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1: // Copyright 2023 Thomas O'Connor
2: #include "LogParser.hpp"
3:
4: const string LogParser::generateRPT() const {
5:     // get all lines of reference text
6:     string line, outputString, startDate, endDate;
7:     unsigned int lineNum = 0;
8:     bool booting = 0;
9:     std::regex rgx1("\\(log\\.c\\.166\\) server started"),
10:    rgx2("oejs\\.AbstractConnector:Started SelectChannelConne
tor@0\\.0\\.0\\.0:9080");
11:     while (std::getline(_referenceLog, line)) {
12:         lineNum++;
13:         // if "server started" is found, boot began at current line
14:         if (std::regex_search(line, rgx1)) {
15:             // early termination of previous boot sequence. End and resta
rt log
16:             if (booting) {
17:                 outputString.append("**** Incomplete boot ****\n\n");
18:             }
19:             booting = true;
20:             outputString.append("=== Device boot ===\n");
21:             outputString.append(std::to_string(lineNum));
22:             outputString.append("(" + _path + "): ");
23:             startDate = line.substr(0, 19);
24:             outputString.append(startDate);
25:             outputString.append(" Boot Start\n");
26:             // boot process terminated at current line
27:         } else if (std::regex_search(line, rgx2)) {
28:             booting = false;
29:             outputString.append(std::to_string(lineNum));
30:             outputString.append("(" + _path + "): ");
31:             endDate = line.substr(0, 19);
32:             outputString.append(endDate);
33:             outputString.append(" Boot Completed\n");
34:             outputString.append("\tBoot Time: ");
35:             // calculate difference in time in ms
36:             // construct the times from the strings directly
37:             ptime t1(time_from_string(startDate)), t2(time_from_string(en
dDate));
38:             boost::posix_time::time_duration td = t2 - t1;
39:             outputString.append(std::to_string(td.total_milliseconds()) +
"ms\n\n");
40:         }
41:     }
42:     // outside of the loop: reached end of file
43:     if (booting) {
44:         outputString.append("**** Incomplete boot ****\n\n");
45:     }
46:     return outputString;
47: }
```