# **Vampire Unicorns - Week 5**

## **Theoretical**

**Explain your choices for the Udacity Hub Architecture regarding:** 

- 1. The tables and the fields that are needed to achieve the required functionality
- 2. The relationships between the tables

### [Youssef Ashraf Sabry]

Udacity Hub is an online educational platform that hosts online sessions connecting instructors to students. In Udacity Hub, we have three entities; Session leads, students, and sessions. We will need a separate table for each entity to store related data.

#### **Session Leads Table**

In the session leads table, we will store all data related to the session leads, including their emails, passwords, and names.

#### **Students Table**

We will store students' emails, passwords, names, and enrollment dates.

#### **Sessions Table**

We will need to store sessions' dates, session leader, and students, but since each session will have different students, it is not viable to include them here, so we will have to create a new table to break the many-to-many relationship.

#### **Sessions-Students Table**

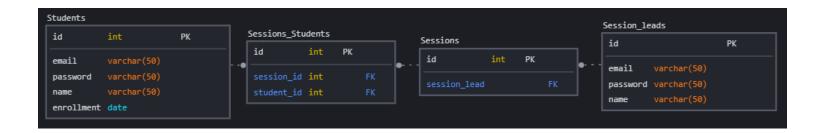
In this table, we will store the session ids and students' ids.

### **Tables Relationships**

Each session can only have one session leader, so the relationship between the sessions table and session leader will be a **One-to-one** relationship.

Each session can have many students. While each student can have many sessions thus, the relationship will be a **Many-to-many** relationship.

No direct relationship is needed between students and session leads, so there will be no relationship.



## **Practical**

- 1. Create a migration file with the required SQL statements for creating the tables.
- 2. Create the needed SQL statements for the CRUD operations

## [Youssef Ashraf Sabry]

Add contributions to the Practical folder inside the Youssef Ashraf Sabry folder.