# DJ Music Player - AmaDJ Design Concept

This is an attempt at documentation.

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### Purpose

#### Overview

The application allows you to smoothly transition songs from currently playing into the queued-up song. This can be set to happen at the end of the current song, or upon the press of a button.

Songs are imported and stored in *C:\Users\user\AppData\LocalLow\olka\_dev\AmaDJ*. The song will require a name, with the author and genre being optional.

You will also have the option to play predefined sound effects at any time during the song.

The intention is to simplify an amateur DJ’s job if his main piece of equipment is a notebook or a desktop PC.

The project is open-source using the MIT License to allow everyone to modify, use, or redistribute it.

### ****Usage Flow****

****Music Player****

You can control the flow of music, with the Pause and Skip button. The Loop button loops the currently playing song and clears the queue.

The Autoplay button, must first have a tag typed into it, and when active it will pick songs at random with the same tag and autoplay them, fading included.

You can have only one queued-up song.

****Sound Effects****

You have an option to play predefined sounds during songs or even when nothing is playing.

These will come with the application.

#### ****Volume Control****

You are able to control the volume with an on-screen slider or a predefined hotkey.

#### ****List of Imported Songs****

You import a song from any folder on your computer. You give it a name, author (Optional) and genre (Optional)**.**

**The imported songs are copied and stored locally.**

You can import any number of songs, as long as you have the space on your disk.

After you have imported your first songs, you can select one and press one of the 2 available options: **Play Now** and **Queue Up**.

The Queue Up option will crossfade the songs at the end of the current song.

The list will by default be sorted in alphabetical order for song names but can be switched to author or genre. You will be able to scroll the list and then use the buttons to either play it now or queue it up.

You have the option to delete a song from the list, which will also delete it from the application's folder.

You can edit the song‘s information at any time

****Settings****

You can customize the the length of the Fading Times from 0 up to 15 seconds. There is also the option to delete all songs.

### ****Feature List****

#### Importing Music

You can import music files directly into the application and type in the name and other optional information.

#### Playing Music

The application can play imported music.

#### Queue Up Music

The main feature is that you can queue up songs from the **Imported Music List.**

#### Crossfading Audio

Every time the current song switches to the queued-up song, it will crossfade their audio to make the transition smooth.

#### Imported Music List

A list that shows all of your imported songs, sorted alphabetically based on your preferences.

#### Sound Effect Buttons

Predefined sound effects to enhance the experience.

#### Volume Control

You can control the volume dynamically.

#### Autoplay & Loop

Loop, will loop the song that is currently playing.

Autoplay randomly picks songs with the same tag as the inputed one.

#### Settings

Customize the Fading Times to fit your preferences

#### Hotkeys

|  |  |
| --- | --- |
| Action | Shortcut |
| Play/Pause | Spacebar |
| Play Queued Up Song Now | Ctrl + Right Arrow |
| Play Sound Effect 1-10 | Num 0-9 |
| Increase Volume | Up Arrow |
| Decrease Volume | Down Arrow |
| Maximize Volume | Ctrl + Up Arrow |
| Minimize Volume | Ctrl + Down Arrow |

### ****Design****

#### ****Design Philosophy****

The design doesn’t need to be complicated, so simplicity was the objective. There is no background images, only colors and minimal visual effects on click. The UI should be easy for the user to understand and navigate, using icons most of the time.

There is an intro and outro sequence, which should feel clean and like a nice addition.

The text should always be highly visible in the contrast.

#### ****Color Scheme****

The color scheme will be mostly monochromatic, using blue with low saturation and value, with a complementary orange. The orange will appear when a music fading is occuring.

### Technical Details

#### Programming Language & Engine

The application uses the Unity Engine as a base, and all scripts are written in C#.

#### Supported File Formats

* MP3
* WAV
* OGG

#### System Requirements

CPU: 2GHz+

GPU: 128MB

RAM: 2 GB

Storage: 100 MB Available Space

OS: Windows 10 / 11