

Welcome XD



Lab 1
(Installation & Walk through)

Lab Agenda

- Notes
- Installation
- Explore MySQL Server Workbench
- ERD Example
- Apply on Sql & Intro to constraints
 - DDLs
 - DMLs
- Explore Schema

Notes

- Lab Time
- Contact
- What I am expecting to do & what you are expecting from me & this course
- Project
- Attendance
- Inquiries...?

Installation

We need to install Mysql Server & Workbench

Links:

- **Windows**
- **Ubuntu**
- **Mac**

ENJOY XD!

Explore MySQL Workbench

The screenshot displays the MySQL Workbench application window. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The main interface is divided into several panes:

- Navigator:** Located on the left, it shows a tree view of the database schema. Under the 'sakila' database, various tables like 'actor', 'address', 'category', etc., are listed. The 'Schemas' tab is active.
- Query Editor:** The central pane shows a query titled 'Query 1' with the text 'show databases;'. A toolbar above the query editor includes icons for saving, running, and other query-related actions. A 'Limit to 1000 rows' dropdown is also visible.
- Results:** Below the query editor, the 'Result Grid' is displayed, showing a list of databases: 'Database', 'information_schema', 'mysql', 'performance_schema', 'sakila' (selected), 'sys', and 'world'.
- SQLAdditions:** A panel on the right side of the Query Editor, currently showing a message: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'
- Output:** At the bottom, the 'Output' panel shows the execution results of the query. It includes a table with columns '#', 'Time', and 'Action', and a summary row indicating '6 row(s) returned'.

The bottom status bar shows 'Object Info' and 'Session' tabs.

#	Time	Action
1	12:16:14	show databases

Message	Duration / Fetch
6 row(s) returned	0.000 sec / 0.000 sec

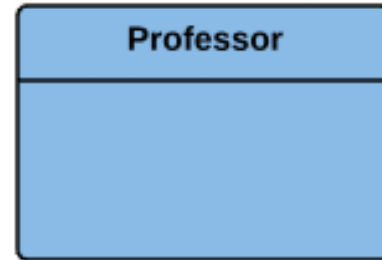
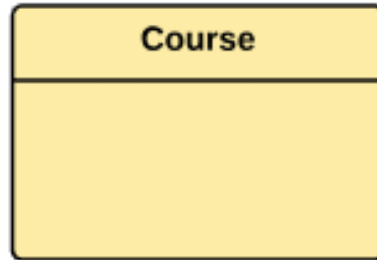
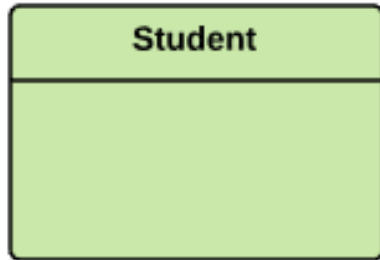
ERD Example

In a university, a Student enrolls in Courses. A student must be assigned to at least one or more Courses. Each course is taught by a single Professor. To maintain instruction quality, a Professor can deliver only one course

- Design the ERD ModelXD

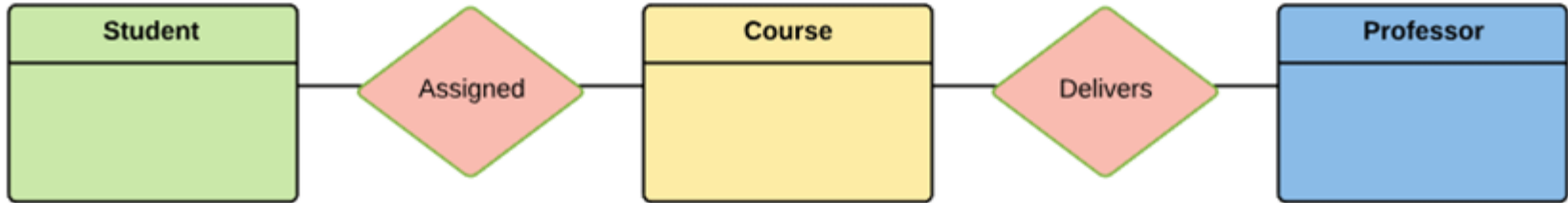
We have three entities

- Student
- Course
- Professor

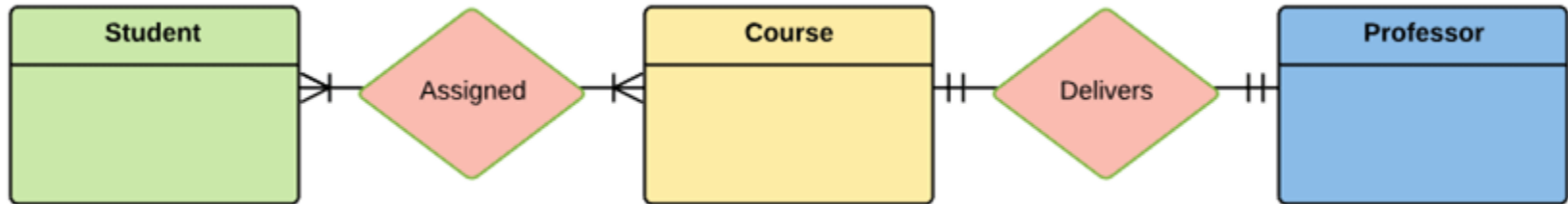


We have the following two relationships

- The student is assigned a course
- Professor delivers a course

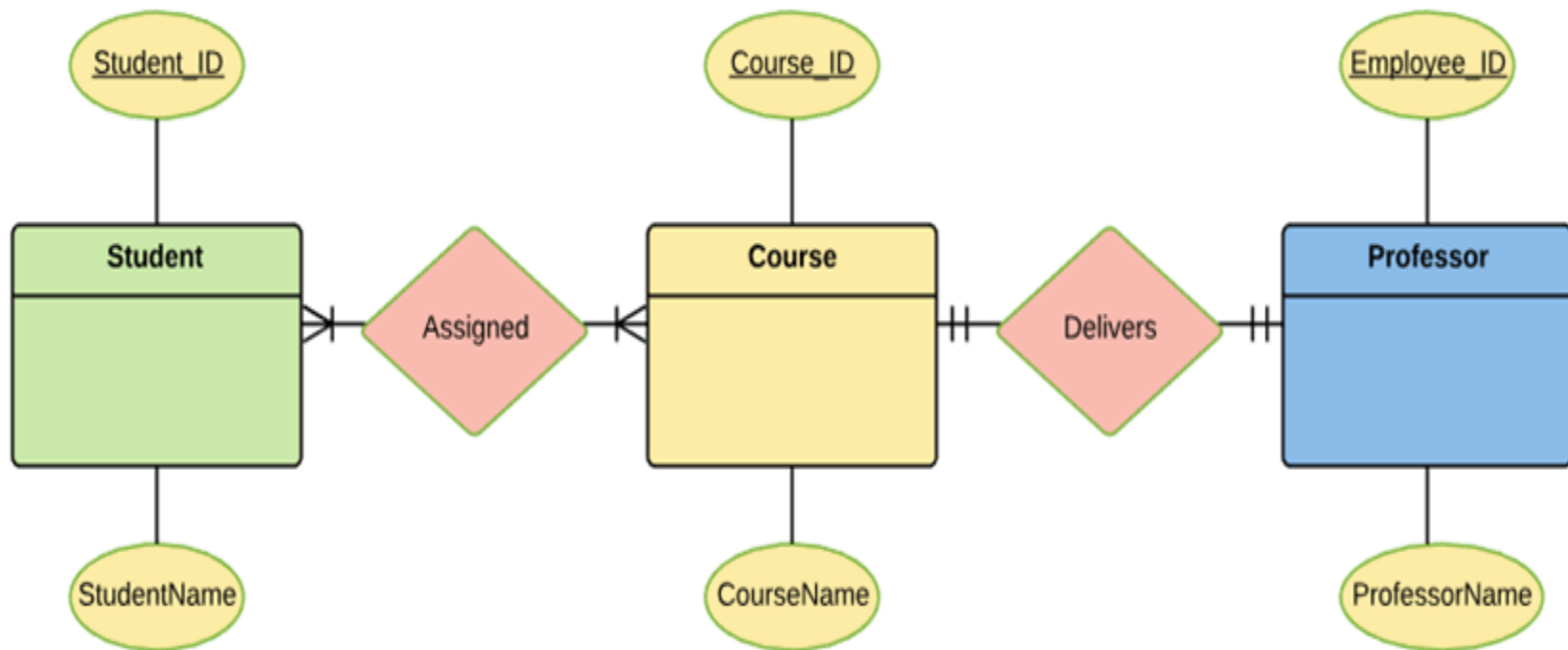


- A student can be assigned multiple courses
- A Course can be taught by only one professor
- A Professor can deliver only one course



- Study the files, forms, reports, data currently maintained by the organization to identify attributes.
- Once, you have a list of Attributes, you need to map them to the identified entities. Once the mapping is done, identify the primary Keys. If a unique key is not readily available, create one.

Entity	Primary Key	Attribute
Student	Student_ID	StudentName
Professor	Employee_ID	ProfessorName
Course	Course_ID	CourseName



Apply On SQL & Intro to constraints



Lab1.sql

Test Yourself

https://www.w3schools.com/sql/trysql.asp?filename=trysql_editor

Explore Schema

Let's play around with MySql Workbench XD..

Export and Import our Schema

➤ EXPORT

- Server > Data Export
- Expo Schema > 'classes' > Dump Structure and Data
- Export Options > Export to Self-Contained File > Start Export

➤ IMPORT

- Create new schema 'classes2' & set default
- Import sql file
- Execute