Lesson 11: Database Integrity

CS 393: Database Systems

# Lesson Overview

|  |  |  |
| --- | --- | --- |
| **Topic** | **Timing** | **Key Ideas** |
| Review | ~5 minutes | Parameterized Queries, Stored procedures |
| ACID principles | ~15 minutes | What ACID means for databases and how it’s enforced. Discuss logging briefly. |
| Transactions | ~15 minutes | How to use COMMIT and ROLLBACK |
| In Class Exercise | Remaining | Demonstrate use of START TRANSACTION, COMMIT and ROLLBACK |

## Required Readings

* DS 22.1 – 22.2

## Supplementary Reading

* [MySQL :: MySQL 8.4 Reference Manual :: 17.2 InnoDB and the ACID Model](https://dev.mysql.com/doc/refman/8.4/en/mysql-acid.html)
* [ACID Properties in DBMS - GeeksforGeeks](https://www.geeksforgeeks.org/acid-properties-in-dbms/)

# Lesson Objectives & Assessment

* Discuss ACID principles
* Utilize transactions to ensure ACID principles in a database

# Lesson Plan

## Timeline

## Comments