# **Notes to keep track of everything related to database:**

Video Link & Notes on created Database + tables + Alteration made to tables

# **0. Install MySQL**

<https://www.youtube.com/watch?v=WuBcTJnIuzo>

Hostname: Whatever you want

Username: root (or whatever you want)

Password: SOEN341W18 (or whatever you want)

# **1. Code to create database using MYSQL Command Line Client**

SHOW DATABASES;

CREATE DATABASE SOEN341\_PROJECT;

# **1.1 Code to see tables inside database.**

SHOW DATABASES;

USE SOEN341\_PROJECT;

SELECT DATABASE();

SHOW TABLES;

DESCRIBE [table];

# **2. Code of first version of created Tables**

CREATE TABLE User(

first\_name VARCHAR(30) NOT NULL,

last\_name VARCHAR(30) NOT NULL,

username VARCHAR(30) NULL,

email VARCHAR(60) NOT NULL,

password VARCHAR(60) NOT NULL,

Country VARCHAR(40) NULL,

birth\_date DATE NULL,

sex ENUM('M', 'F', 'O') NULL,

date\_entered DATE,

user\_id INT UNSIGNED NOT NULL AUTO\_INCREMENT PRIMARY KEY

);

CREATE TABLE Question(

question\_title VARCHAR(100) NOT NULL,

question\_body VARCHAR(1000) NOT NULL,

user\_id INT UNSIGNED NOT NULL, -- WHERE user\_id = user who asked the question

date\_asked DATE,

question\_id INT UNSIGNED NOT NULL AUTO\_INCREMENT PRIMARY KEY

);

CREATE TABLE Answer(

answer\_body VARCHAR(1000) NOT NULL,

user\_id INT UNSIGNED NOT NULL, -- WHERE user\_id = user who gave answered to question

question\_id INT UNSIGNED NOT NULL,

date\_answered DATE,

answer\_id INT UNSIGNED NOT NULL AUTO\_INCREMENT PRIMARY KEY

);

CREATE TABLE Score\_Answer(

Score Enum('-1', '1') NULL,

user\_id INT UNSIGNED NOT NULL, -- WHERE user\_id = user who rated (scored) the answered

answer\_id INT UNSIGNED NOT NULL, -- WHERE answer\_id = answer that was rated by user

date\_scored\_answer DATE,

PRIMARY KEY(user\_id, answer\_id) /\*

We combined the event and user id to make sure we don't have

duplicate scores and it makes it easier to change scores

Since neither the answer ids or the student ids are unique on their

own we are able to make them unique by combining them \*/

); -- This would prevent users to vote more than once on same answer

CREATE TABLE Score\_Question(

Score Enum('-1', '1') NULL,

user\_id INT UNSIGNED NOT NULL, -- WHERE user\_id = user who rated (scored) the question

question\_id INT UNSIGNED NOT NULL, -- WHERE question\_id = question that was rated by user

date\_scored\_question DATE,

PRIMARY KEY(user\_id, question\_id)

);

# **3. Alterations done to Tables.**

# **3.1. (January)**

ALTER TABLE user CHANGE date\_entered date\_entered DATE NOT NULL;

ALTER TABLE user CHANGE COLUMN user\_id user\_id INT UNSIGNED NOT NULL, DROP PRIMARY KEY;

ALTER TABLE user ADD PRIMARY KEY(user\_id, email);

Alter Table user CHANGE user\_id user\_id INT UNSIGNED NOT NULL AUTO\_INCREMENT;

ALTER TABLE user CHANGE COLUMN sex gender ENUM('M', 'F', 'O') NULL;

ALTER TABLE user CHANGE COLUMN Country country VARCHAR(40) NULL;

ALTER TABLE question ADD CONSTRAINT user\_id FOREIGN KEY (user\_id) REFERENCES user(user\_id) ON DELETE RESTRICT; -- (or set null. Note: You restrict the deletion of the user\_id from user table, until it is deleted from the question table).

ALTER TABLE question CHANGE date\_asked date\_asked DATE NOT NULL;

ALTER TABLE answer ADD CONSTRAINT question\_id FOREIGN KEY (question\_id) REFERENCES question(question\_id) ON DELETE RESTRICT; -- (or set null. Note: you restrict the deletion of the question\_id until it is deleted from answer table. Note2: I think you also indirectly restrict the deletion of user\_id from the user table.)

ALTER TABLE answer CHANGE date\_answered date\_answered DATE NOT NULL;

ALTER TABLE score\_answer CHANGE Score score Enum('-1', '1') NOT NULL;

ALTER TABLE score\_answer CHANGE date\_scored\_answer date\_scored\_answer DATE NOT NULL;

ALTER TABLE score\_question CHANGE Score score Enum('-1', '1') NOT NULL;

ALTER TABLE score\_question CHANGE date\_scored\_question date\_scored\_question DATE NOT NULL;

**3.2. (2018-02-06)**

ALTER TABLE user CHANGE date\_entered datetime\_entered DATETIME NOT NULL;

ALTER TABLE user CHANGE username username VARCHAR(30) NOT NULL;

ALTER TABLE user CHANGE gender gender ENUM('M', 'F', 'O') NOT NULL;

ALTER TABLE question CHANGE date\_asked datetime\_asked DATETIME NOT NULL;

ALTER TABLE answer CHANGE date\_answered datetime\_answered DATETIME NOT NULL;

ALTER TABLE score\_question CHANGE date\_scored\_question datetime\_scored\_question DATETIME NOT NULL;

ALTER TABLE score\_answer CHANGE date\_scored\_answer datetime\_scored\_answer DATETIME NOT NULL;

# **3. How to export / import database.**

https://dev.mysql.com/doc/workbench/en/wb-admin-export-import-management.html