**12/5/15**

"""

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CS 110 - B57

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Assignment12Ex1

"""

"""

To create a working GUI using the patron, book and library classes from

Assignment 11

"""

from tkinter import \*

from tkinter.messagebox import \*

from patronStudentVersion import \*

from bookStudentVersion import \*

from libraryStudentVersion import \*

class LibraryGUI:

def \_\_init\_\_(self):

# Initial Frames and Window Created --------------------------------------

self.\_\_win = Tk()

self.\_\_homeFrame = Frame(self.\_\_win)

self.\_\_searchFrame = Frame(self.\_\_win)

self.\_\_membershipFrame = Frame(self.\_\_win)

self.\_\_bookFrame = Frame(self.\_\_win)

self.\_\_patronDict = {}

self.\_\_bookDict = {}

## self.\_\_libraryDict = {}

self.\_\_libraryModel = Library('Pythonville Hometown Library' )

self.\_\_bookModel = Book('title', 'author')

self.\_\_buttonStrVar = StringVar()

self.\_\_buttonStrVar.set("disabled")

# Sub 1 Frames + Home Frame Header Created -------------------------------

self.\_\_homeHeader = Label(self.\_\_homeFrame, text ='PYTHONVILLE HOMETOWN \

LIBRARY')

self.\_\_homeHeader.pack(side='top')

self.\_\_homeFrameSub1 = Frame(self.\_\_homeFrame)

self.\_\_homeFrameSub1Header = Frame(self.\_\_homeFrameSub1)

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self.\_\_homeFrameSub1Title = Frame(self.\_\_homeFrameSub1)

self.\_\_homeFrameSub1Patron = Frame(self.\_\_homeFrameSub1)

self.\_\_homeFrameSub1Button = Frame(self.\_\_homeFrameSub1)

self.\_\_homeFrameSub1Status = Frame(self.\_\_homeFrameSub1)

self.\_\_homeFrameSub2 = Frame(self.\_\_homeFrame)

# Sub 1 Items Created ----------------------------------------------------

self.\_\_sub1HeaderLabel = Label(self.\_\_homeFrameSub1Header, \

text = 'Checkout Books')

self.\_\_sub1TitleLabel = Label(self.\_\_homeFrameSub1Title, text = \

'Title ')

self.\_\_sub1TitleEntryBox = Entry(self.\_\_homeFrameSub1Title, width = 40)

self.\_\_sub1TitleEntryBox.bind("<Return>", self.checkoutBookActivation)

self.\_\_sub1PatronLabel = Label(self.\_\_homeFrameSub1Patron, text = 'Patron')

self.\_\_sub1PatronEntryBox = Entry(self.\_\_homeFrameSub1Patron, width = 40)

self.\_\_sub1PatronEntryBox.bind("<Return>", self.checkoutBookActivation)

self.\_\_sub1CheckoutButton = Button(self.\_\_homeFrameSub1Button, text =\

'Checkout Book', command = self.checkoutBook, state =\

'disabled')

self.\_\_sub1StatusStaticLabel = Label(self.\_\_homeFrameSub1Status,\

text = 'Status')

self.\_\_sub1StrVar = StringVar()

self.\_\_sub1StrVar.set("No transactions")

self.\_\_sub1StatusDynamicLabel = Label(self.\_\_homeFrameSub1Status, \

textvariable = self.\_\_sub1StrVar)

# Sub 1 Packing ----------------------------------------------------------

self.\_\_sub1HeaderLabel.pack(side='top')

self.\_\_sub1TitleLabel.pack(side='left')

self.\_\_sub1TitleEntryBox.pack(side='left')

self.\_\_sub1PatronLabel.pack(side='left')

self.\_\_sub1PatronEntryBox.pack(side='left')

self.\_\_sub1CheckoutButton.pack(side='top')

self.\_\_sub1StatusStaticLabel.pack(side='left')

self.\_\_sub1StatusDynamicLabel.pack(side='left')

self.\_\_homeFrameSub1Header.pack()

self.\_\_homeFrameSub1Title.pack()

self.\_\_homeFrameSub1Patron.pack()

self.\_\_homeFrameSub1Button.pack()

self.\_\_homeFrameSub1Status.pack()

self.\_\_homeFrameSub1.pack(side='left')

# Sub 2 Frames Created ---------------------------------------------------

self.\_\_homeFrameSub2Header = Frame(self.\_\_homeFrameSub2)

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self.\_\_homeFrameSub2Title = Frame(self.\_\_homeFrameSub2)

self.\_\_homeFrameSub2Patron = Frame(self.\_\_homeFrameSub2)

self.\_\_homeFrameSub2Button = Frame(self.\_\_homeFrameSub2)

self.\_\_homeFrameSub2Status = Frame(self.\_\_homeFrameSub2)

# Sub 2 Items Created ----------------------------------------------------

self.\_\_sub2HeaderLabel = Label(self.\_\_homeFrameSub2Header, \

text = 'Return Books')

self.\_\_sub2TitleLabel = Label(self.\_\_homeFrameSub2Title, text = 'Title')

self.\_\_sub2TitleEntryBox = Entry(self.\_\_homeFrameSub2Title, width = 40)

self.\_\_sub2TitleEntryBox.bind('<Return>', self.returnBookActivation)

self.\_\_sub2PatronLabel = Label(self.\_\_homeFrameSub2Patron, text = 'Patron')

self.\_\_sub2ReturnButton = Button(self.\_\_homeFrameSub2Button, text =\

'Return Book', command = self.returnBook, state=\

'disabled')

self.\_\_sub2StatusStaticLabel = Label(self.\_\_homeFrameSub2Status,\

text = 'Status')

self.\_\_sub2StrVar = StringVar()

self.\_\_sub2StrVar.set("No transactions")

self.\_\_sub2StatusDynamicLabel = Label(self.\_\_homeFrameSub2Status, \

textvariable = self.\_\_sub2StrVar)

# Sub 2 Frames and Home Frame Packed -------------------------------------

self.\_\_sub2HeaderLabel.pack(side='top')

self.\_\_sub2TitleLabel.pack(side='left')

self.\_\_sub2TitleEntryBox.pack(side='left')

self.\_\_sub2PatronLabel.pack(side='left')

self.\_\_sub2ReturnButton.pack(side='top')

self.\_\_sub2StatusStaticLabel.pack(side='left')

self.\_\_sub2StatusDynamicLabel.pack(side='left')

self.\_\_homeFrameSub2Header.pack()

self.\_\_homeFrameSub2Title.pack()

self.\_\_homeFrameSub2Patron.pack()

self.\_\_homeFrameSub2Button.pack()

self.\_\_homeFrameSub2Status.pack()

self.\_\_homeFrameSub2.pack(side='left')

# Search Sub 3 Frames + Search Frame Header Created -----------------------

self.\_\_searchHeader = Label(self.\_\_searchFrame, text ='SEARCH')

self.\_\_searchHeader.pack(side='top')

self.\_\_searchFrameSub3 = Frame(self.\_\_searchFrame)

self.\_\_searchFrameSub3Header = Frame(self.\_\_searchFrameSub3)

self.\_\_searchFrameSub3Title = Frame(self.\_\_searchFrameSub3)

self.\_\_searchFrameSub3Status = Frame(self.\_\_searchFrameSub3)

self.\_\_searchFrameSub3BookStatus = Frame(self.\_\_searchFrameSub3)

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self.\_\_searchFrameSub3Book = Frame(self.\_\_searchFrameSub3)

# Sub 3 Items Created ----------------------------------------------------

self.\_\_sub3HeaderLabel = Label(self.\_\_searchFrameSub3Header, \

text = 'Book')

self.\_\_sub3TitleLabel = Label(self.\_\_searchFrameSub3Title, \

text = 'Title')

self.\_\_sub3TitleEntryBox = Entry(self.\_\_searchFrameSub3Title, width = 40)

self.\_\_sub3TitleEntryBox.bind('<Return>', self.searchBooks)

self.\_\_sub3StatusStaticLabel = Label(self.\_\_searchFrameSub3Status, \

text = 'Status')

self.\_\_sub3StrVarLib = StringVar()

self.\_\_sub3StrVarLib.set("No transactions")

self.\_\_sub3StrVarBookStatus = StringVar()

self.\_\_sub3StrVarBookStr = StringVar()

self.\_\_sub3StatusDynamicLabel = Label(self.\_\_searchFrameSub3Status, \

textvariable = self.\_\_sub3StrVarLib)

self.\_\_sub3BookStatusDynamicLabel = Label(\

self.\_\_searchFrameSub3BookStatus, textvariable = \

self.\_\_sub3StrVarBookStatus)

self.\_\_sub3BookDynamicLabel = Label(self.\_\_searchFrameSub3Book,\

textvariable = self.\_\_sub3StrVarBookStr)

# Sub 3 Frames Packed ----------------------------------------------------

self.\_\_sub3HeaderLabel.pack(side='top')

self.\_\_sub3TitleLabel.pack(side='left')

self.\_\_sub3TitleEntryBox.pack(side='right')

self.\_\_sub3StatusStaticLabel.pack(side='left')

self.\_\_sub3StatusDynamicLabel.pack(side='right')

self.\_\_sub3BookStatusDynamicLabel.pack(side='right')

self.\_\_sub3BookDynamicLabel.pack(side='right')

self.\_\_searchFrameSub3Header.pack()

self.\_\_searchFrameSub3Title.pack()

self.\_\_searchFrameSub3Status.pack()

self.\_\_searchFrameSub3Book.pack()

self.\_\_searchFrameSub3BookStatus.pack()

self.\_\_searchFrameSub3.pack(side='left')

# Sub 4 Frames Created ---------------------------------------------------

self.\_\_searchFrameSub4 = Frame(self.\_\_searchFrame)

self.\_\_searchFrameSub4Header = Frame(self.\_\_searchFrameSub4)

self.\_\_searchFrameSub4Name = Frame(self.\_\_searchFrameSub4)

self.\_\_searchFrameSub4Status = Frame(self.\_\_searchFrameSub4)

self.\_\_searchFrameSub4Patron = Frame(self.\_\_searchFrameSub4)

self.\_\_searchFrameSub4PatronStatus = Frame(self.\_\_searchFrameSub4)

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# Sub 4 Items Created ----------------------------------------------------

self.\_\_sub4HeaderLabel = Label(self.\_\_searchFrameSub4Header, \

text = 'Patron')

self.\_\_sub4NameLabel = Label(self.\_\_searchFrameSub4Name, \

text = ' Name')

self.\_\_sub4NameEntryBox = Entry(self.\_\_searchFrameSub4Name, width = 40)

self.\_\_sub4NameEntryBox.bind('<Return>', self.searchPatrons)

self.\_\_sub4StatusStaticLabel = Label(self.\_\_searchFrameSub4Status, \

text ='Status')

self.\_\_sub4StrVarLib = StringVar()

self.\_\_sub4StrVarLib.set("No transactions")

self.\_\_sub4StrVarPatronStr = StringVar()

self.\_\_sub4StatusDynamicLabel = Label(self.\_\_searchFrameSub4Status, \

textvariable = self.\_\_sub4StrVarLib)

self.\_\_sub4PatronDynamicLabel = Label(\

self.\_\_searchFrameSub4Patron, \

textvariable=self.\_\_sub4StrVarPatronStr)

# Sub 4 Frames Packed ----------------------------------------------------

self.\_\_sub4HeaderLabel.pack(side='top')

self.\_\_sub4NameLabel.pack(side='left')

self.\_\_sub4NameEntryBox.pack(side='right')

self.\_\_sub4StatusStaticLabel.pack(side='left')

self.\_\_sub4StatusDynamicLabel.pack(side='right')

self.\_\_sub4PatronDynamicLabel.pack(side='right')

self.\_\_searchFrameSub4Header.pack()

self.\_\_searchFrameSub4Name.pack()

self.\_\_searchFrameSub4Status.pack()

self.\_\_searchFrameSub4Patron.pack()

self.\_\_searchFrameSub4PatronStatus.pack()

self.\_\_searchFrameSub4.pack(side='right')

# Sub 5 Frames + Membership Frame Header Created -------------------------

self.\_\_membershipHeader = Label(self.\_\_membershipFrame, text='MEMBERSHIP')

self.\_\_membershipHeader.pack(side='top')

self.\_\_membershipFrameSub5 = Frame(self.\_\_membershipFrame)

self.\_\_membershipFrameSub5Header = Frame(self.\_\_membershipFrameSub5)

self.\_\_membershipFrameSub5Name = Frame(self.\_\_membershipFrameSub5)

self.\_\_membershipFrameSub5Status = Frame(self.\_\_membershipFrameSub5)

# Sub 5 Items Created ----------------------------------------------------

self.\_\_sub5HeaderLabel = Label(self.\_\_membershipFrameSub5Header, \

text = 'Join')

self.\_\_sub5NameLabel = Label(self.\_\_membershipFrameSub5Name, \

text = 'Name')

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self.\_\_sub5NameEntryBox = Entry(self.\_\_membershipFrameSub5Name, width=40)

self.\_\_sub5NameEntryBox.bind('<Return>', self.addPatron)

self.\_\_sub5StatusStaticLabel = Label(self.\_\_membershipFrameSub5Status, \

text = 'Status')

self.\_\_sub5StrVar = StringVar()

self.\_\_sub5StrVar.set("No transactions")

self.\_\_sub5StatusDynamicLabel = Label(self.\_\_membershipFrameSub5Status, \

textvariable = self.\_\_sub5StrVar)

# Sub 5 Frames Packed ----------------------------------------------------

self.\_\_sub5HeaderLabel.pack(side='top')

self.\_\_sub5NameLabel.pack(side='left')

self.\_\_sub5NameEntryBox.pack(side='right')

self.\_\_sub5StatusStaticLabel.pack(side='left')

self.\_\_sub5StatusDynamicLabel.pack(side='right')

self.\_\_membershipFrameSub5Header.pack()

self.\_\_membershipFrameSub5Name.pack()

self.\_\_membershipFrameSub5Status.pack()

self.\_\_membershipFrameSub5.pack(side='left')

# Sub 6 Frames Created ---------------------------------------------------

self.\_\_membershipFrameSub6 = Frame(self.\_\_membershipFrame)

self.\_\_membershipFrameSub6Header = Frame(self.\_\_membershipFrameSub6)

self.\_\_membershipFrameSub6Name = Frame(self.\_\_membershipFrameSub6)

self.\_\_membershipFrameSub6Status = Frame(self.\_\_membershipFrameSub6)

# Sub 6 Items Created ----------------------------------------------------

self.\_\_sub6HeaderLabel = Label(self.\_\_membershipFrameSub6Header, \

text = 'Leave')

self.\_\_sub6NameLabel = Label(self.\_\_membershipFrameSub6Name, \

text = 'Name')

self.\_\_sub6NameEntryBox = Entry(self.\_\_membershipFrameSub6Name, width=40)

self.\_\_sub6NameEntryBox.bind('<Return>', self.removePatron)

self.\_\_sub6StatusStaticLabel = Label(self.\_\_membershipFrameSub6Status, \

text = 'Status')

self.\_\_sub6StrVar = StringVar()

self.\_\_sub6StrVar.set("No transactions")

self.\_\_sub6StatusDynamicLabel = Label(self.\_\_membershipFrameSub6Status, \

textvariable = self.\_\_sub6StrVar)

# Sub 6 Frames Packed ----------------------------------------------------

self.\_\_sub6HeaderLabel.pack(side='top')

self.\_\_sub6NameLabel.pack(side='left')

self.\_\_sub6NameEntryBox.pack(side='right')

self.\_\_sub6StatusStaticLabel.pack(side='left')

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self.\_\_sub6StatusDynamicLabel.pack(side='right')

self.\_\_membershipFrameSub6Header.pack()

self.\_\_membershipFrameSub6Name.pack()

self.\_\_membershipFrameSub6Status.pack()

self.\_\_membershipFrameSub6.pack(side='right')

# Sub 7 Frames + Book Frame Header Created -------------------------------

self.\_\_bookHeader = Label(self.\_\_bookFrame, text='BOOK COLLECTION')

self.\_\_bookHeader.pack(side='top')

self.\_\_bookFrameSub7 = Frame(self.\_\_bookFrame)

self.\_\_bookFrameSub7Header = Frame(self.\_\_bookFrameSub7)

self.\_\_bookFrameSub7Title = Frame(self.\_\_bookFrameSub7)

self.\_\_bookFrameSub7Author = Frame(self.\_\_bookFrameSub7)

self.\_\_bookFrameSub7Button = Frame(self.\_\_bookFrameSub7)

self.\_\_bookFrameSub7Status = Frame(self.\_\_bookFrameSub7)

# Sub 7 Items Created ----------------------------------------------------

self.\_\_sub7HeaderLabel = Label(self.\_\_bookFrameSub7Header, \

text = 'Add Books')

self.\_\_sub7TitleLabel = Label(self.\_\_bookFrameSub7Title, text = \

'Title ')

self.\_\_sub7TitleEntryBox = Entry(self.\_\_bookFrameSub7Title, width = 40)

self.\_\_sub7TitleEntryBox.bind('<Return>', self.addBookActivation)

self.\_\_sub7AuthorLabel = Label(self.\_\_bookFrameSub7Author, text = 'Author')

self.\_\_sub7AuthorEntryBox = Entry(self.\_\_bookFrameSub7Author, width = 40)

self.\_\_sub7AuthorEntryBox.bind('<Return>', self.addBookActivation)

self.\_\_sub7AddButton = Button(self.\_\_bookFrameSub7Button, text =\

'Add Book', command = self.addBook, state= 'disabled')

self.\_\_sub7StatusStaticLabel = Label(self.\_\_bookFrameSub7Status,\

text = 'Status')

self.\_\_sub7StrVar = StringVar()

self.\_\_sub7StrVar.set("No transactions")

self.\_\_sub7StatusDynamicLabel = Label(self.\_\_bookFrameSub7Status, \

textvariable = self.\_\_sub7StrVar)

# Sub 7 Frames Packed ----------------------------------------------------

self.\_\_sub7HeaderLabel.pack(side='top')

self.\_\_sub7TitleLabel.pack(side='left')

self.\_\_sub7TitleEntryBox.pack(side='right')

self.\_\_sub7AuthorLabel.pack(side='left')

self.\_\_sub7AuthorEntryBox.pack(side='right')

self.\_\_sub7AddButton.pack(side='top')

self.\_\_sub7StatusStaticLabel.pack(side='left')

self.\_\_sub7StatusDynamicLabel.pack(side='right')

self.\_\_bookFrameSub7Header.pack()

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self.\_\_bookFrameSub7Title.pack()

self.\_\_bookFrameSub7Author.pack()

self.\_\_bookFrameSub7Button.pack()

self.\_\_bookFrameSub7Status.pack()

self.\_\_bookFrameSub7.pack(side='left')

# Sub 8 Frames Created ---------------------------------------------------

self.\_\_bookFrameSub8 = Frame(self.\_\_bookFrame)

self.\_\_bookFrameSub8Header = Frame(self.\_\_bookFrameSub8)

self.\_\_bookFrameSub8Title = Frame(self.\_\_bookFrameSub8)

self.\_\_bookFrameSub8Author = Frame(self.\_\_bookFrameSub8)

self.\_\_bookFrameSub8Button = Frame(self.\_\_bookFrameSub8)

self.\_\_bookFrameSub8Status = Frame(self.\_\_bookFrameSub8)

# Sub 8 Items Created ----------------------------------------------------

self.\_\_sub8HeaderLabel = Label(self.\_\_bookFrameSub8Header, \

text = 'Remove Books')

self.\_\_sub8TitleLabel = Label(self.\_\_bookFrameSub8Title, text = \

'Title ')

self.\_\_sub8TitleEntryBox = Entry(self.\_\_bookFrameSub8Title, width = 40)

self.\_\_sub8TitleEntryBox.bind('<Return>', self.removeBookActivation)

self.\_\_sub8AuthorLabel = Label(self.\_\_bookFrameSub8Author, text = 'Author')

self.\_\_sub8RemoveButton = Button(self.\_\_bookFrameSub8Button, text =\

'Remove Book', command = self.removeBook, state='disabled')

self.\_\_sub8StatusStaticLabel = Label(self.\_\_bookFrameSub8Status,\

text = 'Status')

self.\_\_sub8StrVar = StringVar()

self.\_\_sub8StrVar.set("No transactions")

self.\_\_sub8StatusDynamicLabel = Label(self.\_\_bookFrameSub8Status, \

textvariable = self.\_\_sub8StrVar)

# Sub 8 Frames Packed ----------------------------------------------------

self.\_\_sub8HeaderLabel.pack(side='top')

self.\_\_sub8TitleLabel.pack(side='left')

self.\_\_sub8TitleEntryBox.pack(side='right')

self.\_\_sub8AuthorLabel.pack(side='left')

self.\_\_sub8RemoveButton.pack(side='top')

self.\_\_sub8StatusStaticLabel.pack(side='left')

self.\_\_sub8StatusDynamicLabel.pack(side='right')

self.\_\_bookFrameSub8Header.pack()

self.\_\_bookFrameSub8Title.pack()

self.\_\_bookFrameSub8Author.pack()

self.\_\_bookFrameSub8Button.pack()

self.\_\_bookFrameSub8Status.pack()

self.\_\_bookFrameSub8.pack(side='right')

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self.\_\_homeFrame.pack(side='top')

self.\_\_searchFrame.pack()

self.\_\_membershipFrame.pack()

self.\_\_bookFrame.pack()

mainloop()

# Functions ----------------------------------------------------------------

def searchBooks(self,event):

bookTitle = self.\_\_sub3TitleEntryBox.get()

if bookTitle in self.\_\_bookDict:

bookInfo = self.\_\_libraryModel.getBook(bookTitle)

self.\_\_sub3StrVarLib.set(self.\_\_libraryModel.getTransactionStatus())

self.\_\_sub3StrVarBookStatus.set(self.\_\_bookDict[bookTitle].\

getTransactionStatus())

self.\_\_sub3StrVarBookStr.set(bookInfo)

else:

messagebox.showwarning("This book does not exist")

self.\_\_sub3TitleEntryBox.delete(0,END)

self.\_\_sub3TitleEntryBox.delete(0,END)

def searchPatrons(self,event):

patronName = self.\_\_sub4NameEntryBox.get()

if patronName in self.\_\_patronDict:

patronInfo = self.\_\_libraryModel.getPatron(patronName)

self.\_\_sub4StrVarLib.set(self.\_\_libraryModel.getTransactionStatus())

self.\_\_sub4StrVarPatronStr.set(patronInfo)

else:

messagebox.showwarning("This patron does not exist")

self.\_\_sub4NameEntryBox.delete(0,END)

def checkoutBookActivation(self,event):

bookTitle = self.\_\_sub1TitleEntryBox.get()

patronName = self.\_\_sub1PatronEntryBox.get()

if (patronName in self.\_\_patronDict) and (bookTitle in self.\_\_bookDict)\

and (not self.\_\_bookDict[bookTitle].isCheckedOut()):

self.\_\_sub1CheckoutButton.config(state='normal')

else:

messagebox.showwarning("Either the title or patron you've entered\

doesn't exist")

def checkoutBook(self):

bookTitle = self.\_\_sub1TitleEntryBox.get()

patronName = self.\_\_sub1PatronEntryBox.get()

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self.\_\_bookDict[bookTitle].borrowMe(self.\_\_patronDict[patronName])

self.\_\_sub1StrVar.set(self.\_\_bookDict[bookTitle].getTransactionStatus())

self.\_\_sub1TitleEntryBox.delete(0,END)

self.\_\_sub1PatronEntryBox.delete(0,END)

self.\_\_sub1CheckoutButton.config(state='disabled')

def returnBookActivation(self,event):

bookTitle = self.\_\_sub2TitleEntryBox.get()

if bookTitle in self.\_\_bookDict:

self.\_\_sub2ReturnButton.config(state='normal')

else:

messagebox.showwarning("The book title you've given doesn't exist")

def returnBook(self):

bookTitle = self.\_\_sub2TitleEntryBox.get()

bookObject = self.\_\_bookDict[bookTitle]

bookObject.returnMe()

self.\_\_sub2StrVar.set(bookObject.getTransactionStatus())

self.\_\_sub2TitleEntryBox.delete(0,END)

self.\_\_sub2ReturnButton.config(state='disabled')

def removePatron(self,event):

patronName = self.\_\_sub6NameEntryBox.get()

if patronName in self.\_\_patronDict:

self.\_\_libraryModel.removePatron(patronName)

del self.\_\_patronDict[patronName]

self.\_\_sub6StrVar.set(self.\_\_libraryModel.getTransactionStatus())

else:

messagebox.showwarning("This patron isn't a member of the library")

self.\_\_sub6NameEntryBox.delete(0,END)

def addPatron(self,event):

name = self.\_\_sub5NameEntryBox.get()

if name not in self.\_\_patronDict:

newPatron = Patron(name)

self.\_\_patronDict[name] = newPatron

self.\_\_libraryModel.addPatron(newPatron)

self.\_\_sub5StrVar.set(self.\_\_libraryModel.getTransactionStatus())

else:

messagebox.showwarning("This patron is already a member of the library")

self.\_\_sub5NameEntryBox.delete(0,END)

def addBookActivation(self,event):

title = self.\_\_sub7TitleEntryBox.get()

author = self.\_\_sub7AuthorEntryBox.get()

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if (title not in self.\_\_bookDict):

self.\_\_sub7AddButton.config(state='normal')

else:

messagebox.showwarning("This book is already in the library")

def addBook(self):

title = self.\_\_sub7TitleEntryBox.get()

author = self.\_\_sub7AuthorEntryBox.get()

newBook = Book(title, author)

self.\_\_libraryModel.addBook(newBook)

self.\_\_bookDict[title] = newBook

self.\_\_libraryModel.addBook(newBook)

self.\_\_sub7StrVar.set(self.\_\_libraryModel.getTransactionStatus())

self.\_\_sub7TitleEntryBox.delete(0,END)

self.\_\_sub7AuthorEntryBox.delete(0,END)

self.\_\_sub7AddButton.config(state='disabled')

def removeBookActivation(self,event):

bookTitle = self.\_\_sub8TitleEntryBox.get()

if bookTitle in self.\_\_bookDict:

self.\_\_sub8RemoveButton.config(state='normal')

else:

messagebox.showwarning("This book isn't in the library")

def removeBook(self):

bookTitle = self.\_\_sub8TitleEntryBox.get()

self.\_\_libraryModel.removeBook(bookTitle)

del self.\_\_bookDict[bookTitle]

self.\_\_sub8StrVar.set(self.\_\_libraryModel.getTransactionStatus())

self.\_\_sub8TitleEntryBox.delete(0,END)

self.\_\_sub8RemoveButton.config(state='disabled')

LibraryGUI()

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