Book Purchase System

> A project written for a course in the College of Communications

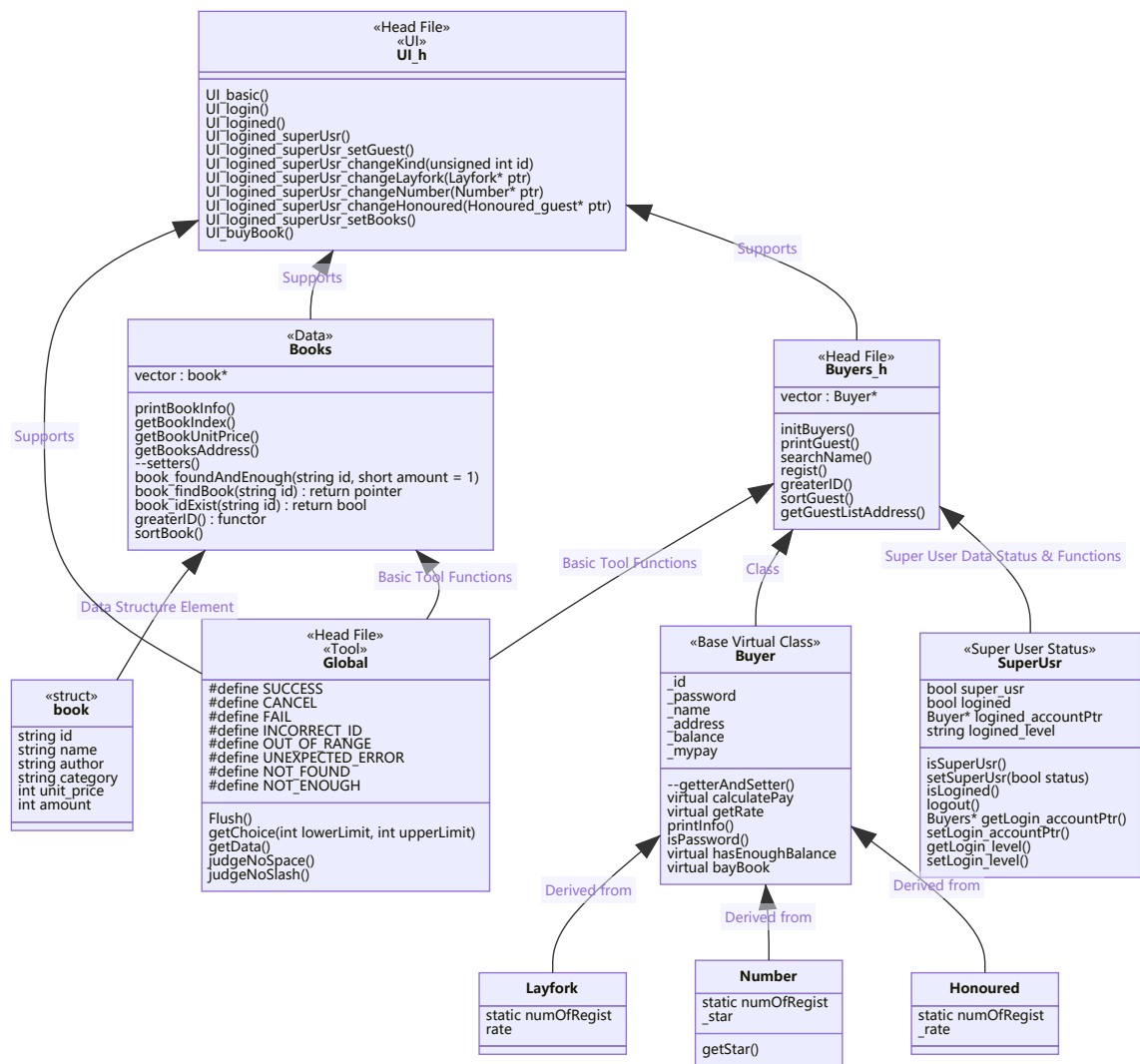## Note

View question in Question
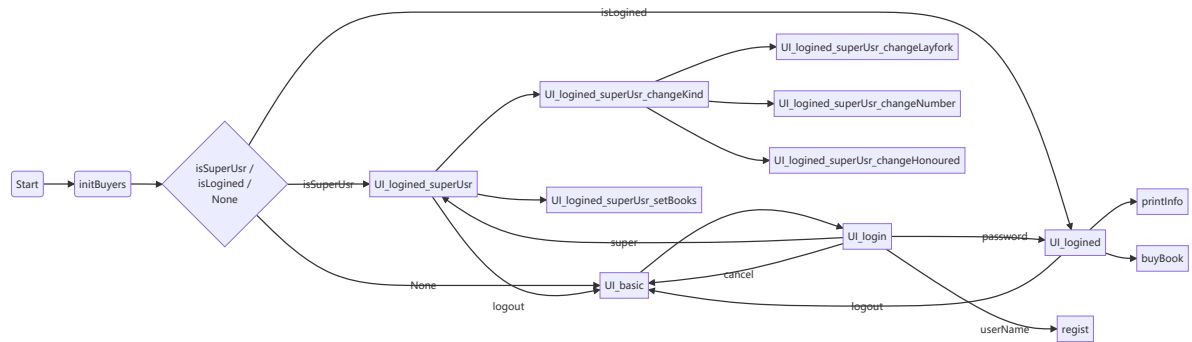
Project Structure

«Head File»
«UI»
UI_h

UI_basic()
UI_login()
UI_logined()
UI_logined_superUsr()
UI_logined_superUsr_setGuest()
UI_logined_superUsr_changeKind(unsigned int id)
UI_logined_superUsr_changeLayfork(Layfork* ptr)
UI_logined_superUsr_changeNumber(Number* ptr)
UI_logined_superUsr_changeHonoured(Honoured_guest* ptr)
UI_logined_superUsr_setBooks()
UI_buyBook()

Supports

«Data»
Books

vector : book*

printBookInfo()
getBookIndex()
getBookUnitPrice()
getBooksAddress()
--setters()
book_foundAndEnough(string id, short amount = 1)
book_findBook(string id) : return pointer
book_idExist(string id) : return bool
greaterID() : functor
sortBook()

Supports

«Head File»
Buyers_h

vector : Buyer*

initBuyers()
printGuest()
searchName()
regist()
greaterID()
sortGuest()
getGuestListAddress()

Supports

Data Structure Element

Basic Tool Functions

Basic Tool Functions

Class

Super User Data Status & Functions

«struct»
book

string id
string name
string author
string category
int unit_price
int amount

«Head File»
«Tool»
Global

#define SUCCESS
#define CANCEL
#define FAIL
#define INCORRECT_ID
#define OUT_OF_RANGE
#define UNEXPECTED_ERROR
#define NOT_FOUND
#define NOT_ENOUGH

Flush()
getChoice(int lowerLimit, int upperLimit)
getData()
judgeNoSpace()
judgeNoSlash()

«Base Virtual Class»
Buyer

_id
_password
_name
_address
_balance
_mypay

--getterAndSetter()
virtual calculatePay
virtual getRate
printInfo()
isPassword()
virtual hasEnoughBalance
virtual bayBook

«Super User Status»
SuperUsr

bool super_usr
bool logined
Buyer* logined_accountPtr
string logined_level

isSuperUsr()
setSuperUsr(bool status)
isLogined()
logout()
Buyers* getLogin_accountPtr()
setLogin_accountPtr()
getLogin_level()
setLogin_level()

Derived from

Derived from

Derived from

Layfork

static numOfRegist
rate

Number

static numOfRegist
_star

getStar()

Honoured

static numOfRegist
_rate

Schematic Diagram of Project Structure

Running Progress

Schematic Diagram of Running Progress

Learned & Used Interesting Skills

1. global `static` variables are only usable in current file
2. `greaterID()` functor
3. `static_cast<>()` & `dynamic_cast<>()`
4. *undefined reference to* & *multiple definition of*