



# Advanced Programming

## COEN 11

Lab 3



# Lab3

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- Surf School Waiting List
  - Change lab 2 to use an array of structures
  - Due in week 3



# Lab3

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- Same functionality as Lab 2, but add one more command
  - The waiting list is created interactively with the following commands
    - 1, 2, 3
      - Same as in lab 2
    - 4 <size>
      - Show the entries in the list that have a size less than or equal to the entered <size>.
    - 0
      - Quits



# Lab3

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- Requirements

- Main: loop forever accepting commands, same
- Do not allow names to repeat
  - Add a function to check for repetitions
  - The function returns zero or one
- 5 functions
  - insert, delete, show, search\_size, check\_duplicate
- List mechanism, same
  - Your list should stay in the oldest-to-newest order
    - Always insert a new entry at the bottom
    - Always shift entries up after deleting one



# Lab3

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- New requirements
  - Global variables
    - array of structures
    - counter
  - Use a **struct pointer** to traverse the array in each function



# Lab 3

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- Grading
  - Pre-lab
    - Pseudocode of the `search_size` function – 10%
  - In the lab
    - Demo to the TA – 30%
    - Submit your code to Camino – 60%
    - Full grade:
      - On time
      - Code compiles and runs correctly
      - All requirements are fulfilled
      - Code has comments and uses indentation/alignment correctly