HomeWork

-student : Student
-teachermail : string
-bytes : byte[]

-us
-gn
-nic
-co
-su
-co
-las
-cu
-do
-do
-fol

Gate

-users : List<User>
-teachers : List<Teacher>
-students : List<Student>
-states : List<int>
-foundusers : Hashset<User>
-foundteachers : HashSet<Teacher>
-foundstudents : HashSet<Student>

+Retornar() : List<User>
+RetornarStudent() : List<Teacher>
+RetornarStudent() : List<Student>
+checkUsername(string) : bool
+CheckGmail(string) : bool
+SingUser(User) : void
+LogAsUser(string, string) : User
+LogAsStudent(string, string) : Student
+LogAsTeacher(string, string) : Teacher
+ChangePassword(string, string, string) : bool
+ChangePassword2(string, string) : void
+ChangeNickName(string, string, string) : bool
+ChangeNickName2(string, string) : void
+ChangeMembership(string, string) : bool

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Lessons

-name : string
-course : string
-subjects : string
- lessons : Video
-teacher : Teacher
-homeWork : object
-currentSecond : int
-bytes : bytes[]

Student

erID : int
mail : string
ckname : string
urse : string
bjects : List<string>
de : string
stlesson : Lesson
rrentSec : int
wnloadLesson : List<Lesson>
wnloadHomeWork : List<object>
lowTeachers : List<Teacher>

child

Teacher

-courses : List<string>
-subjects : List<string>
-code : string
-gmail : string
-nickname : string
-teacherID : string
-lessons : List<Lesson>

+ImportVideoT(string, string, string, MediaPlayer) : Video
+ImportLesson(string, string, string, int, Video, Teacher, byte[], string): Less

child

parent

parent

Person (Abstract)

#name : string
#lastName : string
#age : int
#password : string

child

parent

User

-gmail : string
-nickname : string
-membershipType : string
-privpul : string
-profileimage : Image
-likedSongs : List<Song>
-likedVideos : List<Video>
-likedKaraokes : List<Karaoke>
-lastsong : MediaPlayer
-currentSec : int
-myPlaylist : List<Playlist>
-followUsers : List<User>
-followAlbums : List<Album>
-followPlaylist : List<Playlist>
-followArtist : List<Artist>
-followSeries : List<Serie>
-followTeachers : List<Teacher>
-songprefered : List<Song>
-videoprefered : List<Video>

+NewPlaylist(string, string, Image) : Playlist

-lyrics

Admin

+ImportSong(string, string, string, string, string, int , bool, Image, Medi...
+ImportVideo(string. string, string, List<string>, string, int, int, string, In...
-ProcessLyrics(string) : List<string>
+ImportKaraoke(string, string, string, string, string, string, int, bool, Ima...
+ImportVideoSerie(string, int, string, string, string, List<string>, string,...

Playlist

-songs : List<Song>
-videos : List<Video>
-karaokes : List<Karaoke>
-lessons : List<Lesson>
-playlistName : string
-userowner : User
-publicornot : string
-image : Image
-filter : string

MediaPlayer

-foundsongs : HashSet<Song>
-foundvideos : HashSet<Video>
-foundseries : HashSet<Serie>
-foundplaylist : HashSet<Playlist>
-foundalbums : HashSet<Album>
-foundkaraokes : HashSet<Karaoke>
-foundartists : HashSet<Artist>
-foundlessons : HashSet<Lesson>
-queuestudent : List<Lesson>
-queue : List<MediaFile>
-songs : List<Song>
-videos : List<Video>
-lessons : List<Lesson>
-playlist : List<Playlist>
-series : List<Serie>
-artists : List<Artist>
-karaokes : List<Karaoke>
-albums : List<Album>
-lesson : List<Video>
-videoChapters : List<Video>
-homeworks : List<HomeWork>

+Play(MediaFile) : void
+GetQualification(Video) : double
+GetQualification(Song) : double
+GetMetadata(Song) : void
+GetMetadata(Video) : void
+GetInstrinsicInformation(Video) : void
+GetInstrinsicInformation(Song) : void
+GetPlataformInformation(Video) : void
+GetPlataformInformation(Song) : void

Album

-name : string
-artist : List<string>
-numberSongs : int
-songs : List<Song>

Artist

-songs : List<Song>
-videos : List<Video>
-karaokes : List<Karaoke>
-series : List<Series>

Song

#artist : string
#album : string
#expliciT : bool

child   parent

Me

#lengt
#fileSi
#name
#genr
#year
#code
-letter
#numb
#quali
#dime
#imag
#bytes
#likes

Video

#ageFilter : int
#director : string
#synopsis : string
#chapter : int
#studio : string
#subject : string
#course : string
#actors : List<string>

child   parent

Karaoke

: List<string>

Partial class box (top left, cut off):

```
aPlayer) : bool
mage, MediaPlayer):bool

age, MediaPlayer) : bool
int, int, string, int, Image, MediaPlayer) : bool
```

Searcher

-mediaPlayer : MediaPlayer

+Brain(string) : void
+SmartList(Playlist) : void
+SearchArtist(string) : HashSet<Artist>
+SearchUser(string) : HashSet<User>
+SearchSong(string) : HashSet<Song>
+SearchVideo(string) : HashSet<Video>
+SearchSeries(string) : HashSet<Serie>
+SearchPlaylist(string) : HashSet<Playlist>
+SearchAlbum(string) : HashSet<Album>
+SearchKaraoke(string) : HashSet<Karaoke>

StudentSearcher

-mediaPlayer : MediaPlayer

+Smartlist(Playlist) : void
+Brain(string) : void
+SearchTeacher(string) : HashSet<Teacher>
+SearchStudent(string) : HashSet<Student>
+SearchLesson(string) : HashSet<Lesson>

Partial class box (bottom left, cut off):

ediaFile (Abstract)

```
h : TimeSpan
ze : long
e : string
e : string
 : int
 : int
 : string
erOfReproductions : i
fication : List<int>
nsion : string
e : Image
s : byte[]
 : int
```

-nofVid
-serieN
-seaso
-episo
-image
-code

Serie

deos : int
Name : string
on : int
des : List<Video>
e : Image
: int