Class Diagram Version 2

**UI**

Variables

* UM: UserManager

Functions

* Probably a lot, once I start divvying up responsibilities.

**User Manager**

Variables

* currentUser: String
* users: Hashtable<User>
* loggedIn: LinkedList<User>

Functions

* createUser(userName, password)

**User**

Variables

* userName: String
* password: String
* myLibrary: Library
* friends: LinkedList<String>
* borrowLimit: int
* borrowUnits: Enumerator [minutes, plays]
* mailbox: LinkedList<Message>

Functions

* changePassword(password)
* addSong(name, artist, genre, year, album, year, composer, genre)
* removeSong(name, artist, genre, year, album, year, composer, genre)
* addFriend(String)

**Message**

Variables

* from: String
* to: String
* message: String

Functions

* Not sure yet………

**Song Request** – Inherits from Message

Variables

* songId: String

Functions

* Not sure yet……

**Friend Request**

Variables

* Not sure, May delete this class actually

Functions

* See above…..

**Library**

Variables

* songs: LinkedList<Song>
* playlists: LinkedList<Playlist>
* sortedBy: Enumerator [artist, title, genre]
* size: int; //number of owned songs in LinkedList, used for creating songID’s

Functions

* addOwnedSong(name, artist, genre, year, album, year, composer, genre)
* addBorrowedSong(name, artist, genre, year, album, year, composer, genre)
* removeSong(name, artist, genre, year, album, year, composer, genre)
* changeSort(String);

**Playlist**

Variables

* title: String
* songs: LinkedList<Song>

Functions

* addSong(name, artist, genre, year, album, year, composer, genre)
* removeSong(name, artist, genre, year, album, year, composer, genre)
* changeTitle(String)
* play()

**Song**

Variables

* owner: String
* songID: String
* artist: String
* album: String
* year: int
* composer: String
* genre: String

Functions

* play()

**Borrowed Song**

Variables

* startTime: Date
* playsLeft: int
* borrower: String

Functions

* Not Sure Yet………

**Owned Song**

Variables

* isLent: Boolean
* restriction: Enumerator[atWill, approval] // could use Boolean maybe
* queue: LinkedList<String

Functions

* addToQueue(Strng)
* deQueue()
* peek()