## Part 2 Schema Brian Lemke, Thomas Macaulay, Matthew McFadden

Library(name, address, city, zip)

• Every library in the system has a different name

Customer(<u>customerID</u>, lastName, firstName, birthDate)

Item(<u>itemID</u>, <u>libraryName</u>, author, title, year, length, genre, artist)

• itemIDs are *not* unique across the entire system, only within the library

Employee(employeeID, lastName, firstName, title, salary, libraryName)

Accesses(<u>customerID</u>, <u>libraryName</u>)

• A customer can access multiple libraries

Loan(<u>lendingLibrary</u>, borrowingLibrary, <u>date</u>, <u>itemID</u>)

Checkout(<u>libraryName</u>, customerID, <u>itemID</u>, fineAmount, <u>dateOut</u>, dateDue)

• We assume that a book cannot be checkout out twice in one day

## **BCNF**

These tables are already in BCNF. There are no non-trivial FDs that violate BCNF.

## 4NF

These tables are already in 4NF. There are no non-trivial MVDs at all.