# **MyProject Documentation**

# **Contents**

Namespace FTC-Music-Player Sub-modules														1
Module FTC-Music-Player.lib Functions														<b>1</b> 2 2
Module FTC-Music-Player.main														2
Module FTC-Music-Player.models														2
Classes														2
Class Album														2
Ancestors (in MRO)														2
Descendants														2
Class variables														2
Class Artist														3
Class variables														3
Class Content														3
Descendants														3
Class variables														3
Class Playlist														3
Ancestors (in MRO)														3
Methods														3
Class Song														4
Ancestors (in MRO)														4
Class User														4
Class variables														4
Methods														4

# $\textbf{Namespace} \ \mathtt{FTC-Music-Player}$

# **Sub-modules**

- FTC-Music-Player.lib
- FTC-Music-Player.main
- FTC-Music-Player.models

# $\textbf{Module} \ \mathtt{FTC-Music-Player.lib}$

Definitions of some generally useful functions to use throughout the project.

# **Functions**

## Function TODO

```
def TODO(
    s: str
)
```

# Module FTC-Music-Player.main

# Module FTC-Music-Player.models

Defines several classes modelling data that will be received from the C# backend to be used by the Python frontend:

- User A class to represent a single User of the application.
- Content Top level class modelling any kind of content an Artist could make.
- Album : Content A collection of Songs.
- Playlist : Album A /mutable/ collection of Songs created by the User.
- Song: Content A single Song.
- Artist An entity that has zero or more Content.

# **Classes**

#### Class Album

```
class Album(
   name: str,
   artist,
   songs: list[FTC-Music-Player.models.Song])
```

Immutable collection of Songs made by the same Artist and grouped togther.

- name Name of the Album.
- arist Name of the Artist that made the Album.
- songs List of Songs in the Album.

# **Ancestors (in MRO)**

• FTC-Music-Player.models.Content

#### **Descendants**

• FTC-Music-Player.models.Playlist

#### Class variables

```
Variable songs Type: list[FTC-Music-Player.models.Song]
```

#### Class Artist

```
class Artist(
   name: str,
   albums: list[FTC-Music-Player.models.Album] = [],
   songs: list[FTC-Music-Player.models.Song] = []
)
```

## **Class variables**

```
Variable albums Type: list[FTC-Music-Player.models.Album]
Variable name Type: str
```

Variable songs Type: list[FTC-Music-Player.models.Song]

#### Class Content

class Content

Class modelling any form of Content made my an Artist, inherited by several other classes.

#### **Descendants**

- FTC-Music-Player.models.Album
- FTC-Music-Player.models.Song

## **Class variables**

Variable artist

```
Variable name Type: str
```

## Class Playlist

```
class Playlist(
   name: str,
   songs: list[FTC-Music-Player.models.Song] = []
)
```

Playlist class to be used in the interface between the back- and front-ends.

- name Name of the Playlist.
- arist Name of the Artist that made the Playlist.
- songs List of Songs in the Playlist.
- add song() Adds a Song to the list of Songs.

#### **Ancestors (in MRO)**

- FTC-Music-Player.models.Album
- FTC-Music-Player.models.Content

#### **Methods**

## Method add\_song

```
def add_song(
    self,
    song: FTC-Music-Player.models.Song
)
```

# Class Song

```
class Song(
    name: str,
    artist
)
```

Models a single Song that can be a part of zero or more Albums or Playlists, as well as followed by zero or more Users.

## **Ancestors (in MRO)**

• FTC-Music-Player.models.Content

#### Class User

```
class User(
     handle
)
```

A User class to model the data for a user of the application.

- username Personal identifier
- playlists List of playlists/albums the user has saved
- favourites Special playlist of the user's favourite songs.
- followed List of all the artists that the user has followed.

Initialise a User instance with no playlists, no liked/favourited songs and no followed artists.

## **Class variables**

**Methods** 

```
Variable favourites Type: FTC-Music-Player.models.Playlist

Variable followed_albums Type: list[FTC-Music-Player.models.Album]

Variable followed_artists Type: list[FTC-Music-Player.models.Artist]

Variable playlists Type: list[FTC-Music-Player.models.Playlist]

Variable username Type: str
```

```
Method change_username
    def change_username(
        self,
        new_handle: str
    )
Method create_playlist
    def create_playlist(
        self,
        name: str
    )
Method follow_album
    def follow_album(
        self,
        album: FTC-Music-Player.models.Album
    )
Method follow_artist
    def follow_artist(
        self,
        artist: FTC-Music-Player.models.Artist
    )
Method like_song
    def like_song(
        self,
        song: FTC-Music-Player.models.Song
    )
```

Generated by *pdoc* 0.10.0 (https://pdoc3.github.io).