

Theme: Music application

Project requirements:

- Registration
- Authorization
- View list of the songs
- View list of the albums
- View all of these according to selected genre
- *Logging

Roles:

1. User
 - I. CRUD Playlists
 - II. Subscribe/change subscription/unsubscribe
2. Artist
 - I. CRUD Tracks
 - II. CRUD Albums
3. Admin
 - I. CRUD Playlists, CRUD Subscriptions, CRUD Tracks, CRUD Albums, CRUD Users, CRUD Label

Tables

Roles:

Name:	Type:	Restrictions(PK, FK)
Id	smallserial	PK
Role	varchar(100)	NOT NULL UNIQUE

AbstractUser:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
login	varchar(100)	NOT NULL UNIQUE
email	varchar(256)	NOT NULL UNIQUE
password	varchar(256)	NOT NULL
roleID	(smallserial)	FK

Artist:

Name:	Type:	Restrictions(PK, FK)
UserID	(bigserial)	FK
Country	varchar(56)	NOT NULL
Instruments	varchar(256)	NOT NULL
Website	varchar(256)	NOT NULL UNIQUE
Labels	(bigserial)	FK
Genres	(smallserial)	FK

User:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
AbstractUserID	(bigserial)	FK

Subscription	(smallserial)	FK
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Label:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
ArtsitID	(bigserial)	FK
Name	varchar(150)	NOT NULL UNIQUE
Budget	money	NOT NULL >=0

Album:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
ArtsitID	(bigserial)	FK
Name	varchar(150)	NOT NULL
Release date	date	NOT NULL

Track:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
AlbumID	(bigserial)	FK
Name	varchar(150)	NOT NULL
Timing	time	NOT NULL
Likes	bigint	NOT NULL >=0
Streaming	bigint	NOT NULL >=0
GenreID	(smallserial)	FK

Genre:

Name:	Type:	Restrictions(PK, FK)
Id	smallserial	PK
Name	varchar(150)	NOT NULL UNIQUE

Playlist:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
Name	varchar(150)	NOT NULL UNIQUE
Tracks	ARRAY	

Subscription:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
Title	varchar(150)	NOT NULL UNIQUE
Cost	money	NOT NULL >=0

Logging:

Name:	Type:	Restrictions(PK, FK)
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Id	bigserial	PK
UserID	(bigserial)	FK
Message	varchar(500)	NOT NULL