

Advanced Programming COEN 11

Lab 9

Lab 9

- ❑ **Extend your program for lab 8**
 - Include an auto-saving thread to save the info from the list to a binary file every 5 seconds.
- ❑ **Your thread is in a loop forever.**
 - It sleeps for 5 seconds
 - When it wakes up, it opens the file and traverses the list, writing the info to the file.
 - Then closes the files and sleeps again.

Lab 9

- ❑ **The list is shared**
 - Use a lock!
 - Lock whenever you change the list or save it to the auto-saved file.
- ❑ **Cancel the auto-saving thread before you save the list at the end.**
 - Use the lock to guarantee that you are not in the middle of saving the data to the temporary file when you cancel the thread.

Lab 9

- ❑ **File Requirements**
 - The name of the auto-saved file could be an argument to the program (argv[2]) or be constant (temp.bin).
 - The file should be binary. Use fwrite to write each node to the file.
 - Add an option to your program and create a new function to read the binary file (with fread into a temp node) and show the contents on the screen.
 - Don't forget the lock when reading the file!