

NotChegg

Design Document Version 1

October 30, 2017

Group Members:

Tyler Anthony

Bo Fulgham

David Gullett

Dillon Harrison

Zach Martin

Group K

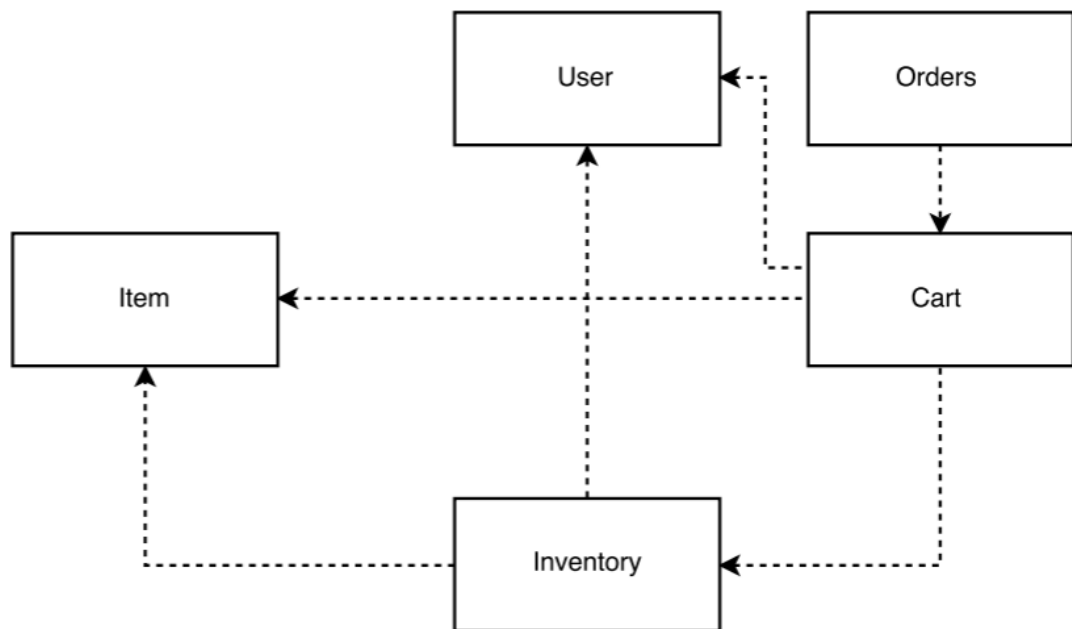
Lab Instructor:

Ben Wiggins

Table of Contents

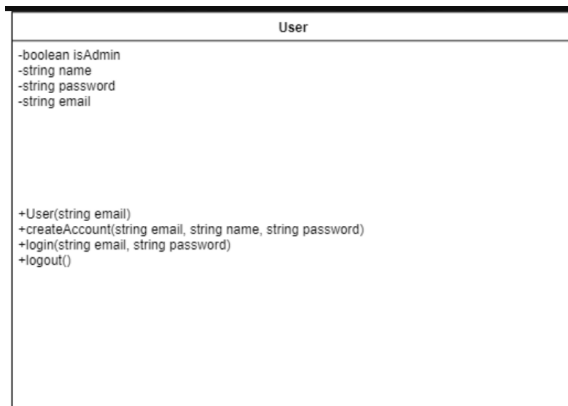
NotChegg	1
1. Overview class diagram	3
2. Detailed class diagram	4
2.1.1 User	4
2.1.2 Item	5
2.1.3 Inventory	6
2.1.4 Orders	7
2.1.5 Cart	8
3. Sequence diagrams	9
3.1.1 Purchase Books	9
3.1.2 Logging In/Out	9
Appendix A. Database Design	10
Appendix B. Task & Role assignments	10

1. Overview class diagram



2. Detailed class diagram

2.1.1 User



Class: User

Descriptions:

-createAccount(string email, string password string address): Constructor, assign userID and adds userID, email, password, and address to the User Table of the database.

-login(string email, string password): Query the database. If email and password combination are true return True else returns false and re-display login page.

-logout(): returns the user to login page.

2.1.2 Item

Item
-string bookID-string title -string author -string ISBN -float price -string edition*** -string publisher*** -string category/major***
-Item(string title, string author, string ISBN, float price, string category, string edition, string publisher) +getTitle() +getAuthor() +getISBN() +getPrice() +getCategory() +getEdition() +getPublisher()

Class:Item

-Item(string title string author string ISBN string price string category string publisher): Constructor. Sets the information about the book such as title, author, ISBN, price, category, and publisher. Stores this information into the book table in the database.

-getTitle(): Query the database. Retrieve book title from database and store.

-getAuthor(): Query the database. Retrieve book author from database and store.

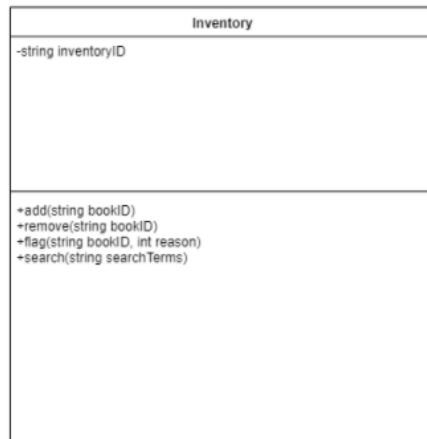
-getISBN(): Query the database. Retrieve book ISBN from database and store.

-getPrice(): Query the database. Retrieve book price from database and store.

-getCategory(): Query the database. Retrieve book category from database and store.

-getPublisher(): Query the database. Retrieve book publisher from database and store.

2.1.3 Inventory



Class:Inventory

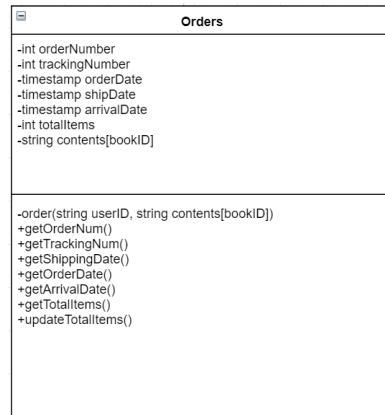
-bool add(string bookID) – creates a book object and returns a TRUE or FALSE if it succeeds or fails respectively.

-bool remove(string bookID) – deletes a book object and returns a TRUE or FALSE if it succeeds or fails respectively.

-string flag(string bookID, int reason) – Marks a book object to be reviewed for deletion by an admin from a numbered list of reasons.

-search(string searchTerms) – creates a query based on the information user input into the function.

2.1.4 Orders



Class:Orders

-order(string userID, string contents[bookID]) – creates an order with an order number, tracking number, shipping date, order date, arrival date, number of items it contains, and the contents of the order.

-getOrderNum() – returns the order number of the order

-getTrackingNum() – returns the tracking number of the order

-getShippingDate() – returns the shipping date of the order

-getOrderDate() – returns the date the order was place

-getArrivalDate() – returns the date of arrival of the order

-updateTotalItems() – updates the number of items the order contains

2.1.5 Cart



-addItem(bookID) - adds the item of bookID to the string[] contents array

-removeItem(bookID) – removes the item with the bookID passed into the function from the

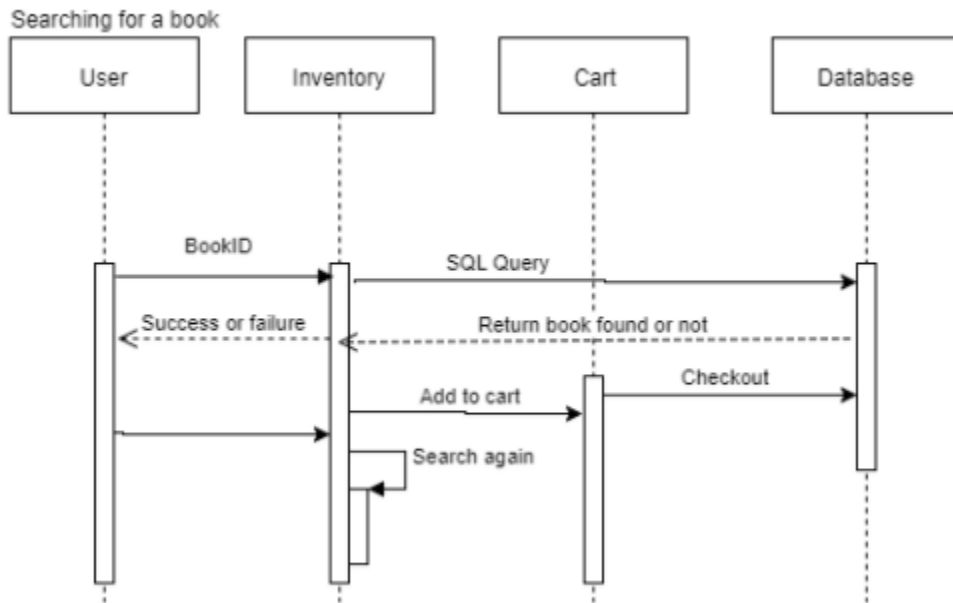
-string[] contents array

-emptyCart() – removes all bookID's from the string[] contents array

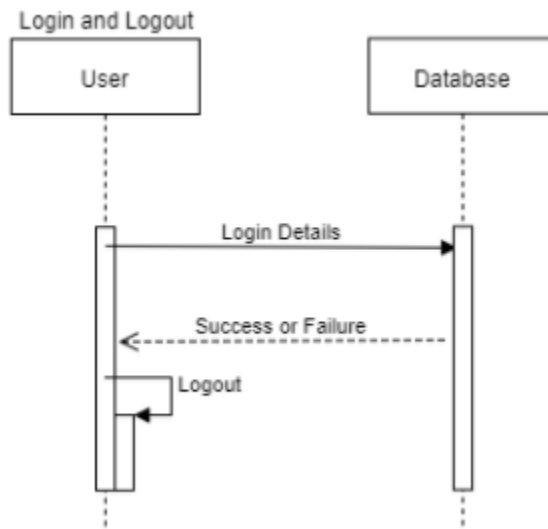
-updateTotal() – adds up all of the bookID's prices in the string[] contents array

-checkout() – checkout will match user information with purchasing of the items within a cart. Checkout will add up the total price of all the books with a bookID in the contents array, and store information that is necessary to purchase books, such as address and order numbers from the orders class

3. Sequence diagrams
3.1.1 Purchase Books



3.1.2 Logging In/Out



Appendix A. Database Design

Primary key *

Foreignkey #

- **Users**
 - *email
 - Password
 - Address
 - isAdmin
 - major
- **Inventory**
 - *bookID
 - Isbn
 - Title
 - Author
 - Publisher
 - Price
 - Image
 - isFlagged
 - edition
 - category
- **Orders**
 - *orderNum
 - TrackingNum
 - orderDate
 - shipDate
 - arrivalDate
 - ItemsOnOrder
 - TotalPrice
 - #bookID
 - #userID

Appendix B. Task & Role assignments

Tyler Anthony – User interface

Zack martin – Database

Dillon Harrison – Authentication/Database

Bo Fulgham – Database Queries

David Gullet – General Programming

