

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
 - III. CRUD Playlist
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)
AbstractUserID	(bigserial)	PK FK
CountryID	(smallserial)	FK
Website	varchar(256)	NOT NULL UNIQUE
Tour_dates	smallint	Default 0

User:

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

SubscriptionID	(smallserial)	FK
-----------------------	---------------	----

Label:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
Name	varchar(150)	NOT NULL UNIQUE
Website	varchar(256)	-
Foundation_year	smallint	NOT NULL >=0 and <= date_part('year', CURRENT_DATE) + 1

Album:

Name:	Type:	Restrictions(PK, FK)
Id	bigserial	PK
Name	varchar(150)	NOT NULL
Release date	smallint	NOT NULL >=0 and <= date_part('year', CURRENT_DATE) + 1

Track:

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

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

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)
Id	bigserial	PK
AbstractUserID	(bigserial)	FK
Message	varchar(500)	NOT NULL

Instruments:

Name:	Type:	Restrictions(PK, FK)
Id	smallserial	PK
Title	varchar(50)	NOT NULL UNIQUE

Country:

Name:	Type:	Restrictions(PK, FK)
Id	smallserial	PK
Title	varchar(56)	NOT NULL UNIQUE
ISO	varchar(2)	NOT NULL UNIQUE