Proposal Template:

Project Participants:

Bryce Cash

Title:

Classroom library for students

Executive Summary:

This project will list books, including the book title, book author. The user will be able to update the book status in the library, and create a book description. The user will also be able to create a book review. The User can also list genres, and list books by genre.

Initial Features:

Create a bulleted list of planned features you plan to have completed in your project by the deadline. This should include a list of API endpoints for each feature. If you are working in a group, please note which team member will be assigned to each feature.

Example of list of Features/Endpoints for a Library API:

- Entities: Books, Author, Genre, Review and Book_Genre
- A User can perform the following operations:
    - As a user, I want to be able to get a list of all of the books in the library so that I know if a book is available. Route: GET /books
    - As a user, I want to be able to update the books status as checked-in or checked-out, so that I can let the rest of the class know where the book is. Route: PUT/books/book_status
    - As a user, I want to view all of the books written by a particular author so that I can find similar books. Route: GET /authors/{author_id}/books
    - As a user, I want to be able to filter the list of books by a specific genre so that I can find books I am interested in. Route: GET /books?genre=fantasy
    - As a user, I want to be able to get a list of genres to see which I may want to see books from. Route: GET/genres
    - As a user, I want to be able to create a review of a specific book so others will know my opinion of the book. Route: POST/reviews/review_text

- As a user, I want to be able to update a review I created, so I can correct any errors in the review. Route: PUT/reviews/{review_id}/review_text
- As a user, I want to be able to get a list of reviews for a specific book, so I can see what other people thought about the book. Route: GET/reviews/{book_ISBN}
- As a user, I want to be able to delete a review of a specific book, so I can remove my views of the book if they change. Route:DELETE/reviews/{review_id}

Stretch Goals (to be completed if time allows, or after graduation):

Create a bulleted list of planned features you plan to have once you have completed your initial features. These should be features that may require more research in how to implement or features that would take longer than the allotted time frame.

- Include more categories in the book table to give the user more information(ie language of book, pages)
- Create a publisher table to allow users to search by publisher.

ERD drawing

Book_Genre

FK1	Book_ISBN INT NOT NULL
FK2	Genre_Id INT NOT NULL

Books

PK	Book_ISBN INT Not Null
	Book_title VARCHAR(200) NOT NULL
	Book_Status VARCHAR(3) NOT NULL
FK	Author_Id INT not null

Author

PK	Author_Id INT auto Increment not null
	Author_name Varchar(128) not null

Genre

PK	Genre_Id INT auto increment Not Null
	Genre_Name VARCHAR(128) NOT NULL

Review

PK	Review_ID INT auto increment Not Null
	Review_text TEXT
FK	Book_ISBN INT NOT NULL