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3/27/2023

CSCE 310 Final Database Design

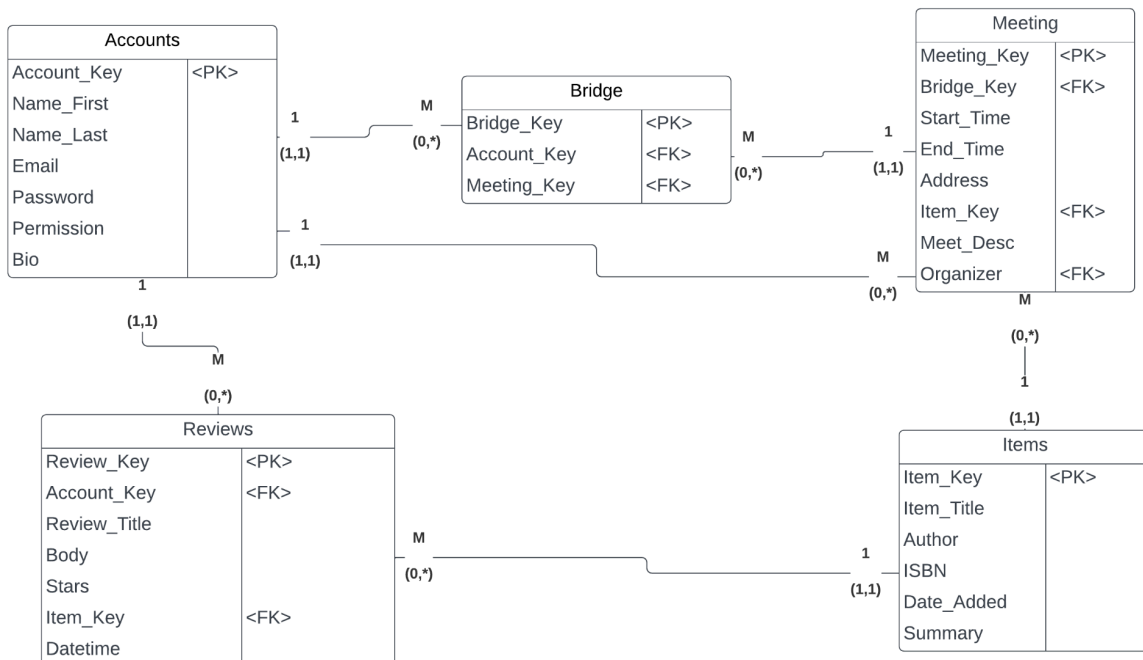
Group 20 Final Database Design

Project Description

Web Application Name: The Book Club

Our web application will be for a book club. The members of this club will be able to create accounts, view various information such as events, a member list, books, and book reviews, and write their own reviews. There will be website administrators that will be able to create events and add new books for reviews.

ERD



Normalization

Item: [3NF]

Item_Key	Item_Title	Author	ISBN	Date_Added	Summary
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Diagram: Arrows point from Item_Key to Item_Title, Author, ISBN, Date_Added, and Summary. An arrow points from Item_Key to Account_Key in the Account table.

Bridge: [3NF]

Bridge_Key	Account_Key	Meeting_Key
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Diagram: Arrows point from Bridge_Key to Account_Key and Meeting_Key. Arrows point from Account_Key and Meeting_Key to their respective primary keys in the Account and Meeting tables.

Meeting: [3NF]

Meeting_Key	Bridge_Key	Start_Time	End_Time	Address	Item_Key	Meet_Desc	Organizer
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Diagram: Arrows point from Meeting_Key to Bridge_Key, Start_Time, End_Time, Address, Item_Key, and Meet_Desc. Arrows point from Bridge_Key, Item_Key, and Organizer to their respective primary keys in the Bridge, Item, and Account tables.

Review: [3NF]

Review_Key	Account_Key	Review_Title	Body	Starts	Item_Key	Datetime
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Diagram: Arrows point from Review_Key to Account_Key, Review_Title, Body, Starts, Item_Key, and Datetime. Arrows point from Account_Key, Item_Key, and Starts to their respective primary keys in the Account, Item, and Meeting tables.

Account: [3NF]

Account_Key	Name_First	Name_Last	Email	Password	Permission	Bio
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Diagram: Arrows point from Account_Key to Name_First, Name_Last, Email, Password, Permission, and Bio. Arrows point from Account_Key to Meeting_Key in the Meeting table and Review_Key in the Review table.

Table Correlation

Accounts [Joshua Wood]

The application will have 3 different types of accounts:

1. Alumni. Alumni will be able to view events, books, reviews, and information on other members/alumni.
2. Members. Members will have all of the viewing permissions of alumni. They will also be able to write reviews.
3. Admins. On top of the permissions of members and alumni, the admins will be able to create/edit/delete events, create/edit/delete books, delete reviews, and delete user accounts.

Every account type will be accessed through the same login page and have the ability to edit their own information or delete their own account. The data needed for an account will include:

1. Full name
2. Email
3. (Encrypted) Password
4. User permission status (alumnus/member/admin)
5. User Bio

Scheduling [Mark Matis]

The scheduling functionality will be used to set up and manage appointments. Each appointment will need a few different related pieces of information:

1. A starting time
2. An ending time
3. A meeting link/location
4. A list of invited members
5. A topic/book
6. A description of the meeting
7. A meeting organizer/owner

Items [Owen Moore]

This functionality will contain items that will be books with the following attributes:

1. Title of book
2. Author
3. ISBN (International Standard Book Number)
4. Datetime the item was added to site
5. Summary of the book

Certain users will be able to add and remove the items where others will be only able to view and read the items.

Reviews [Sam Hollenbeck]

The reviews functionality will allow all users to publish a review on a book. Each review will have the following attributes:

1. the user who published the review
2. title of the review
3. the body text of the review
4. the amount of stars given to the review

5. the book the review is on
6. the datetime that the review was published

Members can publish a review, edit their review, and delete their reviews. Administrators can view and delete any reviews. Alumni can view any reviews.