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Process Monitor

REVIEW

CODE REVIEW 16

HISTORY

▶ src/linux_parser.cpp 9

▶ src/system.cpp 2

▼ src/process.cpp 2

```
1 #include <unistd.h>
2 #include <cctype>
3 #include <sstream>
4 #include <string>
5 #include <vector>
6
7 #include "process.h"
8 #include "linux_parser.h"
9
10 using std::string;
11
12 // Constructor
13 Process::Process(int id) : id_(id) {}
14
15 // Return this process's ID
16 int Process::Pid() const {
17     return id_;
18 }
19
20 // Return this process's CPU utilization
21 float Process::CpuUtilization() const {
22     return LinuxParser::CpuUtilization(id_);
```

```
23 }
24
25 // Return the command that generated this process
26 string Process::Command() {
27     return LinuxParser::Command(id_);
```

SUGGESTION

Here you can make sure that you do not send command more than of 50 characters (or 40 characters - It is). You can append ... in the end if the command exceeds more than 40-50 characters and all.

```
28 }
29
30 // Return this process's memory utilization
31 string Process::Ram() {
32     return LinuxParser::Ram(id_);
33 }
34
35 // Return the user (name) that generated this process
36 string Process::User() {
37     return LinuxParser::User(id_);
38 }
39
40 // Return the age of this process (in seconds)
41 long int Process::UpTime() {
42     return LinuxParser::UpTime(id_);
43 }
44
45 // Overload the "less than" comparison operator for Process objects
46 bool Process::operator<(Process const& a) const {
47     return a.CpuUtilization() < this->CpuUtilization();
```

SUGGESTION

It is so nice to see that you have overloaded less than a comparison operator for process objects.

Similarly, you can do so for any operator using the correct logic and application

Note : Following Operators cannot be overloaded:

1. `.` (Member Access or Dot operator)
2. `?:` (Ternary or Conditional Operator)
3. `::` (Scope Resolution Operator)
4. `.*` (Pointer-to-member Operator)
5. `sizeof` (Object size Operator)
6. `typeid` (Object type Operator)

For greater than operator (You must be knowing this also)

Similarly, you can implement the `>` operator and then make use of it.

But before that, you should define this custom operator in `process.h`

```
48 }
49
```

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- ▶ src/format.cpp 1
- ▶ include/ncurses_display.h 1
- ▶ src/ncurses_display.cpp
- ▶ src/main.cpp
- ▶ include/system.h
- ▶ include/processor.h
- ▶ include/process.h
- ▶ include/linux_parser.h
- ▶ include/format.h
- ▶ README.md
- ▶ Makefile
- ▶ CMakeLists.txt

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