ECE250 – Project 0
Playlist Manager
Design Document

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Overview of Classes

Class:

Playlistdiver

Description:

represent a playlist manager that provides operations like add, del, and play songs.

Member variables:

- Array that stores songs
- Variable that stores the max size of the playlist
- Variable that stores the current number of songs in playlist

Member functions

- Set Size – sets the max size of the playlist, accepts max size, return void
- Add – add songs to the playlist, accepts song object, return void
- Delete – remove songs from the playlist, accepts index, return void
- Play – plays songs from the playlist, accepts index, return void

Class:

Song

Description:

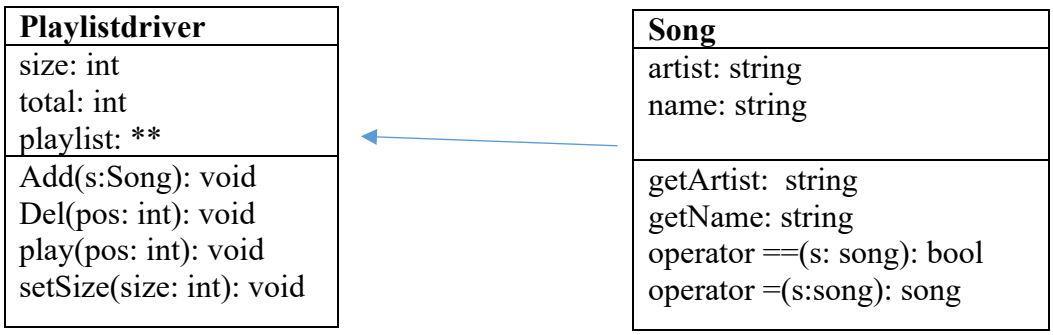
represent a song to be added into the playlist

Member variables:

- Variable that stores artist of the song
- Variable that stores the name of the song

Member functions

- Getters – need gets to access private variable in another class, accepts nothing, return member variable
- Overload == – check if to songs object are identical by comparing their member variables, accepts song object, return Boolean
- Overload = – assigns a song object, accepts song object, return song object



Constructors/Destructor/Operator overloading

Class: Playlistdriver

Playlistdriver() – use to initial all member variable to their initial values
~Playlistdriver() – clean up pointers

Class: Song

Song(String&, String&) – set up song with corresponding values, must have parameters as I don't
Song(&song) – used for copying purpose
Song operator == – use to check if two songs object have the same assigned member variables
Song &operator = – assign song objects after deletion of songs, copy constructor will be used.

2. Test Cases

Test 1: test m command
Test 2: test i command
Test 3: test m along with i command
Test 4: test p command
Test 5: test m along with i command and p command
Test 6: test e command
Test 5: test m along with i command, p command, and e command
Refractor code
Retest