ECE 325: Assignment 2: Building a collection of your songs

--Jaskeerat Singh

3) Which class is the better option? Give at least two reasons for why you think this.

The SongCollectionArrayList class is the better option. I believe so because it offers dynamic functionality and there is not upper limit on the number of songs the band can have that has to be hardcoded in the case of arrays. Also, there are a wide variety of in-built methods that can be used with ArrayLists over arrays like the contains() method, the remove() method and the add() method that you don't have to define yourself.

4) In the remove() method in the SongCollectionArray class, we have the requirement that all empty slots of the array need to be at the end. Why is this important?

It is important that all the empty slots of the array are at the end to maintain the integrity of the storage. it makes it more intuitive to use. We can use this structure to decipher extra information that we might not be able to if the slots are scattered. For example if we want to find the 4th song added in order, we can simply call the function .get(3). If there are holes in the array, whenever we add new songs, they will be added to the nearest hole from the start, which would take information away from us. Interacting with the array will be much harder.