A picture containing object

Description automatically generated

**SONGS**

**Overview:**

The program is designed to store data of songs in a database. For each entry the program can store the following data: title of the song, name of the performer (singer or group), title of the album it was released on, year of release, genre of the music (rock, pop, hip-hop, jazz, classical, etc.), length of song (in minutes and seconds).

**Scope:**

The program is be capable of following functions:

* load existing database into memory.
* add new song entry to the database.
* save the database into a file.
* display all songs of a user selected artist.
* display all details of the songs of a user selected album.
* list all songs that were released in a user selected year.
* list all songs of a user selected genre.
* output the whole database.

**Getting Started:**

To launch the program, simple run the “songs.exe” executable file. You will see a console screen pop-up on the screen.

**Main Menu:**

Once the program has successfully launched, you will see a Welcome Message and a Main Menu that would prompt you to make a choice. You can choose any option by entering the respective number and pressing enter.

The Main Menu presents you will 3 options.

1. Load the existing database
2. Create a new database
3. Exit

**1. Load the existing database:**

If you already have a database stored in your folder, you can perform following operations on it:

1. Search the database
2. Add a New Entry to the Database
3. Show all of the Database
4. Exit

**1.1 Search the database:**

You can search the database for a song using different parameters. Choosing this option will show you another menu which would allow you to search for a song using following parameters:

1. Song’s Title
2. Song’s Artist
3. Song’s Album
4. Song’s Release Year
5. Song’s Genre
6. Exit

**1.2 Add a New Entry to the database:**

You can use this to add new entries to your existing database. Upon choosing this option, you will be asked to enter following details:

* Song Title
* Song Artist
* Song Album
* Song Release Year
* Song Genre
* Song Duration

Once you have entered all these details, the program will terminate. If you wish to enter more songs into the database, repeat the process and refer to article **“1.2 Add a New Entry to the Database”** for more guidance.

**1.3 Show all of the database:**

You can use this to see all the song entries and their detailed information on the screen.

**2. Create a new database:**

You may only use this option if you don’t have a database saved already. If you choose this option, and the program finds an existing database, it will automatically terminate. Otherwise, the program will ask you to enter the following details one by one:

* Song Title
* Song Artist
* Song Album
* Song Release Year
* Song Genre
* Song Duration

Once you have entered all these details, the program will terminate, as you have initialized the database. If you wish to enter more songs into the database, please refer to article **“1.1.2 Add a New Entry to the Database”**.

**3. Exit:**

You can use this option if you wish to terminate the program.