# Module 7 Lab 1: Develop Secure Middleware & Backend Database for a Book Exchange Application

# Brandon Trinkle

# IFT 458: Middleware Programming

# Professor Dinesh Sthapit

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# Module 7 Lab 1: Develop Secure Middleware & Backend Database for a Book Exchange Application

1. *Screenshot 1: Of the terminal showing successful installation of dependencies.*A screenshot of a computer

   AI-generated content may be incorrect.
2. *Screenshot 2: Of the project directory structure showcasing MVC organization.*A screenshot of a computer

   AI-generated content may be incorrect.*Note: This structure follows the MVC pattern. Certs created a few lessons ago are stored in the certs directory.*
3. *Screenshot 3: Of the BookModel.js file with a brief explanation.*A screenshot of a computer program

   AI-generated content may be incorrect. *Note: BookModel.js file defines a Mongoose schema named bookExchangeSchema that establishes the structure for storing book exchange data in MongoDB. Each book document includes required fields such as title, author, and description, ensuring that all necessary details are provided. Regarding the question in this section; we already store userID of the user who added the book with ‘owner’.*
4. *Screenshot 4: Of the bookController.js with the implemented logic.*A screenshot of a computer

   AI-generated content may be incorrect. *Note: owner exists already when created a new book as shown in bookController.js*
5. *Screenshot 5: Of the bookRoutes.js file with defined routes.  
   A screenshot of a computer

   AI-generated content may be incorrect.*
6. *Screenshot 6: Of updated view files (\*.ejs) and changes made.  
   A screenshot of a computer

   AI-generated content may be incorrect.  
   Note: I removed the Genre section as its not defined in our model.*
7. *Screenshot 7: Of the home page as displayed in the browser.  
   A screenshot of a computer

   AI-generated content may be incorrect.*
8. *Screenshot 8: Of all personalized user interface pages.  
   A screenshot of a computer

   AI-generated content may be incorrect.  
   Note: home.ejs is the only file that is customized to the user*
9. *Screenshot 9: Of the testing process and responses for different API endpoints.*A screenshot of a computer

   AI-generated content may be incorrect.
10. *Screenshot 10: Of API specification documentation and screenshots of the corresponding code for each endpoint.*
    1. *Register / Sign up*

*A screenshot of a computer

AI-generated content may be incorrect.*

* 1. *Login*

*A screenshot of a computer

AI-generated content may be incorrect.*

* 1. *Protected Resource*

*A screenshot of a computer

AI-generated content may be incorrect.*

* 1. *View All Books*

*A screenshot of a computer

AI-generated content may be incorrect.*

* 1. *Add Book Exchange*

*A screenshot of a computer

AI-generated content may be incorrect.*

* 1. *Update Delete Exchange*

*A screenshot of a computer

AI-generated content may be incorrect.*

*Note: We can also see that our custom middleware is logging the api requests – showing that they were made successfully without error.*

*A screenshot of a computer

AI-generated content may be incorrect.*