[Abdelmonem Mohamed Abdelmonem]
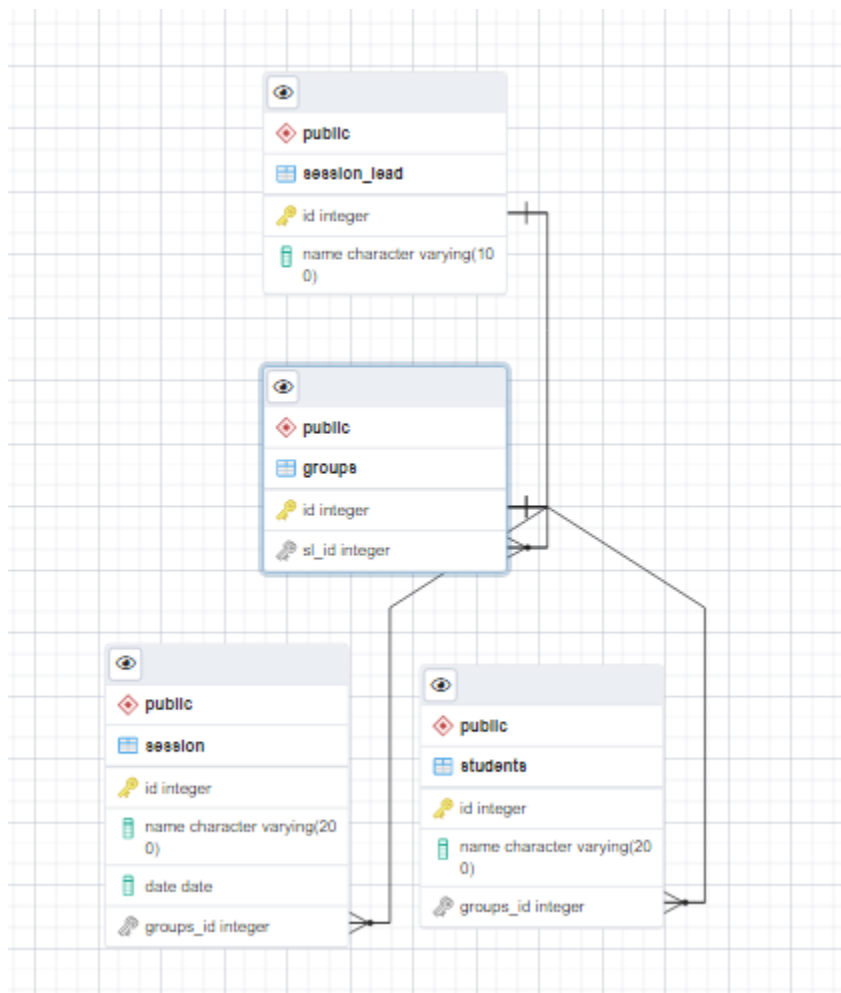

[Beshoy Ayad Abdelmalak]

I thought about the simplest way to create a Database for this project

Created 4 tables

Session_lead - groups – Students – session

- **Database diagram**

· CREATE DATABASE Udacity_HUB;

- npx db-migrate create Session_lead --file-sql

    - CREATE TABLE Session_lead (id SERIAL PRIMARY KEY, name VARCHAR(100));

- npx db-migrate create groups --file-sql

    - CREATE TABLE groups (id SERIAL PRIMARY KEY, SL_ID INT references session_lead(id));

- npx db-migrate create Students --file-sql

    - CREATE TABLE Students (id SERIAL PRIMARY KEY, name VARCHAR(200), groups_ID INT references Groups(id));

- npx db-migrate create session --file-sql

    - CREATE TABLE session (id SERIAL PRIMARY KEY, name VARCHAR(200),date DATE, groups_ID INT references Groups(id));

- Npx db-migrate up

Adding some data for test

insert into session_lead (name) Values (Hossam ');

insert into session_lead (name) Values ('Elzanaty');

insert into groups (SL_ID) Values (1);

insert into groups (SL_ID) Values (1);

insert into groups (SL_ID) Values (2);

insert into students (name, groups_id) VALUES ('ST_1', 1);

insert into students (name, groups_id) VALUES ('ST_2', 1);

insert into students (name, groups_id) VALUES ('ST_3', 1);

insert into students (name, groups_id) VALUES ('ST_4', 1);

insert into students (name, groups_id) VALUES ('ST_5', 1);

insert into students (name, groups_id) VALUES ('ST_6', 2);

insert into students (name, groups_id) VALUES ('ST_7', 2);

insert into students (name, groups_id) VALUES ('ST_8', 2);

insert into students (name, groups_id) VALUES ('ST_9', 2);

insert into students (name, groups_id) VALUES ('ST_10', 2);

insert into students (name, groups_id) VALUES ('ST_11', 2);

insert into students (name, groups_id) VALUES ('ST_12', 2);

insert into students (name, groups_id) VALUES ('ST_13', 3);

insert into students (name, groups_id) VALUES ('ST_14', 3);

insert into students (name, groups_id) VALUES ('ST_15', 3);

insert into session (name, date, groups_id) Values ('session1', '7/21/2022', 1);

insert into session (name, date, groups_id) Values ('session2', '7/22/2022', 2);

insert into session (name, date, groups_id) Values ('session3', '7/22/2022', 3);

insert into session (name, date, groups_id) Values ('session4', '7/22/2022', 3);

To select Data use this command:

select session.name as "Session", session.date, session_lead.name as "Session-Lead", students.name as "Student" from session inner join Groups on session.Groups_id= groups.ID inner join students on Groups.ID = students.Groups_ID inner join session_lead on Groups.SL_ID = session_lead.ID

result;

Session | date | Session-Lead | Student

----------+------------+--------------+---------

 session1 | 2022-07-21 | Hossam | ST_5

 session1 | 2022-07-21 | Hossam | ST_4

```
session1 | 2022-07-21 | Hossam    | ST_3
session1 | 2022-07-21 | Hossam    | ST_2
session1 | 2022-07-21 | Hossam    | ST_1
session2 | 2022-07-22 | Hossam    | ST_12
session2 | 2022-07-22 | Hossam    | ST_11
session2 | 2022-07-22 | Hossam    | ST_10
session2 | 2022-07-22 | Hossam    | ST_9
session2 | 2022-07-22 | Hossam    | ST_8
session2 | 2022-07-22 | Hossam    | ST_7
session2 | 2022-07-22 | Hossam    | ST_6
session4 | 2022-07-22 | Elzanaty  | ST_15
session3 | 2022-07-22 | Elzanaty  | ST_15
session4 | 2022-07-22 | Elzanaty  | ST_14
session3 | 2022-07-22 | Elzanaty  | ST_14
session4 | 2022-07-22 | Elzanaty  | ST_13
session3 | 2022-07-22 | Elzanaty  | ST_13
(18 rows)
```

[Ahmed Heaba]