CSE 341 Final project Proposal

# General Info

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Library Application

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# Application Info

## What will the API do?

Contain and authenticate a collection of users. Contain and retrieve collections of books, groups, reviews.

## How will your API utilize a login system?

Users will be able to log in to leave reviews on books. They will also be able to join groups.

## What database will you use?

MongoDB with at least 4 collections.

## How will the data be stored in your database?

Four collections. Users, groups, books, reviews.

## How would a frontend be able to manage authentication state based on the data you provide?

OAuth.

## What pieces of data in your app will need to be secured? How will you demonstrate web security principles in the development of this app?

User data will need to be secure. The user will need to be signed in to access certain data.

## What file structure and program architecture will you use for this project (how will you organize your node project)? Why?

MVC format. It is simple, modular and easy to update.

## What are potential stretch challenges that you could implement to go above and beyond?

Implementing an admin user with more privileges (creating and editing groups).

Utilizing an external API to increase database coverage.

# API Endpoint Planning

For this section, you’ll plan out what API endpoints you’ll need for your project.

* users
  + POST /users
  + PUT /users
  + GET /users/{userId}
  + DELETE /users/{userId}
* books
  + GET /books
  + GET/books/{bookId}
  + GET/books/booksByGenre
  + POST /books
  + PUT/books
  + DELETE /books/{bookId}
* groups
  + GET/groups/{groupId}
  + GET/groups
  + PUT/groups/{groupID}
  + PUT/groups/{groupId}/addUser
  + DELETE/groups
* Reviews
  + GET/reviews/{bookId}
  + POST/reviews
  + PUT/reviews/{reviewID}
  + DELETE/reviews{reviewId}

# Project Scheduling and Delegation

Plan out what tasks will get completed with each lesson remaining in the semester (Only edit highlighted text).

|  |  |
| --- | --- |
| Week 04 Tasks | *Project Proposal* |
| Week 05 Tasks | * *Create Git Repo* * *Push to Heroku* * *API DOCUMENTATION is complete and available at route ‘/api-docs’* * *Collections created and filled* * *Users/books code completed* |
| Week 06 Tasks | * Groups/reviews * Authentication completed * Troubleshooting |
| Week 07 Tasks | …*…Video Presentation…* |

## How will you divide up work in your team to ensure the following tasks all get completed?

* HTTP GET, GET (all, single) Zach
* HTTP POST Zach
* HTTP PUT Benjamin
* HTTP DELETE Benjamin
* Node.js project creation Benjamin
* Create git repo and share with group Benjamin
* MongoDB setup Benjamin
* API Swagger documentation for all API routes Zach
* Video presentation of node project, all routes functioning, mongoDB data being modified, and API documentation. Individually

# Potential Risks and Risk Mitigation Techniques

## What are the risks involved with you being able to finish this project in a timely manner?

Neither of us have been able to reach our groups from the beginning of the semester so we just joined up this week to work together on the project. It may take a bit to work together as well as if we had started the class in the same group.

## How will you mitigate or overcome these risks?

We will communicate through teams and keep each other updated on our work, as well as meeting whenever needed to make sure we are staying on schedule.