Database Project

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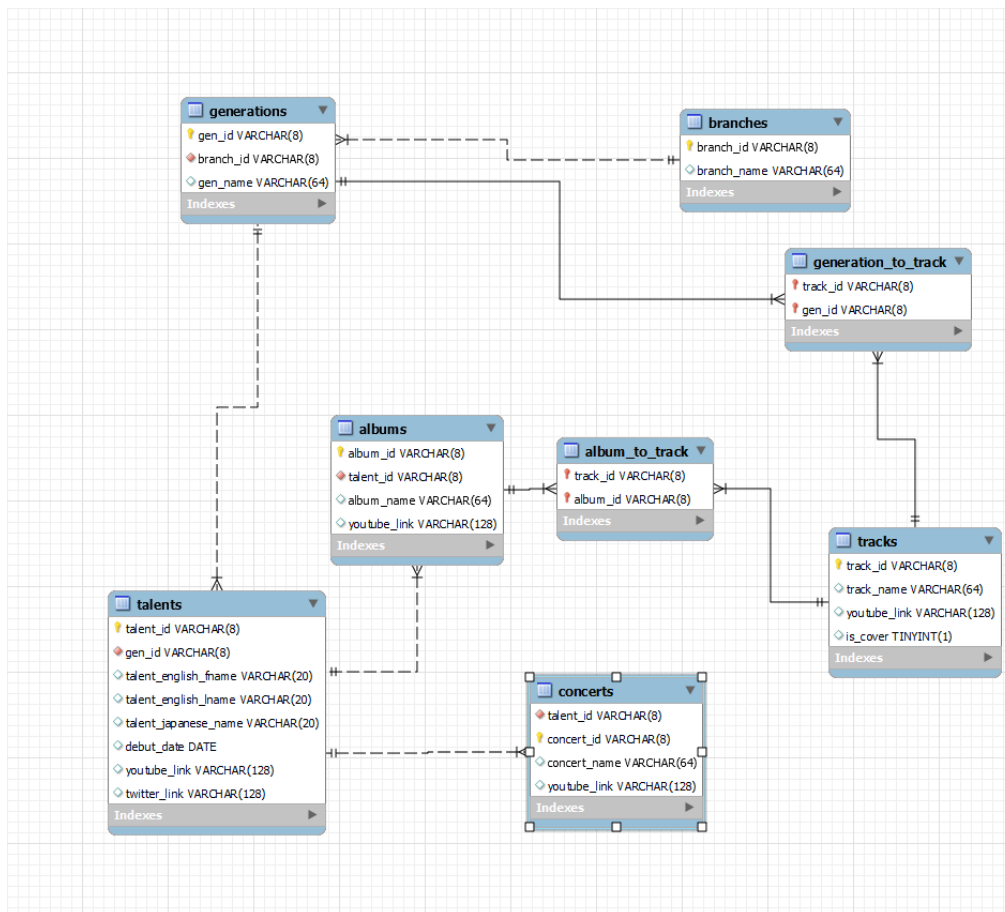
Faculty no. —---------

1. Introduction

The idea of this project is to create database for a talent agency. It should include branches of agency, generations of talents, talents themselves, their albums and their songs.

2. Database structure

EER Diagram view

3. Creation of database

Following SQL query was used to create database:

```sql
drop database if exists holobase;
create database holobase;
use holobase;

create table branches (
    branch_id VARCHAR(8) NOT NULL,
    branch_name VARCHAR(64),

    primary key (branch_id)
);

create table generations (
    gen_id VARCHAR(8) NOT NULL,
    branch_id VARCHAR (8) NOT NULL,
    gen_name VARCHAR(64),

    primary key (gen_id),
    foreign key (branch_id) references branches(branch_id)
on delete restrict on update cascade
);

create table talents (
    talent_id VARCHAR(8) NOT NULL,
    gen_id VARCHAR(8) NOT NULL,
    talent_english_fname VARCHAR(20),
    talent_english_lname VARCHAR(20),
    talent_japanese_name VARCHAR(20),
    debut_date DATE,
    youtube_link VARCHAR(128),
```

```sql
    twitter_link VARCHAR(128),

    primary key (talent_id),
    foreign key (gen_id) references generations(gen_id) on
delete restrict on update cascade
);

create table albums (
    album_id VARCHAR(8) NOT NULL,
    talent_id VARCHAR(8) NOT NULL,
    album_name VARCHAR(64),
    youtube_link VARCHAR(128),

    primary key (album_id),
    foreign key (talent_id) references talents(talent_id) on
delete restrict on update cascade
);

create table tracks (
    track_id VARCHAR(8) NOT NULL,
    track_name VARCHAR(64),
    youtube_link VARCHAR(128),
    is_cover BOOLEAN,

    primary key (track_id)
);

create table concerts (
    talent_id VARCHAR(8) NOT NULL,
    concert_id VARCHAR(8) NOT NULL,
    concert_name VARCHAR(64),
    youtube_link VARCHAR(128),
```

```sql
    primary key (concert_id),
    foreign key (talent_id) references talents(talent_id) on
delete restrict on update cascade
);

create table generation_to_track (
    track_id VARCHAR(8) NOT NULL,
    gen_id VARCHAR(8) NOT NULL,

    primary key (track_id, gen_id),
    foreign key (track_id) references tracks(track_id) on
delete restrict on update cascade,
    foreign key (gen_id) references generations(gen_id) on
delete restrict on update cascade
);

create table album_to_track (
    track_id VARCHAR(8) NOT NULL,
    album_id VARCHAR(8) NOT NULL,

    primary key (track_id, album_id),
    foreign key (track_id) references tracks(track_id) on
delete restrict on update cascade,
    foreign key (album_id) references albums(album_id) on
delete restrict on update cascade
);
```

4. Populating database

Since there`s no centralized resource with agencies data,
the population of database was done by hand using open
source resources. Whole SQL script with data can be

found on in database-data.sql file.

5. Queries

1. Get generation song for group "ReGLOSS":
   select tracks.track_name
   from generations, generation_to_track, tracks
   where generations.gen_id = generation_to_track.gen_id and generation_to_track.track_id = tracks.track_id and generations.gen_name = "ReGLOSS";

track_name ▲
▶ 瞬間ハートビート

2. Get a debut date of all talents in the holoMyth group:
   select talents.talent_english_fname, talents.talent_english_lname, talents.debut_date
   from talents, generations
   where talents.gen_id = generations.gen_id and generations.gen_name = "holoMyth";

	talent_english_fname	talent_english_lname	debut_date
▶	Kiara	Takanashi	2020-09-12
	Amelia	Watson	2020-09-13

3. Get all track names of all songs in "Specter" album:
   select albums.album_name, tracks.track_name
   from albums, album_to_track, tracks
   where albums.album_id = album_to_track.album_id and album_to_track.track_id = tracks.track_id and albums.album_name = "Specter";

	album_name	track_name
▶	Specter	7days
	Specter	デビュタントボール

4. Get all talent names in "HololiveJP" branch:

```
   select talents.talent_english_fname,
talents.talent_english_lname,
talents.talent_japanese_name
   from branches, generations, talents
   where branches.branch_id = generations.branch_id and
generations.gen_id = talents.gen_id and
branches.branch_name = "HololiveJP";
```

talent_english_fname	talent_english_lname	talent_japanese_name
Suisei	Hoshimachi	星街すいせい
AZKi	NULL	NULL
Sora	Tokino	ときのそら
Botan	Shishiro	獅白ぼたん
Polka	Omaru	尾丸ポルカ

5.Get all concerts of talents in "HololiveJP" branch:

```
   select branches.branch_name,
talents.talent_english_fname,
talents.talent_english_lname, concerts.concert_name
   from branches, generations, talents, concerts
   where branches.branch_id = generations.branch_id and
generations.gen_id = talents.gen_id and concerts.talent_id
= talents.talent_id and branches.branch_name =
"HololiveJP";
```

branch_name	talent_english_fname	talent_english_lname	concert_name
HololiveJP	Suisei	Hoshimachi	SheenderelaDay
HololiveJP	AZKi	NULL	ゲスト:ときのそら / 星街すいせい
HololiveJP	Sora	Tokino	想いをこめて届ける3D配信
HololiveJP	Botan	Shishiro	ミッションをクリアせよ
HololiveJP	Polka	Omaru	ポルカおるよ

6. Closing thoughts

By doing this project, I found out on practice how to design, create and use databases. Creating database schema and searching information in web to fill in DB honed my SQL and data search skills. Furthermore, topic I chose is interesting to me, so I enjoyed not only writing

database itself but also looking for information for project and had great motivation to finish it.