```
1package inputManagePackage;
 3 import java.io.FileInputStream;
16
17 public class InputSystemTxt extends InputSystem {
19
      protected InputSystemTxt() {
20
          super();
          minRequiredNumberOfLines = 4;
21
22
          generalInfoEndTagLength = 0;
23
      }
24
      protected boolean checkEoF(String checkEoF) {
25
26
          return false;
27
      }
28
29
      protected void skipLines() {
30
          // Nothing to skip in the case of <a href="Txt">Txt</a>
31
          return;
32
      }
33
34
       * TODO Consolidate conditional in fact tried simple Consolidate conditional
35
36
      protected void inputCvAddSection(int sectionCounter, CVTemplate cvtemplate) throws
37
  ParseException {
38
          String checkNextLine = null;
39
40
          if (inputStream.hasNextLine()) {
41
               checkNextLine = inputStream.nextLine();
42
          } else {
43
               checkNextLine = "exit";
44
45
46
          if (sectionRepetitionCheck(checkNextLine, cvtemplate))
47
               return;
48
49
          cvtemplate.addSectionObj(sectionCounter, new Section(checkNextLine));
50
51
          if (isSingleParagraphSection(checkNextLine))
              cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine(
  ).substring(1));
53
          else if (hasBulletListItemSection(checkNextLine))
54
               inputCvAddBulletListItem(sectionCounter, cvtemplate);
55
          else if (hasBulletListSection(checkNextLine))
56
               inputCvAddBulletList(sectionCounter, cvtemplate);
57
          else if (hasNestedBulletListSection(checkNextLine))
58
              inputCvAddBulletListItemAndItemList(sectionCounter, cvtemplate);
59
          else if (!checkNextLine.equals("exit"))
60
              throw new RuntimeException("Invalid Input File " + checkNextLine);
61
62
      }
63
64
      private boolean hasBulletListSection(String checkNextLine) {
65
          return checkNextLine.equals("Skills and Experience:");
66
67
68
      private boolean hasNestedBulletListSection(String checkNextLine) {
          return checkNextLine.equals("Professional Experience:");
69
```

```
70
       }
 71
 72
       private boolean hasBulletListItemSection(String checkNextLine) {
 7.3
           return checkNextLine.equals("Education and Training:") ||
   checkNextLine.equals("Further Courses:")
 74
                    || checkNextLine.equals("Career Summary:");
 75
 76
 77
       private boolean isSingleParagraphSection(String checkNextLine) {
           return checkNextLine.equals("Professional Profile:") ||
   checkNextLine.equals("Additional Information:")
 79
                   || checkNextLine.equals("Interests:") || checkNextLine.equals("Core
   Strengths:");
 80
       }
 81
 82
       private void inputCvAddBulletList(int sectionCounter, CVTemplate cvtemplate)
   throws ParseException {
 83
           int listCounter = 0;
 84
           String checkNextLine = inputStream.nextLine();
 85
 86
           while (checkNextLine.substring(0, 2).equals(" ")) {
 87
 88
               cvtemplate.getSectionObj(sectionCounter).addBulletList(listCounter,
 89
                        new BulletList(checkNextLine.substring(2)));
               checkNextLine = inputStream.nextLine();
 90
 91
 92
               while (checkNextLine.substring(0, 4).equals("
                                                                  ")) {
 93
                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
 94
                            .addBulletListItem(new
   BulletListItem(checkNextLine.substring(4)));
 95
                    checkNextLine = inputStream.nextLine();
 96
 97
                    if (checkNextLine.isEmpty())
 98
                       break;
 99
100
               }
101
102
               if (checkNextLine.isEmpty())
103
                   break;
104
               listCounter++;
105
106
           notSkipLine = 1;
107
108
109
110
       private void inputCvAddBulletListItem(int sectionCounter, CVTemplate cvtemplate)
   throws ParseException {
           String checkNextLine = inputStream.nextLine();
111
112
           while (checkNextLine.substring(0, 2).equals(" ")) {
113
114
               cvtemplate.getSectionObj(sectionCounter).addBulletListItem(
115
                        new BulletListItem(getDate(checkNextLine),
   getWithoutDate(checkNextLine.substring(2)));
116
               checkNextLine = inputStream.nextLine();
117
118
               if (checkNextLine.isEmpty())
119
                   break;
120
           notSkipLine = 1;
121
```

```
122
123
124
       private void inputCvAddBulletListItemAndItemList(int sectionCounter, CVTemplate
   cvtemplate) throws ParseException {
125
126
           int listCounter = 0;
127
           String checkNextLine = inputStream.nextLine();
128
129
           while (checkNextLine.substring(0, 2).equals(" ")) {
130
131
               cvtemplate.getSectionObj(sectionCounter).addBulletListItem(
132
                        new BulletListItem(getDate(checkNextLine),
   getWithoutDate(checkNextLine.substring(2)));
133
               cvtemplate.getSectionObj(sectionCounter).addBulletList(listCounter, new
   BulletList(checkNextLine));
134
               int listItemCounter = 0;
135
               checkNextLine = inputStream.nextLine();
136
137
               if (checkNextLine.substring(0, 4).equals("
                                                               ")) {
138
139
                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
140
                            .addBulletListItem(new
   BulletListItem(checkNextLine.substring(4)));
141
                   checkNextLine = inputStream.nextLine();
142
                    listItemCounter++;
143
144
                    if (checkNextLine.isEmpty())
145
                       break:
146
                } else {
147
                    System.out.println("Wrong Input Professional Experience");
148
                   break;
149
               }
150
151
               if (checkNextLine.substring(0, 4).equals("
                                                               ")) {
152
153
                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
154
                            .addBulletListItem(new
   BulletListItem(checkNextLine.substring(4)));
155
                    checkNextLine = inputStream.nextLine();
156
                    listItemCounter++;
157
                    if (checkNextLine.isEmpty())
158
159
                       break;
160
161
                    System.out.println("Wrong Input Professional Experience");
162
163
                   break:
164
               }
165
166
               while (checkNextLine.substring(0, 6).equals("
                                                                    ")) {
167
                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
168
169
                            .addBulletListItem(new
   BulletListItem(checkNextLine.substring(6)));
170
                    checkNextLine = inputStream.nextLine();
171
                    listItemCounter++;
172
                   if (checkNextLine.isEmpty())
173
                       break;
174
```

```
175
                }
176
177
                if (checkNextLine.isEmpty())
178
                    break;
179
                listCounter++;
180
           }
181
           notSkipLine = 1;
182
183
184
       private boolean sectionRepetitionCheck(String checkNextLine, CVTemplate
   cvtemplate) {
185
           for (int i = 0; i < cvtemplate.getNumberOfSectionObj(); i++) {</pre>
186
                if (checkNextLine.equals(cvtemplate.getSectionObjTitle(i))) {
187
                    JOptionPane.showMessageDialog(null, "Repeated section of " +
   checkNextLine + ". Skipping.");
188
                    if (checkNextLine.equals("Professional Profile:") ||
   checkNextLine.equals("Additional Information:")
189
                            || checkNextLine.equals("Interests:")) {
190
                        inputStream.nextLine();
191
192
                        return true;
193
                    }
194
195
196
197
           return false;
198
199
       }
200
201
       private Date getDate(String input) throws ParseException {
202
           Date date;
203
204
           SimpleDateFormat sdf = new SimpleDateFormat("dd-MM-yyyy");
205
           date = sdf.parse(input.substring(input.length() - 10));
206
207
           return date;
208
209
210
211
       private String getWithoutDate(String input) {
212
213
           return input.substring(0, input.length() - 12);
214
       }
215
216
       public static void templateTypeIdentifier(CVTemplate cvtemplate) {
217
           int checkForFunctional = 0;
218
           int checkForChronological = 0;
219
           int checkForCombined = 0;
220
221
           for (int i = 0; i < cvtemplate.getNumberOfSectionObj(); i++) {</pre>
222
223
                if (cvtemplate.getSectionObjTitle(i).equals("Skills and Experience:")) {
224
                    checkForFunctional++;
225
                    checkForCombined++;
226
                } else if (cvtemplate.getSectionObjTitle(i).equals("Career Summary:")) {
227
                    checkForFunctional++;
228
229
                } else if (cvtemplate.getSectionObjTitle(i).equals("Professional
   Experience:")) {
```

```
230
                    checkForChronological++;
231
                    checkForCombined++;
232
               } else if (cvtemplate.getSectionObjTitle(i).equals("Core Strengths:")) {
233
                    checkForChronological++;
234
235
               }
236
237
           }
238
239
           if (cvtemplate.getNumberOfSectionObj() < 4)</pre>
               JOptionPane.showMessageDialog(null, "Less than 4 sections.");
240
241
           if (checkForChronological != 2 && checkForCombined != 2 && checkForFunctional
   == 2) {
               JOptionPane.showMessageDialog(null, "Functional CV identified.");
243
           } else if (checkForChronological == 2 && checkForCombined != 2 &&
   checkForFunctional != 2) {
245
               JOptionPane.showMessageDialog(null, "Chronological CV identified.");
246
           } else if (checkForChronological != 2 && checkForCombined == 2 &&
   checkForFunctional != 2) {
247
               JOptionPane.showMessageDialog(null, "Combined CV identified.");
248
           } else {
249
               JOptionPane.showMessageDialog(null, "CV type not identified.");
250
251
252
       }
253
254
       public int checkIfCVFile(String filePath) {
255
256
           Scanner fileStream = null;
257
           try {
258
               fileStream = new Scanner(new FileInputStream(filePath));
259
           } catch (FileNotFoundException e2) {
260
               // TODO Auto-generated catch block
261
               e2.printStackTrace();
262
263
           int i = 0;
264
           while (fileStream.hasNextLine() && fileStream.nextLine().length() > 0) {
265
266
               fileStream.nextLine();
267
           }
268
269
           if (i < 4) {
270
               JOptionPane.showMessageDialog(null, "Invalid input file. Not a CV file.");
271
               return 1:
272
273
           return 0;
274
       }
275
276}
277
```