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1: // Copyright 2015 Zheondre Calcano
2: // PS7b
3: #include <boost/regex.hpp>
4: #include <boost/date_time.hpp>
5: #include <exception>
6: #include <stdexcept>
7: #include <sstream>
8: #include <fstream>
9: #include <iostream>
10: #include <string>
11: #include <vector>
12: #include "Services.hpp"
13:
14: using namespace std; //NOLINT
15: using namespace boost; //NOLINT
16:
17: void efname(string &name) { name += ".rpt"; }
18: void parse(string fn) {
19:     int linenum, completeboot, startS, i, SoftLoadfound, ngvalf, serf;
20:     vector< int > holdval;
21:     services s;
22:     holdval.push_back(0);
23:     holdval.push_back(0);
24:     holdval.push_back(0);
25:     string ufn, filename, lif, rs, rsa, temp, boottime, isnll;
26:     isnll = "";
27:     ufn = fn;
28:     efname(fn);
29:     std::fstream outfile;
30:     outfile.open(fn.c_str(), fstream::out);
31:     rs = ".*log.c.166.*";
32:     rsa = ".*oejs.AbstractConnector:Started SelectChannelConnector.*";
33:     string t = "(\\d{2}):(\\d{2}):(\\d{2})";
34:     string tmm = "(\\d{2}):(\\d{2}):(\\d{2})\\.\\.\\. (\\d{3})";
35:     string gd = "(\\d{4})-(\\d{2})-(\\d{2})";
36:     boottime = "Boot Time: ";
37:     std::ifstream infile(ufn.c_str());
38:     smatch sm, sn, so, sp;
39:     regex e = regex(rs);
40:     regex ea = regex(rsa);
41:     regex etime(t);
42:     regex f(tmm);
43:     regex getdate(gd);
44:     regex getdatea(gd);
45:     std::ostringstream ss;
46:     linenum = completeboot = startS = SoftLoadfound = 0;
47:     while (getline(infile, lif)) {
48:         linenum++;
49:         if (regex_match(lif, e)) {
50:             if (completeboot == 1) {
51:                 outfile << "**** Incomplete boot ****\n\n";
52:                 completeboot = 0;
53:                 outfile << "Services \n";
54:                 outfile << s.Sformat(ufn);
55:                 outfile << s.LFS();
56:                 outfile << "\n";
57:             }
58:             if (SoftLoadfound == 1) {
59:                 outfile << s.getL1();
60:                 outfile << s.getL2();
61:                 outfile << s.getL3();
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62:         outfile << s.getL4();
63:         outfile << s.getL5();
64:         s.makeLsNull();
65:     }
66:     outfile << "=== Device boot ===\n";
67:     regex_search(lif, sm, etime);
68:     regex_search(lif, so, getdate);
69:     holdval[0] = boost::lexical_cast<int>(sm[1]);
70:     holdval[1] = boost::lexical_cast<int>(sm[2]);
71:     holdval[2] = boost::lexical_cast<int>(sm[3]);
72:     ss.str("");
73:     ss << linenum;
74:     temp = ss.str();
75:     temp += "(" + ufn + "): ";
76:     temp += so[0] + " " + sm[0] + " Boot Start \n";
77:     outfile << temp;
78:     completeboot = 1;
79:     startS = 1;
80:     temp.clear();
81: }
82: if (startS == 1) {
83:     s.ServiceStart(lif, linenum);
84:     s.ServiceSuccess(lif, linenum);
85: }
86: if (s.SoftloadS(lif, linenum, ufn)) {
87:     SoftLoadfound = 1;
88: }
89: if (SoftLoadfound == 1) {
90:     s.findOV(lif);
91:     s.findNV(lif);
92:     SoftLoadfound = s.SoftloadEnd(lif, linenum, ufn);
93: }
94: if (regex_match(lif, ea)) {
95:     ss.str("");
96:     ss << linenum;
97:     temp = ss.str();
98:     temp += "(" + ufn + "): ";
99:     regex_search(lif, sn, f);
100:    regex_search(lif, sp, getdatea);
101:    boost::posix_time::time_duration ta(holdval[0], holdval[1], holdval[2]
);
102:    boost::posix_time::time_duration tb(boost::lexical_cast<int>(sn[1]),
103:                                       boost::lexical_cast<int>(sn[2]),
104:                                       boost::lexical_cast<int>(sn[3]));
105:    // tb += boost::posix_time::millisec(boost::lexical_cast<int>(sn[4]));
106:    tb = tb - ta;
107:    temp += sp[0] + " " + sn[1] + ":" + sn[2] + ":" + sn[3]
108:    + " " + "Boot Completed\n";
109:    outfile << temp;
110:    ss.str("");
111:    ss << tb.total_milliseconds();
112:    outfile << "\t" + boottime + ss.str() + "ms\n\n";
113:    completeboot = 0;
114:    startS = 0;
115:    temp.clear();
116:    outfile << "Services\n";
117:    outfile << s.Sformat(ufn);
118:    isnll = s.LFS();
119:    outfile << isnll;
120:    if (isnll != "") {
121:        outfile << "\n";
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122:     }
123:     s.setNegvalues();
124: }
125: }
126: outfile.close();
127: }
128: int main(int argc, char *argv[]) {
129:     string filename;
130:     filename = argv[1];
131:     if (filename.size() < 1)
132:         throw
133:             std::runtime_error("Null string for file name");
134:     parse(filename);
135:     return 0;
136: }
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10: #include <string>
11: #include <vector>
12: #include "Services.hpp"
13:
14: using namespace std; //NOLINT
15: using namespace boost; //NOLINT
16:
17: void services::makeLsNull() {
18:     l1 = l2 = l3 = l4 = l5 = "";
19: }
20: string services::getL1() {
21:     return l1;
22: }
23: string services::getL2() {
24:     return l2;
25: }
26: string services::getL3() {
27:     return l3;
28: }
29: string services::getL4() {
30:     return l4;
31: }
32: string services::getL5() {
33:     return l5;
34: }
35: regex services::getRS() { return rs; }
36: string services::AFail() { return allfs; }
37: string services::getsr(int x) {
38:     if (x < 0)
39:         throw std::invalid_argument("Value is less than 0");
40:     if (x > sofV)
41:         throw std::invalid_argument("Value is greater than vector size");
42:     return sname[x];
43: }
44: string services::getfSM() { return fSM ; }
45: string services::getSta() { return startservice; }
46: string services::getGS() { return GoodStart; }
47: string services::getCompleteLN(int x) { return CompleteLN[x]; }
48: string services::getStartLN(int x) { return StartLN[x]; }
49: string services::getElapsedT(int x) { return ElapsedT[x]; }
50: int services::sz() { return sofV; }
51: void services::setNegvalues() {
52:     for (int i = 0; i < sofV; i++) {
53:         StartLN[i] = "-1";
54:         CompleteLN[i] = "-1";
55:         ElapsedT[i] = "-1";
56:     }
57: }
58: void services::ServiceStart(string line, int linenum) {
59:     int i;
60:     std::ostringstream so;
61:     for (i = 0; i < sofV; i++) {
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62:     regex e(getSta() + getsr(i) + ".*");
63:     if (regex_match(line, e)) { // Start service found
64:         so.str("");
65:         so << linenum;
66:         StartLN[i] = so.str();
67:     }
68: }
69: }
70: void services::ServiceSuccess(string line, int linenum) {
71:     int i; smatch sm; std::ostringstream so;
72:     for (i = 0; i < sofV; i++) {
73:         regex e(getGS() + getsr(i) + ".*");
74:         if (regex_match(line, e)) { // Success service found
75:             regex dig(rs);
76:             if (regex_search(line, sm, dig)) {
77:                 so.str("");
78:                 so << linenum;
79:                 ElapsedT[i] = boost::lexical_cast<string>(sm[1]);
80:                 CompleteLN[i] = so.str();
81:             }
82:         }
83:     }
84: }
85: void services::findOV(string line) {
86:     smatch sm; std::ostringstream so; string ltp;
87:     regex e(".*intouch-application-base-.*");
88:     if (regex_match(line, e)) {
89:         regex rge(".*: removing.*");
90:         if (regex_match(line, rge)) {
91:             regex dig("(?=[0-9])(.*?)(?=\.\armv)");
92:             if (regex_search(line, sm, dig)) {
93:                 ltp = boost::lexical_cast<string>(sm[0]);
94:                 ltp.erase(0, 1);
95:                 l2 = "\tOriginal version ==> " + ltp + "\n";
96:             }
97:         }
98:     }
99: }
100: void services::findNV(string line) {
101:     smatch sm; std::ostringstream so; string ltp;
102:     regex e(".*intouch-application-base-.*");
103:     if (regex_match(line, e)) {
104:         regex rge(".*: Processing.*");
105:         if (regex_match(line, rge)) {
106:             regex dig("(?=[0-9])(.*?)(?=\.\armv)");
107:             if (regex_search(line, sm, dig)) {
108:                 ltp = boost::lexical_cast<string>(sm[0]);
109:                 ltp.erase(0, 1);
110:                 l3 = "\tNew version ==> "+ltp +"\n";
111:             }
112:         }
113:     }
114: }
115: bool services::SoftloadS(string line, int ln, string fn) {
116:     smatch sm; std::ostringstream so; string ltp;
117:     regex e(startSoftload);
118:     if (regex_match(line, e)) {
119:         regex rge("(\\s*\\w{3}\\s*[0-9]{1,2})");
120:         regex rgd("([0-9]{2}):([0-9]{2}):([0-9]{2})");
121:         if (regex_search(line, sm, rge)) {
122:             so.str("");
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123:         so << ln;
124:         ltp = "=== Softload ===\n";
125:         ltp += so.str() + "(" + fn + ") : " + boost::lexical_cast<string>(sm[0
]);
126:         ltp += " ";
127:     }
128:     if (regex_search(line, sm, rgd)) {
129:         ltp += boost::lexical_cast<string>(sm[0]) + " Softload Start\n";
130:         start[0] = boost::lexical_cast<int>(sm[1]);
131:         start[1] = boost::lexical_cast<int>(sm[2]);
132:         start[2] = boost::lexical_cast<int>(sm[3]);
133:         ll = ltp;
134:         return true;
135:     }
136: }
137: return false;
138: }
139: int services::SoftloadEnd(string line, int ln, string fn) {
140:     // if valid line drab date
141:     smatch sm; std::ostringstream so; string ltp;
142:     regex e(EndSoftload);
143:     if (regex_match(line, e)) {
144:         regex rge("(\\s*\\w{3}\\s*[0-9]{1,2})");
145:         regex rgd("([0-9]{2}):([0-9]{2}):([0-9]{2})");
146:         if (regex_search(line, sm, rge)) {
147:             so.str("");
148:             so << ln;
149:             ltp = so.str() + "(" + fn + ") : " + boost::lexical_cast<string>(sm[0
]);
150:             ltp += " ";
151:         }
152:         if (regex_search(line, sm, rgd)) {
153:             ltp += boost::lexical_cast<string>(sm[0]) + " Softload Completed\n";
154:             end[0] = boost::lexical_cast<int>(sm[1]);
155:             end[1] = boost::lexical_cast<int>(sm[2]);
156:             end[2] = boost::lexical_cast<int>(sm[3]);
157:             l5 = ltp;
158:             GetEtime();
159:         }
160:     }
161:     return 1;
162: }
163: void services::GetEtime() {
164:     string temp;
165:     std::ostringstream so;
166:     boost::posix_time::time_duration st(start[0], start[1], start[2]);
167:     boost::posix_time::time_duration et(end[0], end[1], end[2]);
168:     et = et - st;
169:     so.str("");
170:     so << et.total_seconds();
171:     temp = "\tElapsed time (sec) ==> " + so.str() + "\n";
172:     l4 = temp;
173: }
174: string services::Sformat(string ufn) {
175:     string temp = "";
176:     for (int i = 0; i < sofV; i++) {
177:         if (getCompleteLN(i) != "-1") {
178:             temp += "\t" + getsr(i) + "\n\t\tStart: "
179:             + getStartLN(i) + "(" + ufn + ")\n";
180:             temp += "\t\tCompleted: " + getCompleteLN(i) + "(" + ufn + ")\n";
181:             temp += "\t\tElapsed Time: " + getElapsedT(i) + "\n";
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182:         } else {
183:             if (getStartLN(i) == "-1") {
184:                 temp += "\t" + getsr(i) + "\n\t\tStart: "
185:                 + "Not started(" + ufn + ")\n";
186:                 temp += "\t\tCompleted: Not completed("
187:                 + ufn + ")\n\t\tElapsed Time:\n";
188:             } else {
189:                 temp += "\t" + getsr(i) + "\n\t\tStart: "
190:                 + getStartLN(i) + "(" + ufn + ")\n";
191:                 temp += "\t\tCompleted: Not completed("
192:                 + ufn + ")\n\t\tElapsed Time:\n";
193:             }
194:         }
195:     }
196:     return temp;
197: }
198: string services::LFS() {
199:     string temp, t2;
200:     temp = t2 = "";
201:     int ngvalf = 0;
202:     for (int i = 0; i < sofV; i++) {
203:         if (getCompleteLN(i) == "-1") {
204:             if (ngvalf == 0) {
205:                 t2 += fSM;
206:                 temp += getsr(i);
207:                 ngvalf++;
208:                 continue;
209:             }
210:             if (ngvalf == 1) {
211:                 temp += ", " + getsr(i);
212:             }
213:         }
214:     }
215:     t2 += temp;
216:     return t2;
217: }
```