import getpass

class Library:

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

self.books = {}

self.users = {}

self.logged\_in\_user = None

def add\_book(self):

title = input("Enter the title of the book: ")

author = input("Enter the author of the book: ")

copies = int(input("Enter the number of copies: "))

if title in self.books:

self.books[title]['copies'] += copies

else:

self.books[title] = {'author': author, 'copies': copies}

print(f'Book "{title}" by {author} added to the library.')

def remove\_book(self):

title = input("Enter the title of the book to remove: ")

if title in self.books:

del self.books[title]

print(f'Book "{title}" removed from the library.')

else:

print(f'Book "{title}" not found in the library.')

def display\_books(self):

if not self.books:

print("The library has no books.")

else:

for title, details in self.books.items():

print(f'Title: {title}, Author: {details["author"]}, Copies: {details["copies"]}')

def list\_users(self):

if not self.users:

print("No users found.")

else:

for username in self.users:

print(f'Username: {username}')

def remove\_user(self):

username = input("Enter the username to remove: ")

if username in self.users:

del self.users[username]

print(f'User "{username}" removed from the system.')

else:

print(f'User "{username}" not found.')

def borrow\_book(self):

title = input("Enter the title of the book to borrow: ")

if title in self.books:

if self.books[title]['copies'] > 0:

self.books[title]['copies'] -= 1

print(f'You have borrowed "{title}".')

else:

print(f'Sorry, "{title}" is currently out of stock.')

else:

print(f'Book "{title}" not found in the library.')

def return\_book(self):

title = input("Enter the title of the book to return: ")

if title in self.books:

self.books[title]['copies'] += 1

print(f'You have returned "{title}".')

else:

print(f'Book "{title}" not found in the library. Adding it to the collection.')

author = input("Enter the author of the book: ")

self.books[title] = {'author': author, 'copies': 1}

def create\_user\_account(self):

username = input("Enter a username: ")

if username in self.users:

print("Username already exists. Please try another one.")

else:

password = getpass.getpass("Enter a password: ")

self.users[username] = password

print("User account created successfully.")

def login(self, username, password):

if username == "admin" and password == "111111":

self.logged\_in\_user = "admin"

print("Admin logged in successfully.")

elif username in self.users and self.users[username] == password:

self.logged\_in\_user = username

print(f'User "{username}" logged in successfully.')

else:

print("Invalid username or password.")

def main():

library = Library()

while True:

if not library.logged\_in\_user:

print("\nLibrary Management System")

print("1. Admin Login")

print("2. User Login")

print("3. Create User Account")

print("4. Exit")

choice = input("Enter your choice: ")

if choice == '1':

username = input("Enter admin username: ")

password = getpass.getpass("Enter admin password: ")

library.login(username, password)

elif choice == '2':

username = input("Enter username: ")

password = getpass.getpass("Enter password: ")

library.login(username, password)

elif choice == '3':

library.create\_user\_account()

elif choice == '4':

print("Exiting the system.")

break

else:

print("Invalid choice. Please try again.")

else:

if library.logged\_in\_user == "admin":

print("\nAdmin Dashboard")

print("1. Add Book")

print("2. Remove Book")

print("3. Display Books")

print("4. List Users")

print("5. Remove User")

print("6. Logout")

choice = input("Enter your choice: ")

if choice == '1':

library.add\_book()

elif choice == '2':

library.remove\_book()

elif choice == '3':

library.display\_books()

elif choice == '4':

library.list\_users()

elif choice == '5':

library.remove\_user()

elif choice == '6':

library.logged\_in\_user = None

print("Logged out successfully.")

else:

print("Invalid choice. Please try again.")

else:

print("\nUser Dashboard")

print("1. Borrow Book")

print("2. Return Book")

print("3. Display Books")

print("4. Logout")

choice = input("Enter your choice: ")

if choice == '1':

library.borrow\_book()

elif choice == '2':

library.return\_book()

elif choice == '3':

library.display\_books()

elif choice == '4':

library.logged\_in\_user = None

print("Logged out successfully.")

else:

print("Invalid choice. Please try again.")

if \_\_name\_\_ == "\_\_main\_\_":

main()