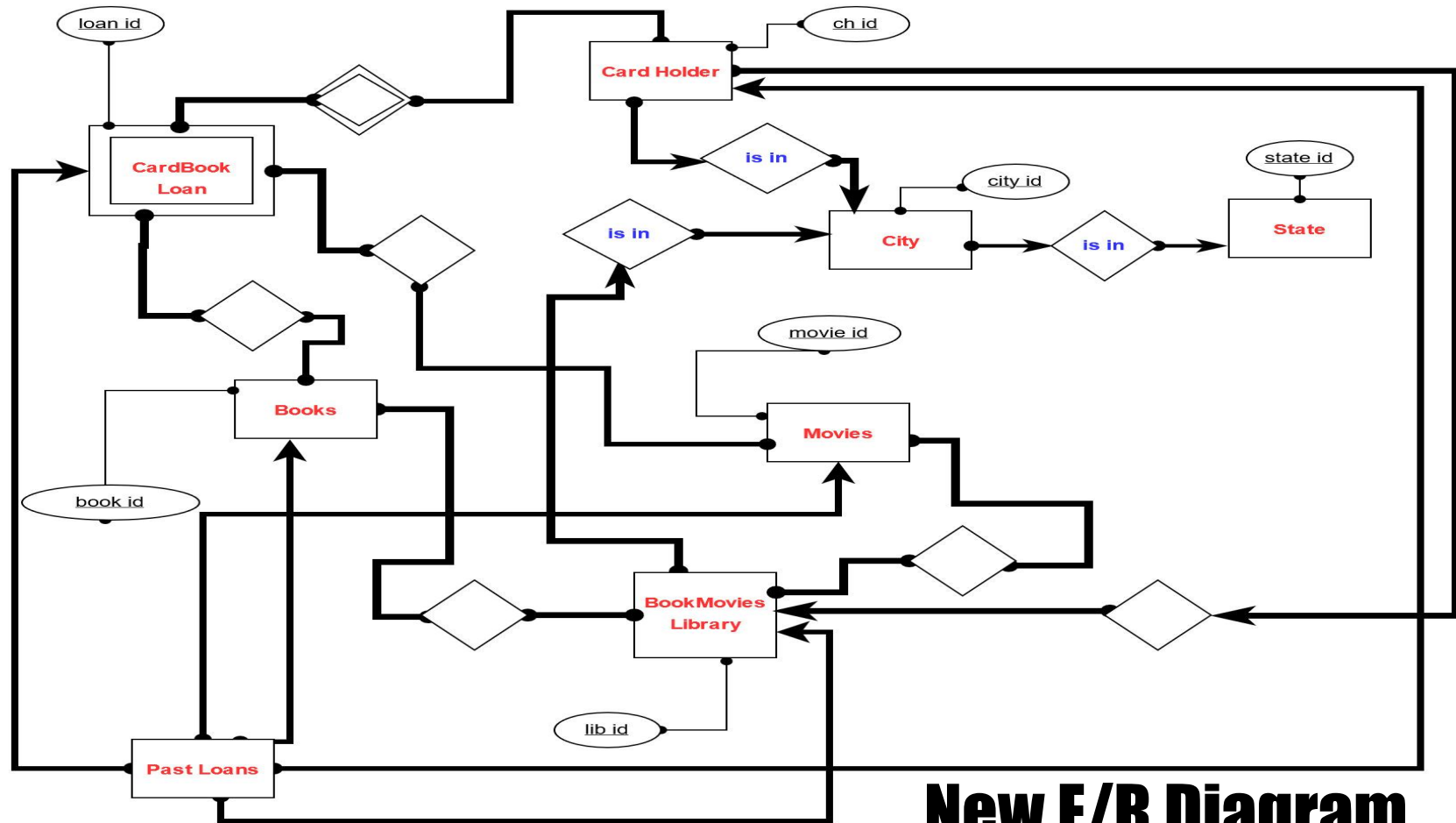
# What we built

## Database

- We used SQLite to compile and manage a database of libraries and books/movies

- PHP, CSS and HTML to create the application used by a browser

- The database is a mixture of real and fabricated data

    - Books and movies have real sourced tuples
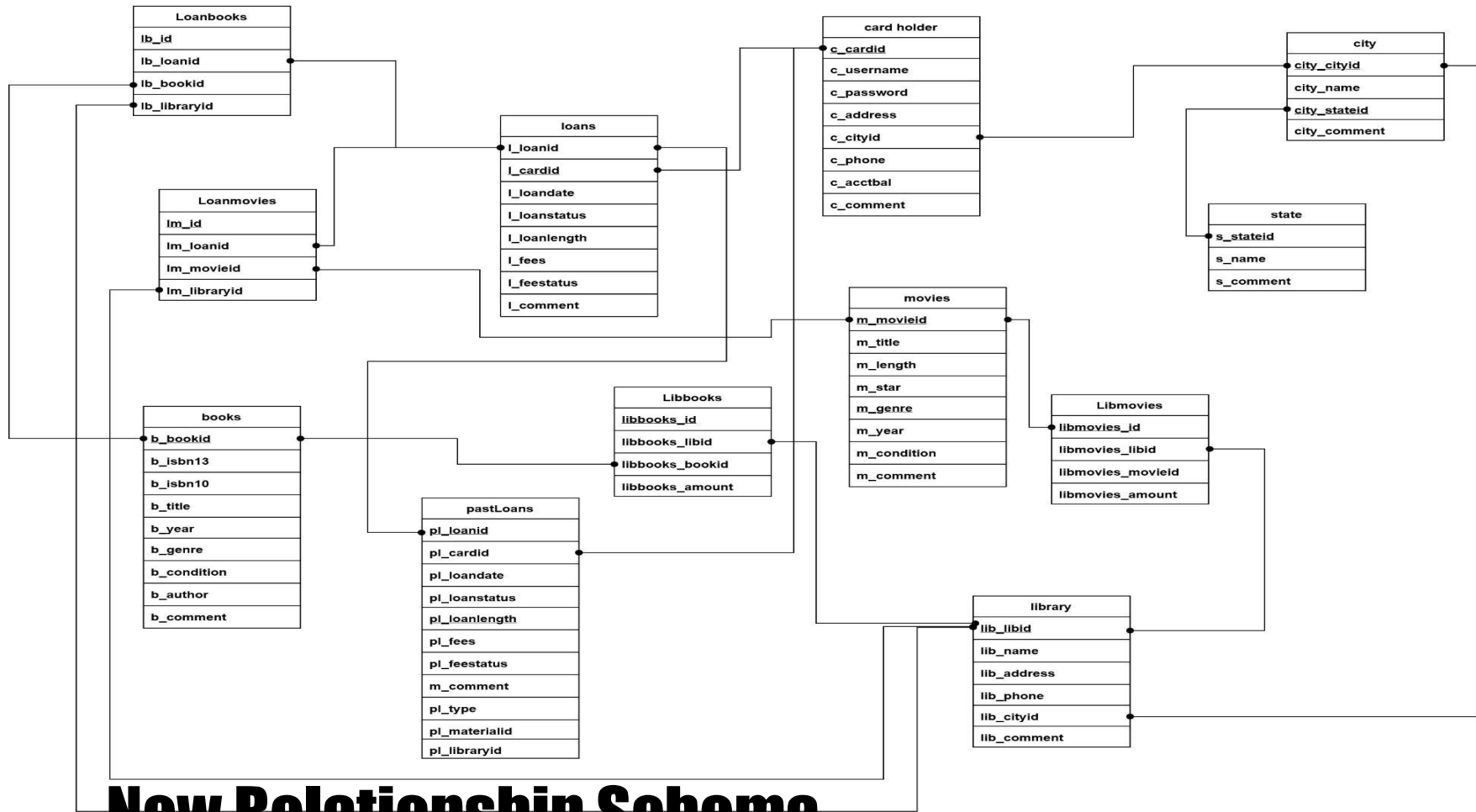    - The users data where books and movies are located are fabricated.

## Application

- The front end of the application allows for users to make an account and search for books/movies based on misc. Inputs.

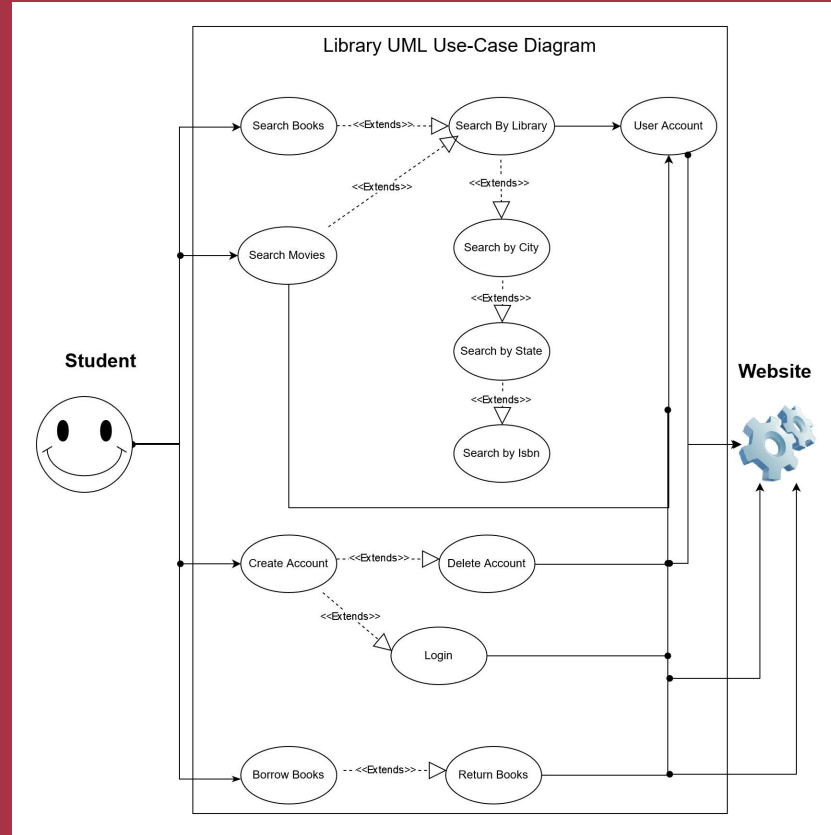- The back end manages insertions deletions and query returns.

Old E/R Diagram

New E/R Diagram

**New Relationship Schema**

# UML USER USE CASE

- The users is able to search and request loans of books and movies.



Library UML Use-Case Diagram

Student

Website

Search Books — <<Extends>> → Search By Library → User Account

<<Extends>> <<Extends>>

Search Movies

Search by City

<<Extends>>

Search by State

<<Extends>>

Search by Isbn

Create Account — <<Extends>> → Delete Account

<<Extends>>

Login

Borrow Books — <<Extends>> → Return Books

# Moving Forward

Like all projects there is always room for improvement and additional implementation here are a few

- Add age and restrictions to the card holder for child safe searches.

- Split up pages so operations happen in different areas.

- Either add book and movie searching or specify only one at a time.

- Make the ISBN field able to take ISBN 10 & 13.

- Maybe add some style and colour to the project.

# Thank You

GitHub: https://github.com/CSE111FinalProject/CSE111finalproject