

# Overview

## 1. Warming up (10 min)

- Sign-in & Attendance.
- A few comments on code check.
- A few comments on HW4.

## 2. Main Session #1 (30 ~ 40 min)

- Demo of good practices: using struct to pack things up
- Union – shared memory space for different type interpretations
- Bit-fields – low level optimizing technique

C has become our old friend. 🍋

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From now on, we dive into the world of C++ ! 🎉 🎉

## 3. Main Session #2 (60 min)

- Introduction to **RAII** (Resource Acquisition Is Initialization)
- C and C++ as memory-unsafe languages
- Why RAII? How does RAII protect our programs?

## 5. Bonus Application (10 min)

- Maybe we will talk a little bit more about clang-format.

## Supplementary Materials

- [CppCoreGuidelines | Use RAII to prevent leaks](#)
- [Back to Basics: RAII in C++ - Andre Kostur - CppCon 2022 | Youtube](#)
- [the cleanest feature in C that you've probably never heard of | Youtube](#)