Book

#string title
#string author
#string ISBN
#string genre
#bool available
#string borrowedBy

+Book()
+Book(const string& title, const string& author, const string& ISBN, const string& genre)
+Book(const string& title, const string& author, const string& ISBN, const string& genre, bool available, const string& borrowedBy)
+getTitle() : string const
+getAuthor() : string const
+getISBN() : string const
+getGenre() : string const
+getAvailable() : bool const
+getBorrowedby() : string const
+setTitle(const string& newTitle) : void
+setAuthor(const string& newAuthor) : void
+setISBN(const string& newISBN) : void
+setGenre(const string& newGenre) : void
+setAvailable(bool newAvailability) : void
+setBorrowedBy(const string& newBorrower) : void
+displayInfo() : virtual void const
+operator<<(ostream& os, const Book& book) : friend ostream&
+operator>>(istream& is, Book& book) : friend istream&

Audiobook

-int duration
-string narrator

+Audiobook()
+Audiobook(const string& title, const string& author, const string& ISBN, const string& genre, int duration, const string& narrator)
+getDuration() : int const
+getNarrator() : string const
+setDuration(int newDuration) : void
+setNarrator(const string& newNarrator) : void
+displayInfo() : void const override;

Member

-string memberID
-string name
-string email
-vector checkedOutBooks
-map dueDates
-double lateFeePerDay = 1.0

+Member()
+Member(const string& memberID, const string& name, const string& email)
+getMemberID() : string const
+getName() : string const
+getEmail() : string const
+getCheckedOutBooks() : vector const
+setMemberID(const string& memberID) : void
+setName(const string& name) : void
+setEmail(const string& email) : void
+setLateFeePerDay(double fee) : void
+borrowBook(Book* book) : void
+returnBook(const string& bookTitle) : void
+setDueDate(Book* book, int days) : void
+isBookOverdue(Book* book) : bool const;
+calculateLateFee(Book* book) : double const;
+operator<<(ostream& os, const Member& member) : friend ostream&
+operator>>(istream& is, Member& member) : friend istream&

Library

-vector books
-vector members
-int booksAdded = 0
-int booksRemoved = 0
-int membersAdded = 0
-int membersRemoved = 0

+Library()
+getBooks() : vector&
+getMembers() : vector&
+findBook(const string& title) : bool const
+getBookByTitle(const string& bookTitle) : Book* const
+addBook() : void
+removeBook() : void
+displayBooks() : void const
+findMember(const string& memberID) : bool const
+getMemberByID(const string& memberID) : Member* const
+addMember() : void
+removeMember() : void
+displayMembers() : void const;
+operator+(vector& books, Book*) : friend void
+operator-(vector& books, const string& bookTitle) : friend void
+operator+(vector& members, Member*) : friend void
+operator-(vector& members, const string& memberID) : friend void
+readBooksFromFile(const string& fileName) : void
+readMembersFromFile(const string& fileName) : void
+checkOutBook(const string& memberID, const string& bookTitle) : void
+returnBook(const string& memberID, const string& bookTitle) : void
+generateReport() : void const