

Carnegie
Mellon
University

Intro to Database
Systems (15-445/645)

Lecture #00

Course Overview & Logistics

FALL 2023 » Prof. Andy Pavlo • Prof. Jignesh Patel



#1 - KB + BD

#2 - DBs



SingleStore

TODAY'S AGENDA

Waitlist

Lecture Rules

Course Logistics

WAIT LIST

We do not control the wait list.

We do not take bribes (anymore).

Admins will move students moved off the wait list as new spots become available.

If you are not currently enrolled, the likelihood that you will get in is unfortunately very low.

15-445/645 will be offered in Spring 2024!

LECTURE RULES

Do interrupt us for the following reasons:

- We are speaking too fast.
- You don't understand what we are talking about.
- You have a database-related question.

Do **not** interrupt us for the following reasons:

- Whether you can use the bathroom.
- Questions about blockchains.

We will **not** answer questions about the lecture immediately after class.

COURSE OVERVIEW

This course is about the design/implementation of database management systems (DBMSs).

This is **not** a course about how to use a DBMS to build applications or how to administer a DBMS.
→ See [CMU 95-703](#) (Heinz College)

COURSE LOGISTICS

Course Policies + Schedule: [Course Web Page](#)

Discussion + Announcements: [Piazza](#)

Homeworks + Projects: [Gradescope](#)

Final Grades: [Canvas](#)

Non-CMU students can complete all assignments using [Gradescope](#) (Code: **KK5DVJ**).

→ Do **not** post your solutions on Github.

→ Do **not** email instructors / TAs for help.

→ Discord Channel: <https://discord.gg/YF7dMCg>

→ Somebody needs to finish Andy's [Wikipedia article](#).

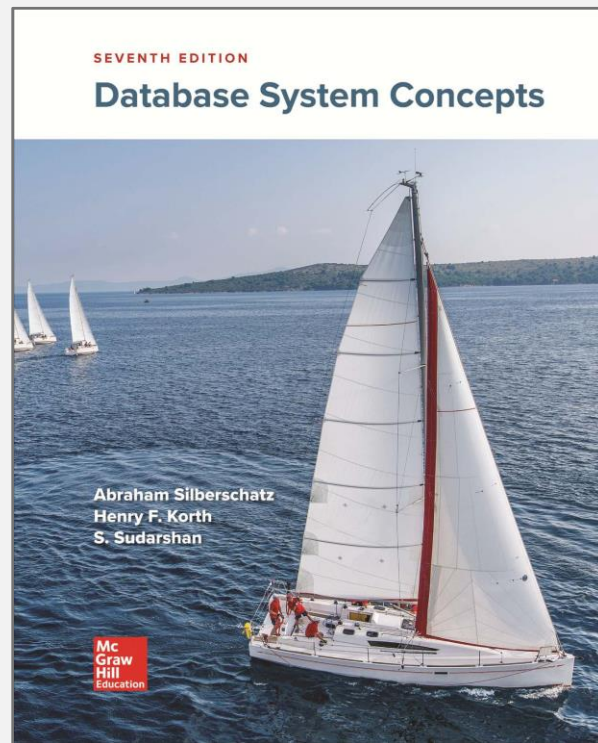
TEXTBOOK

Database System Concepts

7th Edition

Silberschatz, Korth, & Sudarshan

We also provide lecture notes that cover topics not found in textbook.



GRADING RUBRIC

Homeworks (15%)

Projects (45%)

Midterm Exam (20%)

Final Exam (20%)

HOMWORKS

Five homework assignments that cover lecture and reading material.

→ First homework is a SQL assignment.

→ The rest will be pencil-and-paper assignments.

Submit all assignments via Gradescope.

All homework should be done individually.

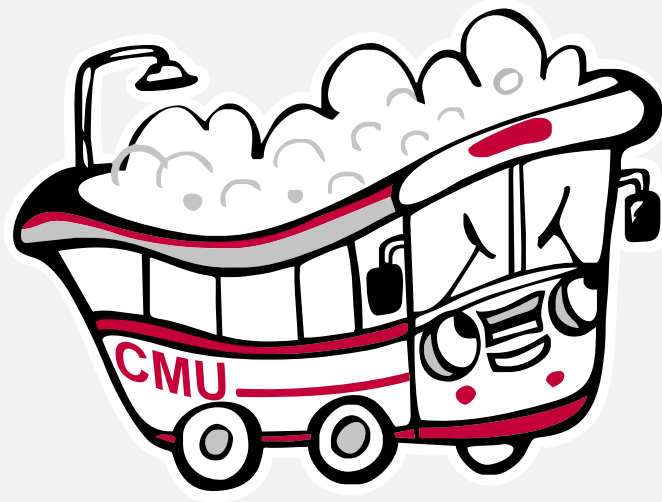
PROJECTS

All projects will use the CMU DB Group BusTub academic DBMS.

- Each project builds on the previous one.
- We will **not** teach you how to write/debug C++17.

Total of **four** late days the entire semester for projects only.

We will hold an online recitation for each project after it is released.



BusTub

PROJECT #0

To ensure that students have the programming skills to handle this course, we require everyone to complete Project #0 by **Sunday Sept 10th** .

- You must pass all tests with a perfect score.
- This is an ungraded assignment.

If you do not complete this assignment, you will be asked to withdraw from the course.

Zero exceptions will be made.

OFFICE HOURS

Instructors and TAs will hold office hours on weekdays (Mon-Fri) at different times.

We will also hold a TA power session on the Saturday before each project is due.

There will not be any office hours on Sundays.

CMU-Q Students: We will arrange a weekly Zoom office hour with a TA. Schedule office hours with instructors as needed.

PROJECT LATE POLICY

You will lose 10% of the points for a project or homework for every 24 hours it is late.

You have a total of **four** late days to be used for **projects only**.

We will grant no-penalty extensions due to extreme circumstances (e.g., medical emergencies).

→ If something comes up, please contact the instructors as soon as possible.



PLAGIARISM WARNING



The homework and projects must be your own original work. They are **not** group assignments. You may **not** copy source code from other people or the web.

Plagiarism is **not** tolerated. You will get lit up.
→ Please ask instructors (not TAs!) if you are unsure.

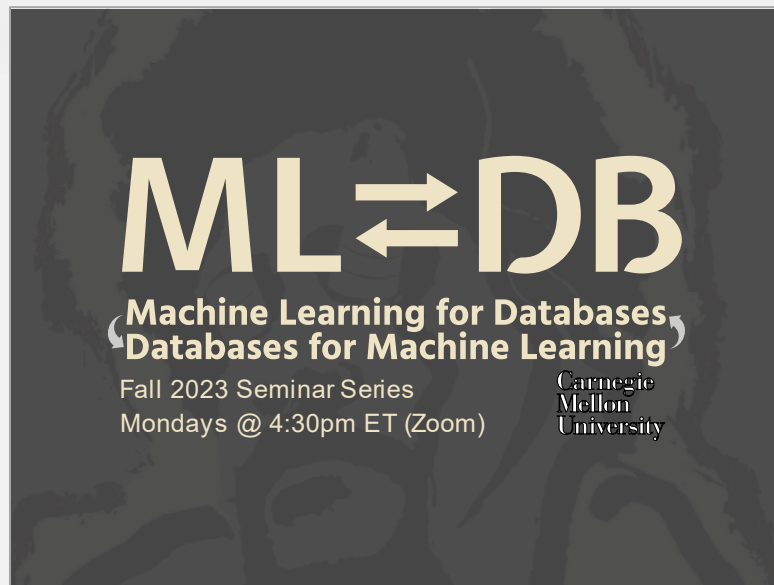
See [CMU's Policy on Academic Integrity](#) for additional information.

Machine Learning for Databases *Databases for Machine Learning*

Mondays @ 4:30pm (starting on 9/11)

Live on Zoom. Published to Youtube afterwards.

Open to the public.



<https://db.cs.cmu.edu/seminar2023>

NEXT CLASS

In-class lecture!

We will talk about the beautiful world of databases and the relational model.