

Husain Alshehhi

Scheduler was implemented using linked list. By adding a item, it appends it to the end of the list.

### **Scheduler::Scheduler**

Initializes the values, mainly the head of the linked list.

### **Scheduler::add**

Simply finds the end of the list and put the variable there.

### **Scheduler::yield**

Takes the first element in the linked list. Pops that element from the list and runs it.

### **Schedule::resume**

Similar to Scheduler::add

### **Scheduler::terminate**

Does nothing interesting beside calling Scheduler::yield

### **thread\_shutdown**

Moved from thread.C to Scheduler.C. It calls the function Scheduler::terminate

### **thread termination:**

Implemented by deleting the allocated memory and then terminate.

### **Issues with the implementation.**

One of the problems was maintaining whether or not the linked list is empty (it sounds easier that it actually is). Another one is the Scheduler does not control the thread from the beginning (one of the threads runs without permission from the Scheduler) which renders the class into a non-efficient Scheduler.