# UML

## 1.Class

#### **AudioBooks**

-author : String -language : Languages -category : Categories

+AudioBooks(title: String, author: String, duration: int, contents: String, language: Languages,

category: Categories, id: String)

+AudioBooks(title: String, author: String, duration: int, contents: String, language: Languages,

category : Categories)
+getAuthor : String
+getCategory : String
+getLanguage : String
+toString : String

#### **Playlist**

-name : String -id : UUID

-audiobooksList : LinkedList < AudioBooks >

-songsList : LinkedList<Song>

+ Playlist (name: String, id: UUID, songsList: LinkedList < Song >, audiobooksList:

LinkedList<AudioBooks>)

+Playlist(name: String, songsList: LinkedList<Song>, audiobooksList: LinkedList<AudioBook>)

+toString : String +getName : String +getId : String

+getSongsList : LinkedList<Song>

+getAudioBooksList: LinkedList<AudioBook>

+showSongList : void +showAudioBookList : void

#### **Album**

-title : String -artist : String -duration : int -date : int

-songList : LinkedList<Song>

+idAlbum: UUID

+Album(title: String, date: int, duration: int, songs: LinkedList<Song>, artist: String, id: String)

+Album(title: String, date: int, date: int, songs: LinkedList<Song>, artist: String)

+getTitle : String +getArtist : String +getDuration : int +setDuration : void +getDate : int +getId : String

+addSong(song : Song) : void

+showAlbum: void

+showAlbumInformations: void

+showSongList : void +toString : String

#### Song

-artist : String -genre : Genres

+Song(title: String, artist: String, duration: int, contents: String, genre: Genres, id: String)

+Song(title : String, artist : String, duration : int, contents : String, genre : Genres)

+getGenre : String +getGenreForXML : String +getArtist : String

+toString : String

#### **MenuSelection**

+menuData(sc : Scanner) : static int throws NotANumberException

+selectAlbum5(sc : Scanner, util : Util) : static void +selectPlaylist6(util : Util, sc : Scanner) : static void +selectArtist7(util : Util, sc : Scanner) : static void +selectAuthor8(util : Util, sc : Scanner) : static void

+changeContent9(util: Util, sc: Scanner, xmlfile: XmlFile): static void

+addASongToTheSongsList(util : Util, sc : Scanner) : static void +addAnAlbumToTheAlbumsList(util : Util, sc : Scanner) : static void +addASongToAnAlbum(util : Util, sc : Scanner) : static void

+addAnAudioBookToTheAudioBooksList(util: Util, sc: Scanner): static void

+createAPlaylist(util : Util, sc : Scanner) : static void +deleteAPlaylist(util : Util, sc : Scanner) : static void

+saveApplicationInXml(xmlfile : XmlFile, util : Util) : static void +chooseTheMusicToListen(util : Util, sc : Scanner) : static void

# HelaySound(Sound : File, I : int) : static void +PlayListOfSound(soundList : LinkedList<File>, I : int) : static void +listenToSomeMusic(musicFilepath : String, sc : Scanner) : static void +listenToAListOfMusics(listMusicFilepath : LinkedList<String>, sc : Scanner) : static void Util

```
-audiobooksList: LinkedList<AudioBooks>
-songsList : LinkedList<Song>
-albumsList : LinkedList < Album >
-playlistsList : LinkedList<Playlist>
+Util()
+Util(au: LinkedList<AudioBooks>, so: LinkedList<Song>, al: LinkedList<Album>, pl:
LinkedList<Playlist>)
+fileTheAudioBooksList(xmlfile: XmlFile): void
+fileTheSongsList(xmlfile: XmlFile): void
+fileTheAlbumsList(xmlfile: XmlFile): void
+fileThePlaylistsList(xmlfile: XmlFile): void
+addAudiobookToTheList(audiobookToAdd: AudioBooks): void
+addSongToTheList(songToAdd : Song) : void
+addAlbumToTheList(albumToAdd: Album): void
+addPlaylistToTheList(playlistToAdd: Playlist): void
+getAudioBooksListForXml: LinkedList<AudioBook>
+getSongsListForXml: LinkedList<Song>
+getAlbumsListForXml: LinkedList<Album>
+getPlaylistsListForXml : LinkedList<Playlist>
+showAudioBooksNamesOrdered(orderedOrNot : String) : void
+getAudioBookIndex(thisAudioBook: String): int
throws NotAnExistingAudioBook
+addAudioBookToNewPlaylist(thisAudioBook: String, listAudioBookPlaylist: LinkedList<AudioBook>):
String
+getAuthors: LinkedList<String>
+showSongsNamesOrdered(orderedOrNot : String) : void
+getSongIndex(thisSong: String): int
throws NotAnExistingSong
+addSongToNewAlbumOrPlaylist(thisSong String, listSongAlbumOrPlaylist : LinkedList<Song>) : String
+addSongToAlbum(thisSong: int, thisAlbum: int): void
+musicToListen(thisMusic: String, kindOfMusic: String): String
+showAlbumsNamesOrdered(orderedOrNot : String) : void
+getAlbumIndex(thisAlbum: String): int
throws NotAnExistingAlbum
+qetAlbumSongsFilepath(albumWanted: String, sc: Scanner): LinkedList<String>
+showPlaylistsNamesOrdered(orderedOrNot : String) : void
+getPlaylistIndex(thisPlaylist : String) : int
throws NotAnExistingPlaylist
+getPlaylistMusicsFilepath(playlistWanted: String, sc: Scanner): LinkedList<String>
```

#### **XmlFile**

Root: Element

-filepathPlaylist = "files/playlist.xml" : static String
-filepathAlbum = "files/albums.xml" : static String
-filepathMedias= "files/elements.xml" : static String

-transformerFactory: TransformerFactory

-transformer : Transformer

-docFactory : DocumentBuilderFactory-docBuilder : DocumentBuilder-docPlaylist : static Document

-docAlbum : static Document-docMedias : static Document

+XmlFile()

+showXML(xmlWanted : String) : void +getContent(n : Node, tab : String) : String -getAudioBooks(n : Node) : AudioBook

throws NotACategoryException, NotALanguageException

+getListAudioBooks : LinkedList<AudioBook>

-getSong(n : Node) : Song
throws NotAGenreException
+getListSongs : LinkedList<Song>
-getAlbum(n : Node) : Album
+getListAlbum : LinkedList<Album>
-getPlaylist(n : Node) : Playlist
+getListPlaylist : LinkedList<Playlist>
+setXmlWithUtilList(util : Util) : void

+writeXml(whereToWrite: String, util: Util): void

## 2.Enum

# <<enum>> Categories

=JEUNESSE, NOVEL, THEATRE, SPEECH, DOCUMENTARY

-category : String

-Categories : (category : String)

+getCategory : String

# <<enum>> Genres

=JAZZ, CLASSIC, HIPHOP, ROCK, POP, RAP, KPOP

-genre : String

-Genres : (genre : String)
+getGenre : String

# <<enum>> Languages

=FRENCH, ENGLISH, ITALIAN, SPANISH, GERMAN, KOREAN, CHINESE, RUSSIAN

-language : String

-Language: (language: String)

+getLanguage : String

## 3.Abstract

<<abstract>> Media

#titre : String #int : Duration #id: UUID

#contents: String

+toString: abstract String

+getTitle : String +getContent : String +getId : String +getDuration: int

## 4.Exception

<<Exception>> NotACategoryException

+NotACategoryException(titleSong : String)

<<Exception>> **NotAGenreException** 

+NotAGenreException(titleSong : String)

<<Exception>> NotALanguageException

+NotALanguageException(titleSong : String)

<<Exception>> **NotANumberException** 

+NotANumberException()

<<Exception>> **NotAnExistingAlbum** 

+NotAnExistingAlbum()

< <exception>&gt; NotAnExistingAudioBook</exception>
+NotAnExistingAudioBook()
< <exception>&gt; NotAnExistingPlaylist</exception>
+NotAnExistingPlaylist()
< <exception>&gt; NotAnExistingSong</exception>
+NotAnExistingSong()
5.Interface
< <interface>&gt; InterfaceDuration</interface>
+getDuration : int
< <interface>&gt; InterfaceGenre</interface>
+getGenre : String
< <interface>&gt; InterfaceString</interface>
+toString : String
< <interface>&gt; InterfaceTitle</interface>
+getTitle : String