

DEVELOPER DOCUMENTATION

SOLUTION

This is a program is a songs application where a user is able to create, search, edit and delete songs, artists, albums, years and length in a file. The data is stored in an array and can be saved to a file named “songs.txt”.

MODULES

OPERATIONS:

Functions such as search(), create(), edit(), save(), and delete() are used to carry out operations.

MAIN:

The main function allows the user to carry out the operations mentioned aboved.

FILE:

The file can be handled and modified using the create(), edit(), save(), and delete() functions, to an external filed titled “songs.txt”.

DATA STRUCTURE

“typedef struct” is used to store the song details which include artist, song, album, year, genre and length of song(in minutes and seconds).

“songs” which is the structure is pointed to “s” which is used for the allocation of memory which saves song details.

ALGORITHM

Create: allows the creation of new song details. Must save to file for it to be saved externally.

Search: allows the search of already saved song details in the external file and internal database.

Save to file: this ensures that created or deleted files take an effect on the external file.

Edit: to make changes to the already existing file.

Delete: to delete song details from the already existing file(“save” function must be used).

FUNCTIONS AND INTERFACES

load(): to read external file’s data into the programs memory, if the application is closed, as long as the data was saved to file.

search(): searches for either artist, song, album, year or genre and prints all the data connected to it.

create(): creates a new database in the applications memory without saving to file. To save to file select the “save” function.

save(): this function enables the saving the new information to the external file “songs.txt” after creating and deleting.

updateFile(): this function is specifically for the edit function. It immediately edits the new detail(s), after the user types. There is no need to call the “save” function.

edit(): to modify already existing data.

delete(): to remove the details completely from the external file “save” function must be called.

INPUT PARAMETERS AND RETURNED RESULTS

Functions use the “scanf” for accepting user input to update and perform file operations.

No particular values are returned but error messages are sent using the “printf”.

Artist|Song|Album|Year|Genre|Length (is currently saved in the file for searching, new data can also be added)

Ariana_Grande|pov|Positions|2015|pop|12|30

Rema|DND|Ravage|2023|Afro|2|30

Rema|Red_Potion|Ravage|2023|Afro|2|31

