



Advanced Programming

COEN 11

Lab 5



Lab 5

- Surf School Waiting List
 - Using a linked list
 - Each node has a name and the number of people in the group



Lab 5

- Extend lab 3
 - Same options
 - 1, 2, 3, 4, 0 → same interface and functionality
 - Attention: do not work on lab 4. Go back to lab 3.



Lab 5

- Do not allow names to repeat
 - Check the list before inserting
- Keep your list in the oldest-to-newest order
 - Always insert a new entry at the end
 - Use a tail pointer pointing to the last node
- To delete
 - Keep traversing the list while there is space
 - Rearrange the list every time a node is removed
- To search and show
 - Traverse the list using the the pointers



Lab 5

- Requirements
 - 1 linked list
 - 2 global variables: **head** and **tail**
 - 6 functions:
 - main, insert, delete, show, search_size, check_duplicate



Lab 5

- To receive full credit
 - Pre-lab
 - Cases for insert and delete
 - Demo
 - Show the TA
 - insert 4 items
 - delete the one in the **middle**, the **first**, and the **last**
 - delete the nodes left, until it's empty
 - Delete a non-existing node
 - insert one more
 - quit
 - Submit to Camino