

Member Functions	
Pharmacy class	
Methods	Functionality
Pharmacy(string n = "N/A"); Pharmacy(const Pharmacy& p2); ~Pharmacy();	Default -parameterized constructor and copy constructor assign values to objects to avoid garbage values and a destructor.
Setters: void setid(int i); void setName(string name); void setNumCustomer(int NumCustomer); void setNumMed(int NumMed); void decrementMed(string); void setMedication(int i, Medication& m); void setCustomer(int i, Customer &c); void setPrescArray(Prescription* temp); void setOffTheArray(OffTheShelf* temp);	Setter functions that enable us to modify private member values.
Getters: int getid() const; string getName()const; int getNumCustomer()const; int getNumMed()const; Medication *getMedication() ; Customer *getCustomer(); Prescription* getPrescription(); OffTheShelf* getOffTheShelf();	Getter functions that enable us to get and use private member values.
void AddOffShelfMedication(OffTheShelf& medication); void AddPrescMedication(Prescription& medication); void AddCustomer(const Customer& c);	Adds a new medication or a customer to the pharmacy's inventory.
void RemoveprescMedications(string medication); -voidRemoveoffthshelfMedications(string medication);	Removes the selected medication from the pharmacy's inventory.
void DisplayCustomers()const; void DisplayMedication() const;	Prints all information about medications and customers.
void NumberofMedication(Pharmacy& p); void NumberOfCustomers(Pharmacy& p)const;	Compares the number of medications and customers between two pharmacies.
void CompareMedicationPrice(string medicationName, Pharmacy& pharmacy2);	Compares the price of a specific medication in the current pharmacy with another pharmacy .
float CalculateAVGtPrice();	Calculates the average price of all available medications in the pharmacy.
void NullArrays();	This function decrements quantity of a med when when purchasing
Address Class	
Methods	Functionality

Address(); Address(string e, string c, string p, string s);	Parameterized and default constructors to initialize values of data members
Setters: - void setEmail(string e); - void setCity(string c); - void setPnumber(string pn); - void setStreet(string s);	Setters to modify private data members from the main
Getters: string getEmail() const; string getCity()const; string getPnumber()const; string getStreet()const;	Getters to return private values to the main
void print() const;	Print function to display details appropriately
Customer Class	
Methods	Functionality
Customer(); Customer(string cn, Address a); Customer(const Customer& c2);	Default and parameterized constructor assign values to objects to avoid garbage values
Setters: - void setcname(string cn); -void setId(int id); -void setcaddress(const Address& a);	Setter functions that enable us to modify private member values
Getters: - int getcid() const; - string getcname() const; -Address getcaddress()const; -static int getcustomercounter();	Getter functions that enable us to get and use private member values
void print() const	Prints object's information
Date Class	
Methods	Functionality
Date(int day_ = 1, int month_ = 1, int year = 2023);	Default-parameterized constructor assigns values to objects to avoid garbage values
Setter: void setDay(int day_); void setMonth(int month_); void setYear(int year_);	Setter functions that enable us to modify private member values Year setter ensures that the expiry date is in the future, not the present
Getters: int getDay(); int getMonth(); int getYear();	Getter functions that enable us to get and use private member values
void print() const;	
Medication Class	
Methods	Functionality

Medication(Date ExpiryDate = Date(), string MedicationName = "NoName", string Description = "NoDescription", float Price = 0.0, int QuantityInStock = 0, string Barcode = "000000"); Medication(const Medication& m2);	Default-parameterized constructor assigns values to objects to avoid garbage values
-void setId(int id); - void setMedicationName(string); -void setDescription(string); -void setPrice(float); -void setQuantityInStock(int); -void setBarcode(string); -void setExpire(Date);	Setter functions that enable us to modify private member values
-String getMedicationName() const -String getDescription() const -String getExpiryDate() const -Int getQuantityInStock() const -String getBarcode() const -Double getPrice() const	Getter functions that enable us to get and use private member values
Void Display() const	Prints object's information
Main	
Methods	Functionality
int validatepharm()	Validates that the input pharmacy exists and is valid
OffTheShelf class	
public Medication	
Methods	Functionality
OffTheShelf(Date ExpiryDate, string MedicationName, string Description, float Price, int QuantityInStock, string Barcode, bool BOGOF, const Date& OfferEnds);	constructor assigns values to objects to avoid garbage values
void setBOGOF(bool bogof); void setOfferEnds(const Date& date);	Setter functions that enable us to modify private member values
bool getBOGOF() const; Date getOfferEnds() const;	Getter functions that enable us to get and use private member values
void Display() const;	Prints object's information (override)
Prescription class	
public Medication	
Methods	Functionality

<pre> Prescription(Date ExpiryDate = Date(), string MedicationName = "NoName", string Description = "NoDescription", float Price = 0.0, int QuantityInStock = 0, string Barcode = "000000", int FDAn = 0, const Date& AD = Date(1, 1, 2026)); Prescription(const Prescription& p); </pre>	Default-parameterized constructor and copy constructor assigns values to objects to avoid garbage values
<pre> void setFDANumber(int newFDANumber); void setApprovalDate(const Date& newApprovalDate); </pre>	Setter functions that enable us to modify private member values
<pre> Date getApprovalDate() const; void Display() const; </pre>	Getter functions that enable us to get and use private member values
<pre> void Display() const; </pre>	Prints object's information (override)
<pre> ~Prescription(); </pre>	destructor