Course Project

**CD/DVD Collection**

This program will allow the user to keep track of a CD or DVD collection. This can only work exclusively with either CDs or DVDs since some of the data is different—your choice. Each CD/DVD in the collection will be represented as a class, so you will have one class that is a single CD/DVD.

The CD class will use a vector to keep track of the titles of the songs on the CD; this will allow each CD to have a different number of songs. It should also maintain the length of each song thus another vector. The class will also keep track of the total length of the CD. The class will also have a data member for the artist name and the name of the CD.

The DVD class will have data members for the title of the movie, the length of the movie, and the year the movie was released. The class will have a vector which is used to store the name of the actors and actresses in the movie. Another vector will be used to maintain the character names that the actor/actress played in the movie. These two vectors must work in parallel, meaning the first actor/actress in the list must correspond to the first character in the other vector.

The program will maintain a list of CD/DVDs. This list will be a vector of that class type (CD or DVD). The program must provide methods (functions) to add a CD/DVD, remove a CD/DVD and update a CD/DVD. There should also be a function that displays the entire list of CDs/DVDs. The output must be a table format, with heading.

For the DVDs:

* Movie Title
* Length of Movie
* Year Released
* Actors/Actresses
* Characters

Note: the movie title, length of movie and year released should only appear once while the actors/actresses and characters will have several lines. So the other columns must be displayed with blanks.

For the CDs:

* Artist
* CD Name
* Length of CD
* Song Title
* Song Length

Note: the artist name, CD name and length of CD should only appear once while the song title and length will have several lines. So the other columns must be displayed with blanks.