MSU Textbook Exchange

Design Document, version 1

April 2, 2009

Group Members: Great Student Better Student Awesome Student

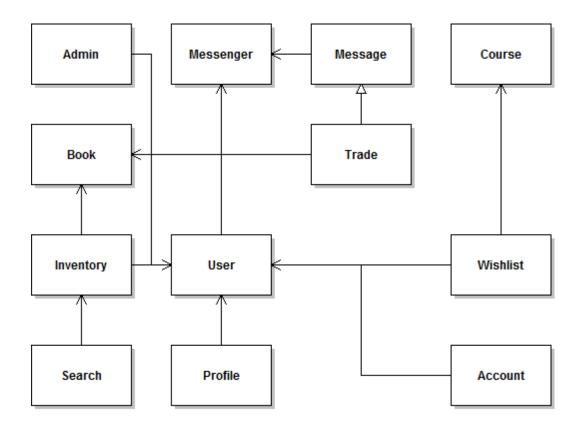
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1. Overview Class Diagram



2. Detailed Class Diagrams

2.1. Data Classes

2.1.1. User

-int userID -string username -bool isAdmin +User(String userName) +User(int userID) +passwordIsReset(): bool

- User(String userName): Constructor. Set username. Retrieve userID and isAdmin from database and store.
- User(int userID): Constructor. Set userID. Retrieve username and isAdmin from database and store.
- isAdmin(): Returns true if the user is an admin.
- passwordIsReset(): Query the database. Return the user's "passwordIsSet." (Forces user to change password during login).

2.1.2. Book

Book		
-bookID : int		
+Book()		
+Book(int bookID)		

- Book(): Default Constructor. Creates a new book in the database.
- Book(int bookID): Constructor. Loads a book from the database based on bookID. If not found, load a default not-found book.

2.1.3. Message

Message

-messageID : int +validate() : boolean

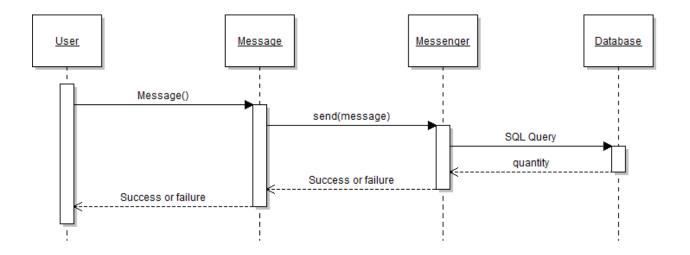
+Message()

+Message(int messageID)

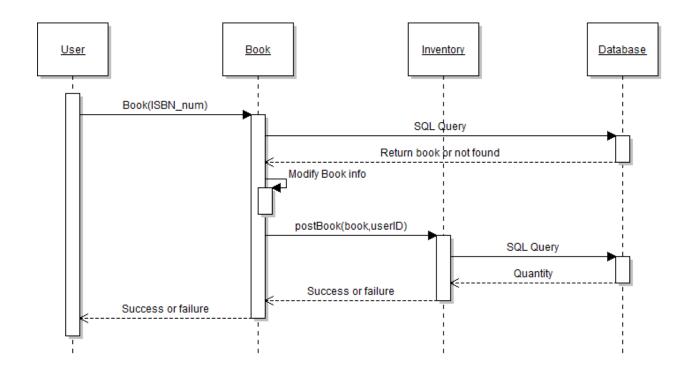
- validate(): The validate function will check the values stored in the message to ensure they are valid. The function will return true if the values are correct, and the function will return false if there is some kind of problem.
- Message(): The default message constructor will create a new message in the database.
- Message(int messageID): This message constructor will fetch the message with the given ID from the database.

3. Sequence Diagrams

3.1. Send Message



3.2. Post Book



Appendix A. Task & Role Assignments

Current Presentation Assignments:

Requirements: Great Student

Design: Better Student Final: Awesome Student

Current Task Assignments:

Great Student: User authentication

Better Student, Awesome Student: Messaging

Awesome Student: Searches

Better Student, Great Student: Web Layout