

## 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>
- sortBy: 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()