***** Book Store GUI Design *****

**************. Customer.java **************

class Customer -> Fields -> String first(customer's first name), String last(customer's last name), String email(customer's email)

// Getters and Setters for fields
// toSring() method called CustomerDisplay()

***************** Book.java ******************

class Book -> Fields -> String title(Book's title), String author(Book's author), int numpages(Number of Pages in Book), String publisher(Book's publisher), int numcopies(Number of copies of the Book)

//Getters and Setters for the Fields
// toString() method called BookDisplay()

*****************RentedBook.java ******************.

class RentedBook (subclass of Book) -> Fields -> String rentname(Name of person renting a book) -> inherited Fields from class Book -> String title(Book's title), String author(Book's author), int numpages(Number of Pages in Book), String publisher(Book's publisher), int numcopies(Number of copies of the Book)

// Getters and Setters for the Fields
//toString method called RentalDisplay();

*************** gui.java ********************

class gui -> create objects, create ArrayLists of objects , read from three different files

Create GUI components (labels, buttons, etc) and add them to frames

implement actionListener

- 3 FILES

Display all Customers from customer_input.txt file
Display all Books from books_input.txt file
Display all rentals from rent_input.txt file

Create Buttons(and Button actions) to display items

Create other Buttons(and Button actions) to search for the items in each list

Create other Buttons(and Button actions) to Add or Remove Book Rentals and
update rent_input.txt file

Build GUI

Display GUI

*** Design Notes ***

Implemented inheritance in this program
class RentedBook is a subclass of Book

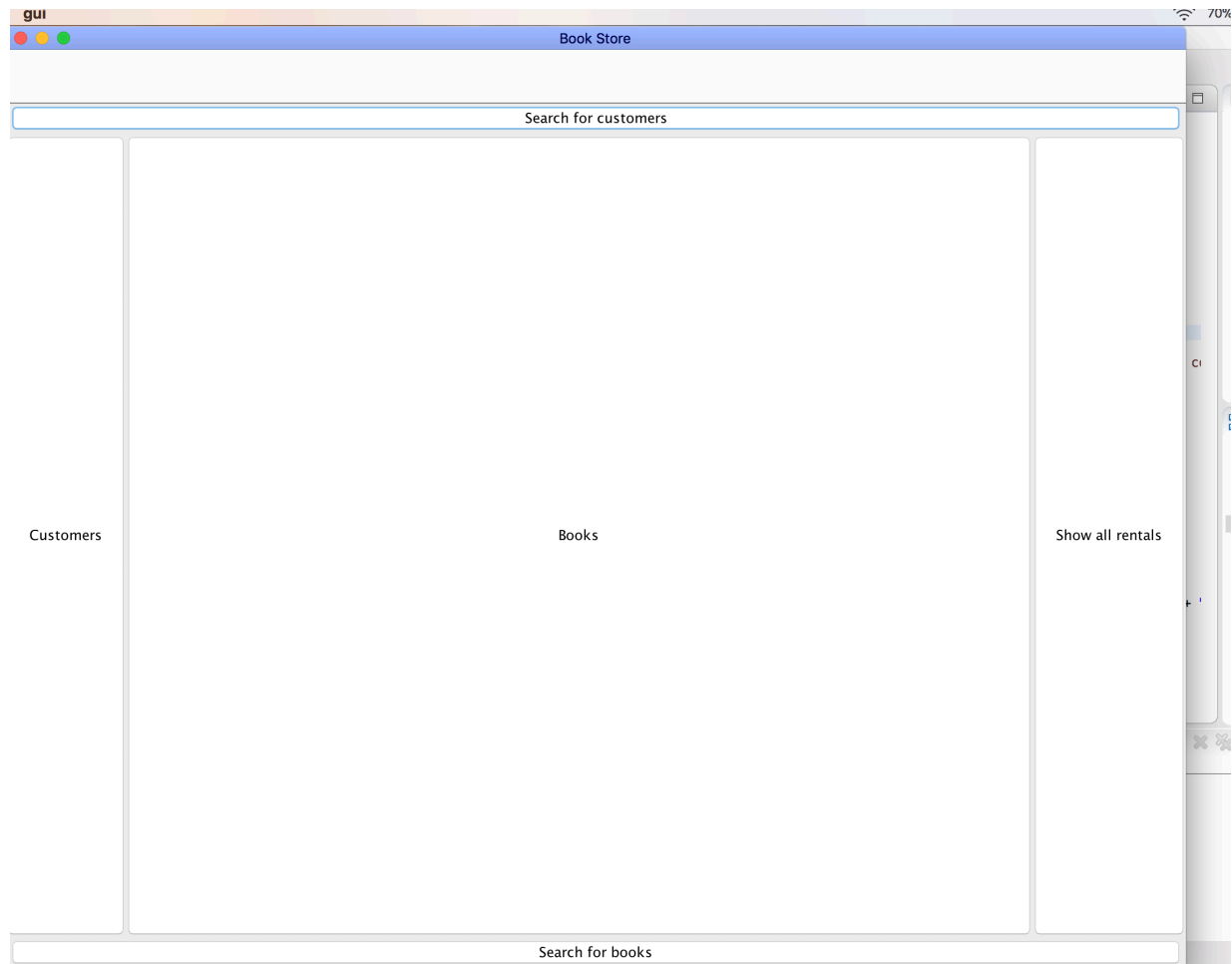Therefore, RentedBook inherited the attributes and public methods of Book
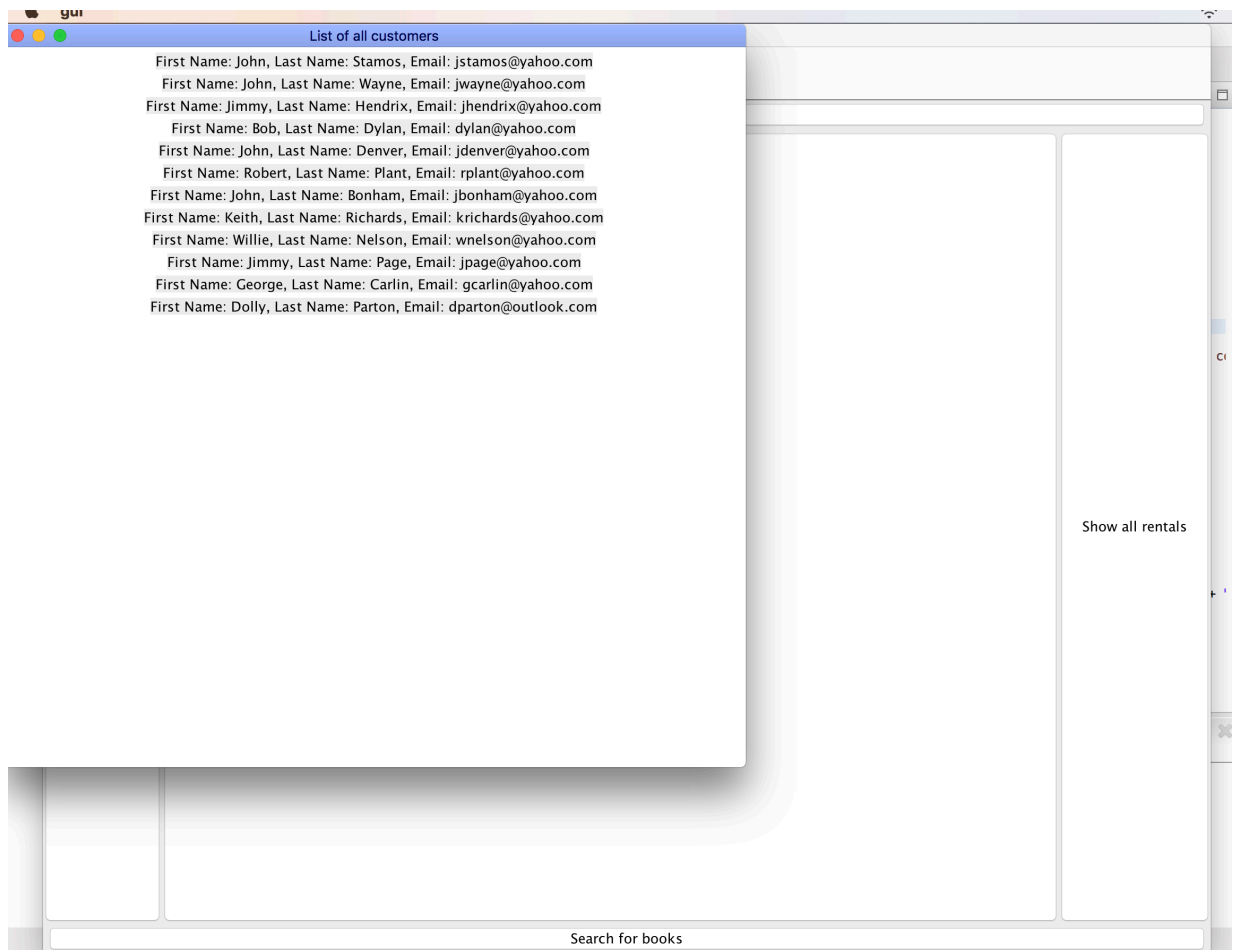

**** Issues ****

I wanted to create more functionality and use for the Book Store application with
operations and buttons to ADD and REMOVE Book Rentals (contents of
rent_input.txt file)
However, there is an issue with the REMOVE operation. It works at times, but then
sometimes it will remove all items from the file when you only select to remove
one particular item (Namely, if you choose to remove the last item in the file or
list)

Also, there are some thread exceptions when you cancel out of a window (like the
InputDialog window), but everything still seems to function.

Another issue --> I couln't figure out how to update the number of copies of the book and/or make it so the customers couldn't rent out the same book more times than the number of copies

gui   70%

Book Store

Search for customers

Customers   Books   Show all rentals

Search for books

List of all customers

First Name: John, Last Name: Stamos, Email: jstamos@yahoo.com
First Name: John, Last Name: Wayne, Email: jwayne@yahoo.com
First Name: Jimmy, Last Name: Hendrix, Email: jhendrix@yahoo.com
First Name: Bob, Last Name: Dylan, Email: dylan@yahoo.com
First Name: John, Last Name: Denver, Email: jdenver@yahoo.com
First Name: Robert, Last Name: Plant, Email: rplant@yahoo.com
First Name: John, Last Name: Bonham, Email: jbonham@yahoo.com
First Name: Keith, Last Name: Richards, Email: krichards@yahoo.com
First Name: Willie, Last Name: Nelson, Email: wnelson@yahoo.com
First Name: Jimmy, Last Name: Page, Email: jpage@yahoo.com
First Name: George, Last Name: Carlin, Email: gcarlin@yahoo.com
First Name: Dolly, Last Name: Parton, Email: dparton@outlook.com

Show all rentals

Search for books

Title: The Red Badge of Courage, Author: Stephen Crane, Number of pages: 200, Publisher: Penguin Books, Number of copies: 20
Title: The Catcher in the Rye, Author: J.D. Salinger, Number of pages: 240, Publisher: Penguin Books, Number of copies: 10
Title: 1001 Nights, Author: Various Authors, Number of pages: 750, Publisher: Penguin Books, Number of copies: 5
Title: The Basketball Diaries, Author: Jim Carrol, Number of pages: 195, Publisher: Penguin Books, Number of copies: 3
Title: This Blinding Absence of Light, Author: Tahar Bin Jalloun, Number of pages: 235, Publisher: Penguin Books, Number of copies: 7
Title: The Hobbit, Author: J.K. Tolkien, Number of pages: 180, Publisher: Penguin Books, Number of copies: 4
Title: Alice in Wonderland, Author: Lewis Carroll, Number of pages: 190, Publisher: Penguin Books, Number of copies: 9
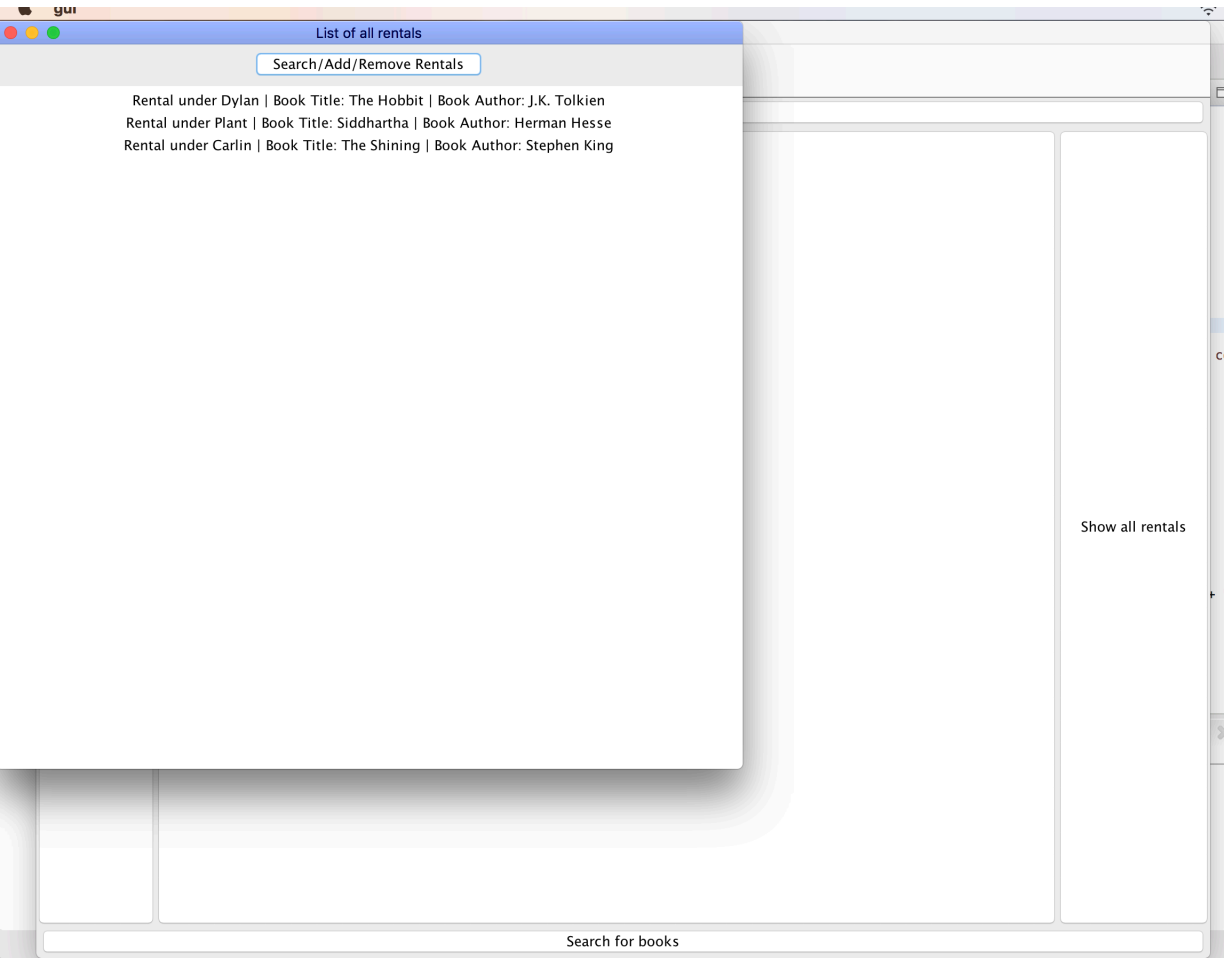Title: Siddhartha, Author: Herman Hesse, Number of pages: 175, Publisher: Penguin Books, Number of copies: 6
Title: Go Now, Author: Richard Hell, Number of pages: 195, Publisher: Penguin Books, Number of copies: 2
Title: Secondhand Souls, Author: Christopher Moore, Number of pages: 240, Publisher: Penguin Books, Number of copies: 3
Title: The Shining, Author: Stephen King, Number of pages: 310, Publisher: Penguin Books, Number of copies: 8
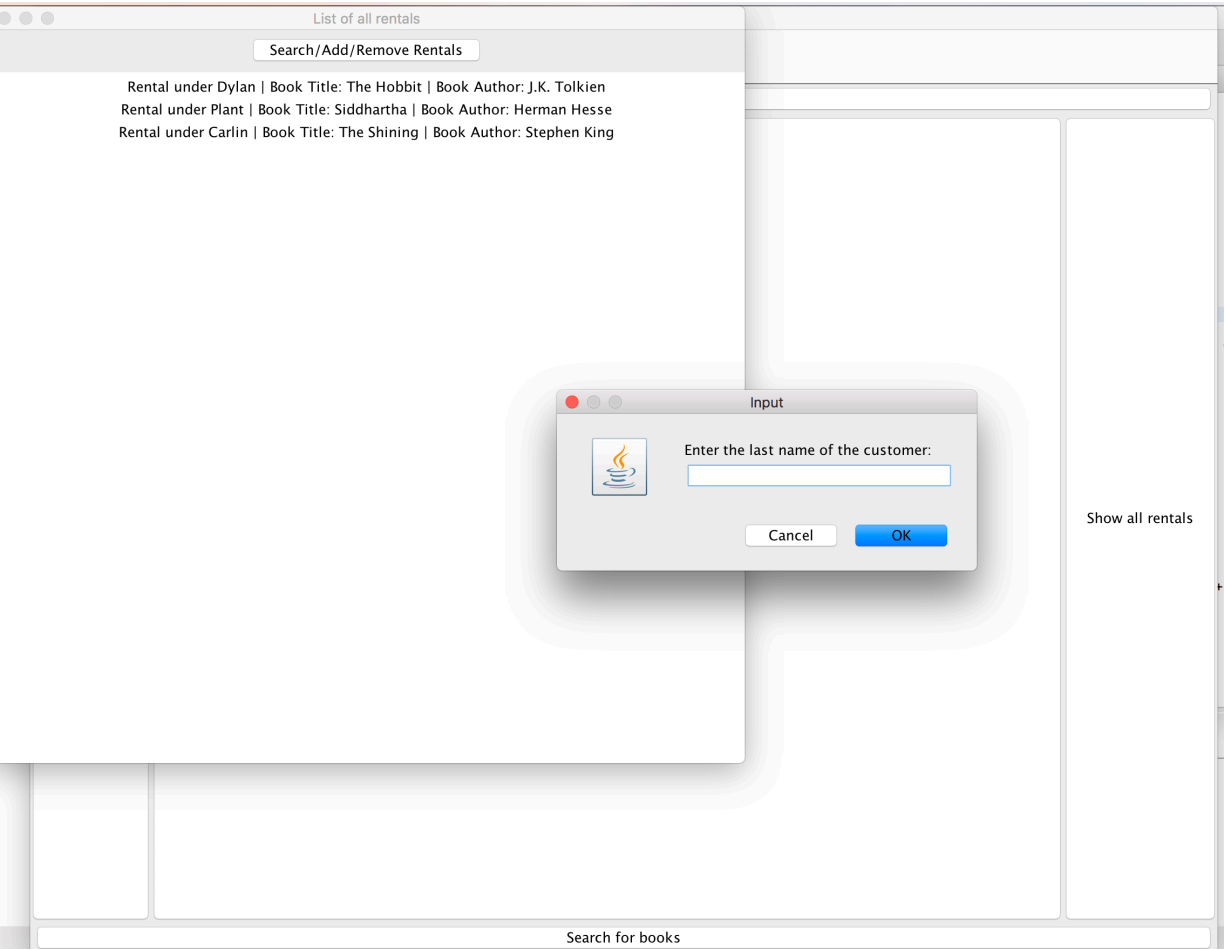
Show all rentals

List of all rentals

Search/Add/Remove Rentals

Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien
Rental under Plant | Book Title: Siddhartha | Book Author: Herman Hesse
Rental under Carlin | Book Title: The Shining | Book Author: Stephen King

Show all rentals

Search for books
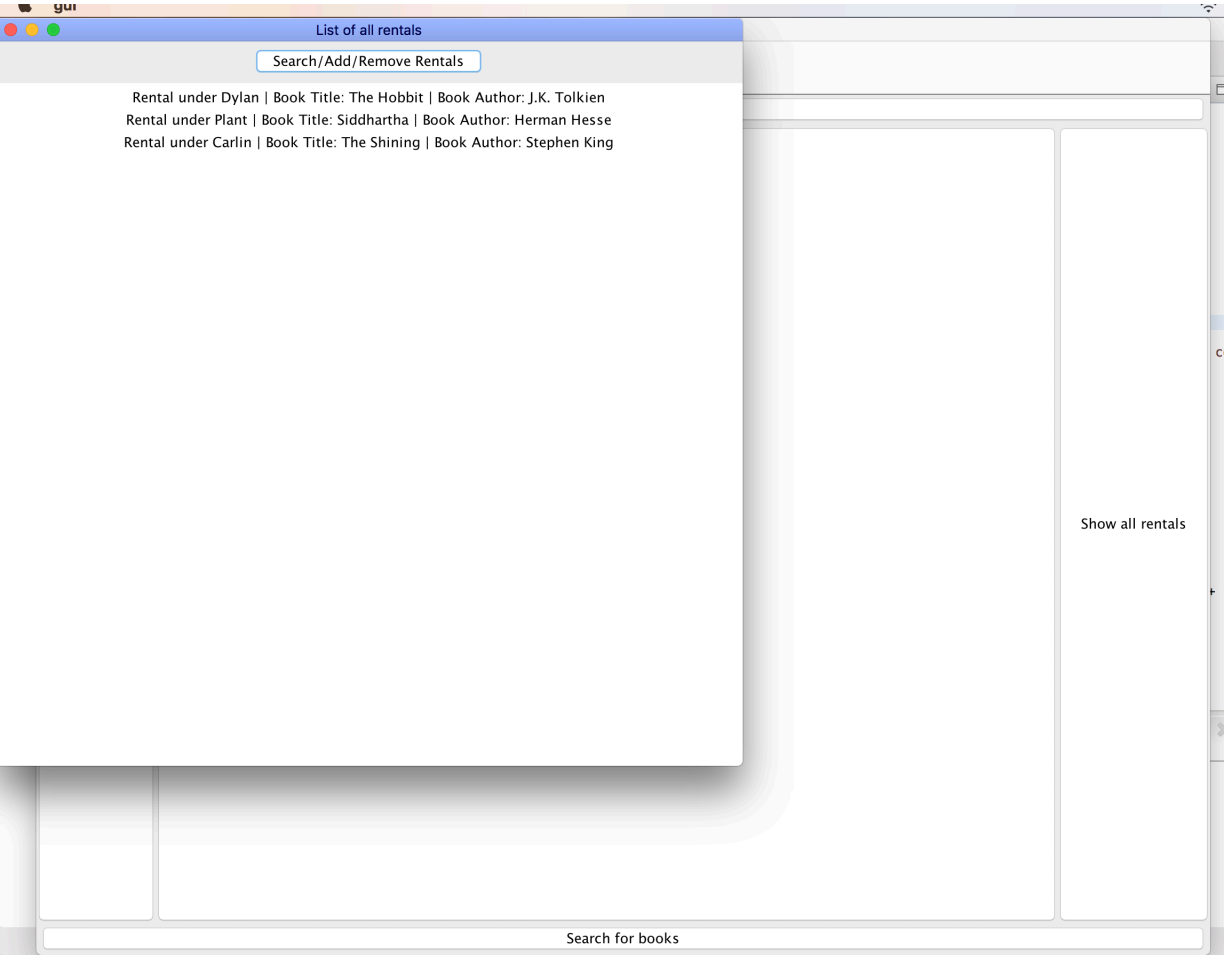
Search/Add/Remove Rentals

Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien
Rental under Plant | Book Title: Siddhartha | Book Author: Herman Hesse
Rental under Carlin | Book Title: The Shining | Book Author: Stephen King

Input

Enter the last name of the customer:

Cancel   OK

Show all rentals

Search for books

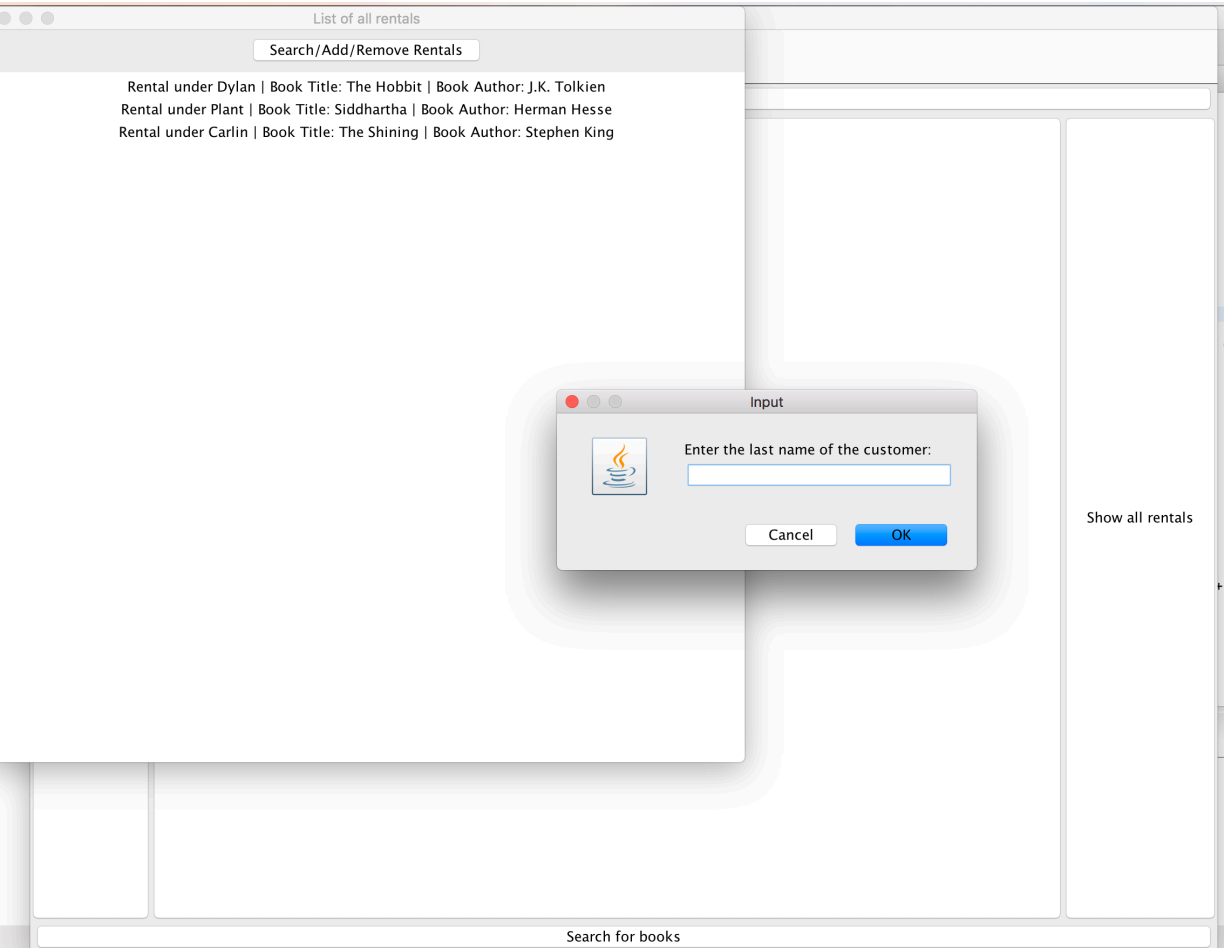**List of all rentals**

Search/Add/Remove Rentals

Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien
Rental under Plant | Book Title: Siddhartha | Book Author: Herman Hesse
Rental under Carlin | Book Title: The Shining | Book Author: Stephen King
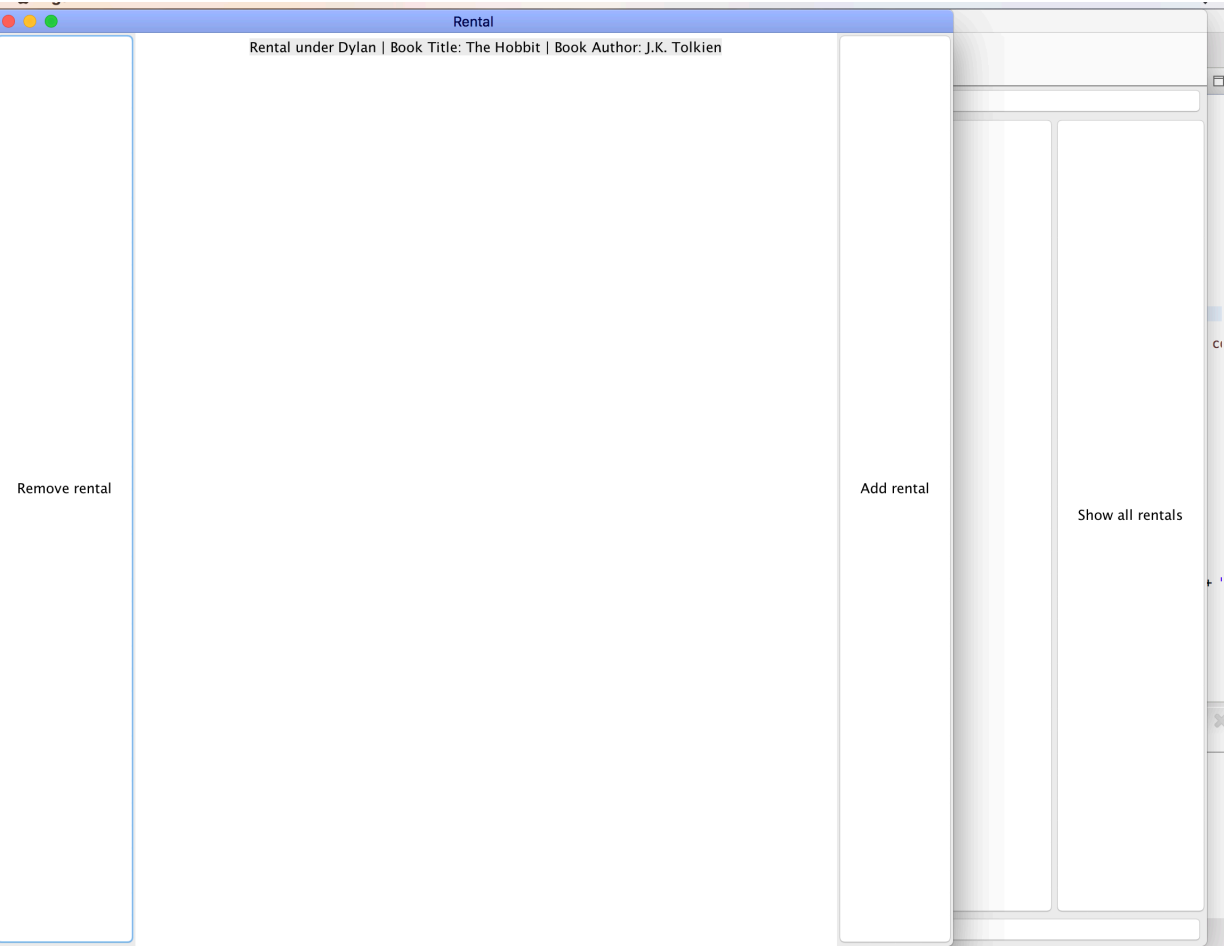
Show all rentals

Search for books

Search/Add/Remove Rentals

Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien
Rental under Plant | Book Title: Siddhartha | Book Author: Herman Hesse
Rental under Carlin | Book Title: The Shining | Book Author: Stephen King

Input

Enter the last name of the customer:

Cancel   OK

Show all rentals

Search for books

Input

Enter the last name of the customer:

Dylan

Cancel   OK

Show all rentals

Search for books

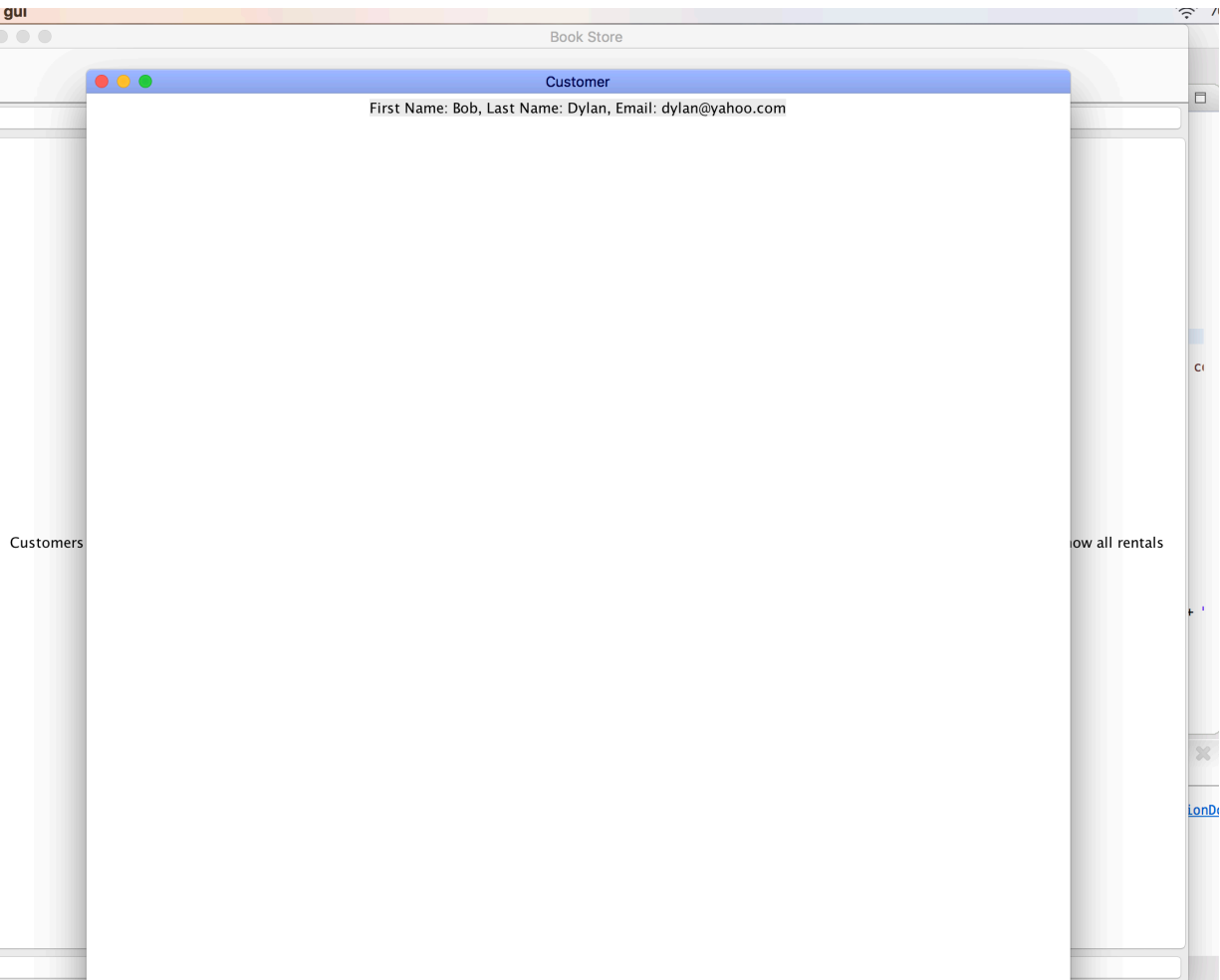Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien

Remove rental

Add rental

Show all rentals

Input

Do you want to add a rental? :

Cancel   OK

Show all rentals

Rental under Dylan | Book Title: The Hobbit | Book Author: J.K. Tolkien

ental

Show all rentals

Input

Do you want to remove a rental? :

yes

Cancel   OK

Book Store

Customer

First Name: Bob, Last Name: Dylan, Email: dylan@yahoo.com

Customers

ow all rentals

cu

LonD

Book Store

Search for customers

Input

Enter the title of the book:

Siddhartha

Cancel   OK

Show all rentals

Search for books

Book

Title: Siddhartha, Author: Herman Hesse, Number of pages: 175, Publisher: Penguin Books, Number of copies: 6

Show all rentals