

Lab 02

Objectives:

The purpose of this lab is to familiarize you with tables, columns, relationships, and constraints as provided to you within the sample database. By the end of this lab you should be able to:

- Produce a relationship diagram of an existing database
- Visualize the sample database provided to you and display the relationships between the tables
- Be familiar with the sample database that we will be using for the remainder of the term

Preface:

During this lab, you will need to create a relationship diagram. There are many free tools available to you for this task. One example would be <http://draw.io>.

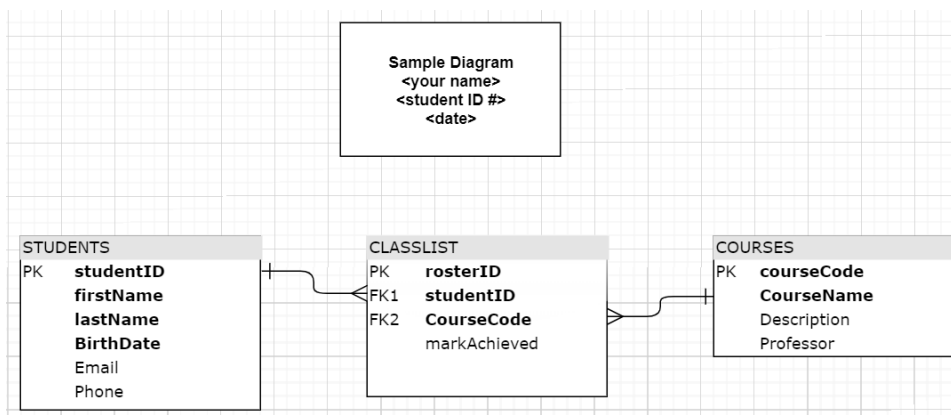
Explore the Database

By navigating through SQL Developer and looking at the Columns, Data and Constraints tabs for each table, you will create a relationship diagram for all the tables in the database.

Your diagram must include:

- The names of the entities (tables)
- The attributes (columns) for each table
- Lines representing the relationships between tables, try to get the lines to as closely point to the correct fields as possible (not always possible to be exact, but do your best here). Do not overlap or cross the lines.
- Crows Foot Symbols on the lines representing the type of relationship (1-1, 1-many)
- Required fields should be **bolded**
- Primary Key fields should be underlined **or** indicated with a PK beside it.
- Child fields in the relationships should be indicated with an FK beside it.

Example:



LAB 02 – SUBMISSION

You will be submitting Word document with the screenshots of a completed database relationship diagram of the following 5 questions.

In the Word document header have your Name, Student ID number, section. This can be achieved by creating a simple box in the diagram before saving it.

QUESTION 1

Draw the Entity Relationship diagram of the following tables Employees and Offices

QUESTION 2

Draw the Entity Relationship diagram of the following tables Orders, Orderdetails and Products

QUESTION 3

Draw the Entity Relationship diagram of the following tables Customer, Employees, Payments and Orders

QUESTION 4

Draw the Entity Relationship diagram of a social media platform like Facebook for the following tables Users and Posts (make up the field names (atleast 5), make it bold which are required, find which fields can be PK and FK between the tables and name them)

QUESTION 5

Draw the Entity Relationship diagram of a social media platform like Microsoft Teams for the following tables Users and Teams (make up the field names (atleast 5), make it bold which are required, find which fields can be PK and FK between the tables and name them)