

The background of the slide is a dark blue color with a complex, light blue circuit board pattern. The pattern consists of numerous thin, interconnected lines and small circular nodes, resembling a microchip or a network diagram. A thin white horizontal line is positioned above the 'CC1' text, and another thin white horizontal line is positioned below it.

CC1

Organization
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Introduction

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Exam condition

- Conditions of exam
 - How to build and maintain code (documentation, build, attention point)
 - Compiler flags (define which ones you need and tell me why you chose them) and which compiler's version
 - The architecture will be looked at – Do not do a single huge .c file, you'll lose a lot of points
 - What is to be done to build project
 - Commit are looked at – do not push at the end, work continuously

Goal

- Look at https://github.com/Mbahal/class_db for the skeleton code

Steps

- Do the makefile
- Start doing structures for table and rows (for rows you can define one struct and use it, and not use user input)
- Implement the select statement
- Implement the Insert statement

Steps 2

- Provide some tests (assert for now)
- Keep track on where you are in the DB should you need it
- Store everything in a binary tree and develop the major things you'll need (balancing/splitting/searching/inserting/deleting and other if you have ideas)
- Do some disk persistence

Bonus – Code audit and “quality”

- One of the best way to find bugs (whether security or not) is to use dynamic security tools thus
 - Look at valgrind/fuzzers (honggfuzz or AFL++) and sanitizers and integrate them in your code when testing and report on some bug they found and how you patched them. You can see electric fence as well even though I have mixed feelings on it.

General idea

- The most important things for me are
 - Working binary tree, and some sql commands (insert/delete/select)
 - Disk persistence is quite easy and should not be too hard

Due dates

- 3SI1 : 17/11 23h59
- 3SI2 : 17/11 23h59
- 3SI3 : See with admin (both projects will have the same due date)
- 3SI4 : See with admin (both projects will have the same due date)
- 3SI5 : 15/12 23h59