Lab 1

CS460 Fall 2021
Agenda

➔ Lab outline

➔ Project 1 Introduction
Lab Outline

- Primary focus will be discussion related to projects!
- We will also try to solve the issues you are facing.
- 2 Projects
- SQL Hands-on
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Project 1 Introduction
Project 1

- You’ll work on designing a movie database
- We will specify the details and you will design accordingly!
- There should be a UI that connects to the database
- This web application should be able to create new entries, list movies, search movies (based on different criteria) and calculate some statistics.
Project 1 Steps

1. Create/Design an ER Diagram
2. Create Table Schema
3. Create DB Tables and insert some data
4. Create an UI that connects to the DB
5. Run simple queries from the UI (e.g., list all movies, list movies directed/acted by X)
6. Add more functionalities to run some complex queries.
ER Modeling & Schema Design

- **Entity Relationship** Model (ER Modeling) is a graphical approach to database design.
- Depends on application requirements
- Good ER modeling eliminates redundant data, maintains data integrity, and provides an efficient way to access data.

More about this in next class...
Project 1 Infrastructure Setup
Download XAMPP from this link: https://www.apachefriends.org/download.html

On mac, use safari to download

Use the installer and follow instructions

After installing open the application

Move .app file to “Applications” panel

Double click “XAMPP.app” to open the application

Alternatively: you may have to search (using Cmd + space) for control panel if the shortcut is not on the applications panel
Click on the “Manage Servers” tab in the XAMPP control panel

Start the Apache Web server and the MySQL Database

In a web browser, go to the following url: localhost:port_number. In my case, I would go to localhost:80

If the apache webserver does not start, you may have one from another application running. Stop this service. On mac, go to terminal: “sudo apachectl stop”
phpMyAdmin

- Click on phpMyAdmin option on the top right corner of the webpage