```
1package inputManagePackage;
 3 import java.io.File;
19
20
21 public class InputSystemTxt {
23
      static Scanner inputStream = null;
24
      static Scanner checkStream = null;
25
      static int checkIfSection = 0;
26
      static int notSkipLine = 0;
27
28
29
      protected static ArrayList<Section> inputCvTemplateSectionObj = new
  ArrayList<Section>();
30
31
32
33
      public static void addCvDataFromFile(int index, String filePath) throws
  ParseException{
34
35
36
          try{
37
              inputStream = new Scanner(new FileInputStream(filePath));
38
              checkStream = new Scanner(new FileInputStream(filePath));
39
          }catch(FileNotFoundException e) {
40
              System.out.println("Problem opening file.");
41
              System.exit(0);
42
          }
43
44
45
          int i=0;
46
          while(checkStream.hasNextLine() && checkStream.nextLine().length()>0) {
47
48
              checkStream.nextLine();
49
          }
50
51
          if(i<4){
              JOptionPane.showMessageDialog(null, "Invalid input file. Reached eof while
 on General Info.");
53
              return;
54
          }
55
56
57
          String applicantName = inputStream.nextLine().substring(6);
          String applicantAddress = inputStream.nextLine().substring(9);
58
59
          String applicantHomeTelephone = inputStream.nextLine().substring(18);
60
          String applicantWorkTelephone = inputStream.nextLine().substring(18);
61
          String applicantEmail = inputStream.nextLine().substring(7);
62
63
          CVTemplate cvtemplate = new CVTemplate(applicantName, applicantAddress,
  applicantHomeTelephone,
64
                  applicantWorkTelephone, applicantEmail);
65
66
          int sectionCounter = 0;
67
          while(inputStream.hasNextLine()) {
68
69
              if (notSkipLine==0) {
70
                  inputStream.nextLine();
```

```
71
 72
 73
               notSkipLine=0;
 74
               inputCvAddSection(sectionCounter, cvtemplate);
 75
 76
 77
 78
 79
           inputStream.close();
 80
           checkStream.close();
 81
 82
           templateTypeIdentifier(cvtemplate);
 83
           Database.addCVtemplateToList(cvtemplate);
 84
 85
 86
 87
       }
 88
 89
       private static void inputCvAddSection(int sectionCounter, CVTemplate cvtemplate)
   throws ParseException{
 90
           String checkNextLine=null;
 91
 92
           if (inputStream.hasNextLine()){
 93
               checkNextLine = inputStream.nextLine();
 94
           }else{
 95
               checkNextLine = "exit";
 96
 97
 98
           if (sectionRepetitionCheck(checkNextLine, cvtemplate)) return;
 99
100
           if(checkNextLine.equals("Professional Profile:")){
101
102
               cvtemplate.addSectionObj(sectionCounter , new Section("Professional
   Profile:"));
103
               cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine(
   ).substring(1));
104
105
106
           }else if(checkNextLine.equals("Additional Information:")) {
107
108
               cvtemplate.addSectionObj(sectionCounter , new Section("Additional
109
   Information:"));
               cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine())
110
   ).substring(1));
111
112
113
           }else if(checkNextLine.equals("Interests:")){
114
               cvtemplate.addSectionObj(sectionCounter , new Section("Interests:"));
115
               cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine())
116
   ).substring(1));
117
118
119
           }else if(checkNextLine.equals("Education and Training:")) {
120
121
               cvtemplate.addSectionObj(sectionCounter , new Section("Education and
   Training:"));
122
               inputCvAddBulletListItem(sectionCounter , cvtemplate);
```

```
123
124
           }else if(checkNextLine.equals("Further Courses:")) {
125
126
               cvtemplate.addSectionObj (sectionCounter , new Section("Further)
   Courses:"));
127
               inputCvAddBulletListItem(sectionCounter , cvtemplate);
128
129
           }else if(checkNextLine.equals("Career Summary:")) {
130
131
               cvtemplate.addSectionObj(sectionCounter , new Section("Career Summary:"));
132
               inputCvAddBulletListItem(sectionCounter , cvtemplate);
133
134
           }else if(checkNextLine.equals("Skills and Experience:")) {
135
136
               cvtemplate.addSectionObj(sectionCounter , new Section("Skills and
   Experience:"));
               inputCvAddBulletList(sectionCounter , cvtemplate);
137
138
139
           }else if(checkNextLine.equals("Core Strengths:")){
140
141
               cvtemplate.addSectionObj(sectionCounter , new Section("Core Strengths:"));
142
               cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine(
   ));
143
144
           }else if(checkNextLine.equals("Professional Experience:")) {
145
146
               cvtemplate.addSectionObj(sectionCounter , new Section("Professional)
   Experience:"));
147
               inputCvAddBulletListItemAndItemList(sectionCounter , cvtemplate);
148
149
           }else{
150
               if (!checkNextLine.equals("exit")) System.out.println("Invalid Input File
   "+checkNextLine);
151
152
153
           sectionCounter++;
154
155
156
       private static void inputCvAddBulletList(int sectionCounter, CVTemplate
   cvtemplate) throws ParseException{
157
           int listCounter = 0;
           String checkNextLine=inputStream.nextLine();
158
159
           while (checkNextLine.substring(0, 2).equals(" ")){
160
161
162
               cvtemplate.getSectionObj(sectionCounter).addBulletList(listCounter , new
   BulletList(checkNextLine.substring(2)));
               checkNextLine=inputStream.nextLine();
163
164
165
166
               while (checkNextLine.substring(0, 4).equals("
                                                                 ")){
                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter).ad
167
   dBulletListItem(new BulletListItem(checkNextLine.substring(4)));
168
                   checkNextLine=inputStream.nextLine();
169
170
                   if(checkNextLine.isEmpty()) break;
171
172
               }
173
```

```
174
               if(checkNextLine.isEmpty()) break;
175
               listCounter++;
176
177
           }
178
           notSkipLine=1;
179
       }
180
181
       private static void inputCvAddBulletListItem(int sectionCounter, CVTemplate
   cvtemplate) throws ParseException{
182
           String checkNextLine=inputStream.nextLine();
183
           while (checkNextLine.substring(0, 2).equals(" ")){
184
185
               cvtemplate.getSectionObj(sectionCounter).addBulletListItem(new
   BulletListItem(getDate(checkNextLine), getWithoutDate(checkNextLine.substring(2))));
186
               checkNextLine=inputStream.nextLine();
187
188
               if(checkNextLine.isEmpty()) break;
189
           }
190
           notSkipLine=1;
191
       }
192
193
       private static void inputCvAddBulletListItemAndItemList(int sectionCounter,
   CVTemplate cvtemplate) throws ParseException{
194
195
               int listCounter = 0;
196
               String checkNextLine=inputStream.nextLine();
197
198
               while (checkNextLine.substring(0, 2).equals(" ")){
199
200
                    cvtemplate.getSectionObj(sectionCounter).addBulletListItem(new
   BulletListItem(getDate(checkNextLine), getWithoutDate(checkNextLine.substring(2))));
201
                    cvtemplate.getSectionObj(sectionCounter).addBulletList(listCounter,
   new BulletList(checkNextLine));
202
                    int listItemCounter = 0;
203
                    checkNextLine=inputStream.nextLine();
204
205
                    if (checkNextLine.substring(0, 4).equals("
                                                                  ")){
206
207
                        cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
   .addBulletListItem(new BulletListItem(checkNextLine.substring(4)));
208
                        checkNextLine=inputStream.nextLine();
209
                        listItemCounter++;
210
211
                        if(checkNextLine.isEmpty()) break;
212
                        System.out.println("Wrong Input Professional Experience");
213
214
                        break:
215
                    }
216
217
                    if (checkNextLine.substring(0, 4).equals("
                                                                  ")){
218
219
                        cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
   .addBulletListItem(new BulletListItem(checkNextLine.substring(4)));
220
                        checkNextLine=inputStream.nextLine();
221
                        listItemCounter++;
222
223
                        if(checkNextLine.isEmpty()) break;
224
225
                    }else{
```

```
226
                        System.out.println("Wrong Input Professional Experience");
227
                        break;
228
                    }
229
230
                    while (checkNextLine.substring(0, 6).equals("
                                                                         ")){
231
232
                        cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
   .addBulletListItem(new BulletListItem(checkNextLine.substring(6)));
                        checkNextLine=inputStream.nextLine();
233
234
                        listItemCounter++;
235
                        if(checkNextLine.isEmpty()) break;
236
237
                    }
238
239
240
241
                if(checkNextLine.isEmpty()) break;
242
                listCounter++;
243
           }
244
           notSkipLine=1;
245
       }
246
247
       private static boolean sectionRepetitionCheck(String checkNextLine, CVTemplate
   cvtemplate) {
248
           for(int i=0; i<cvtemplate.getNumberOfSectionObj(); i++) {</pre>
249
                if( checkNextLine.equals(cvtemplate.getSectionObjTitle(i))) {
250
                    JOptionPane.showMessageDialog(null, "Repeated section of " +
   checkNextLine + ". Skipping.");
2.51
                    if(checkNextLine.equals("Professional Profile:") ||
   checkNextLine.equals("Additional Information:") ||
252
                            checkNextLine.equals("Interests:")) {
253
                        inputStream.nextLine();
254
255
                        return true;
256
                    }
257
258
259
260
           return false;
261
262
       }
263
264
       private static Date getDate(String input) throws ParseException{
265
           Date date;
266
           SimpleDateFormat sdf = new SimpleDateFormat("dd-MM-yyyy");
267
268
           date = sdf.parse(input.substring(input.length() - 10));
269
270
           return date;
271
272
       }
273
274
       private static String getWithoutDate(String input) {
275
276
           return input.substring(0, input.length() - 12);
277
       }
278
279
       public static void templateTypeIdentifier(CVTemplate cvtemplate) {
280
           int checkForFunctional=0;
```

```
281
           int checkForChronological=0;
282
           int checkForCombined=0;
283
284
           for (int i=0; i<cvtemplate.getNumberOfSectionObj(); i++) {</pre>
285
286
               if(cvtemplate.getSectionObjTitle(i).equals("Skills and Experience:")) {
287
                    checkForFunctional++;
288
                    checkForCombined++;
289
                }else if(cvtemplate.getSectionObjTitle(i).equals("Career Summary:")) {
290
                    checkForFunctional++;
291
292
               }else if(cvtemplate.getSectionObjTitle(i).equals("Professional
   Experience:")){
293
                    checkForChronological++;
294
                    checkForCombined++;
295
                }else if(cvtemplate.getSectionObjTitle(i).equals("Core Strengths:")) {
296
                    checkForChronological++;
297
298
               }
299
300
           }
301
302
           if (cvtemplate.getNumberOfSectionObj()<4) JOptionPane.showMessageDialog(null,
   "Less than 4 sections.");
303
304
           if(checkForChronological!=2 && checkForCombined!=2 && checkForFunctional==2) {
305
               JOptionPane.showMessageDialog(null, "Functional CV identified.");
           }else if(checkForChronological==2 && checkForCombined!=2 &&
   checkForFunctional!=2) {
307
               JOptionPane.showMessageDialog(null, "Chronological CV identified.");
308
           }else if(checkForChronological!=2 && checkForCombined==2 &&
   checkForFunctional!=2) {
309
               JOptionPane.showMessageDialog(null, "Combined CV identified.");
310
311
               JOptionPane.showMessageDialog(null, "CV type not identified.");
312
           }
313
314
315
316
       public static int templateTypeSilentIdentifier(CVTemplate cvtemplate) {
317
           int checkForFunctional=0;
           int checkForChronological=0;
318
319
           int checkForCombined=0;
320
321
           for (int i=0; i<cvtemplate.getNumberOfSectionObj(); i++) {</pre>
322
323
               if(cvtemplate.getSectionObjTitle(i).equals("Skills and Experience:")) {
324
                    checkForFunctional++;
325
                    checkForCombined++;
326
               }else if(cvtemplate.getSectionObjTitle(i).equals("Career Summary:")) {
327
                    checkForFunctional++;
328
329
               }else if(cvtemplate.getSectionObjTitle(i).equals("Professional
   Experience:")){
330
                    checkForChronological++;
331
                    checkForCombined++;
332
               }else if(cvtemplate.getSectionObjTitle(i).equals("Core Strengths:")) {
333
                    checkForChronological++;
334
```

```
335
               }
336
337
           }
338
339
           if(checkForChronological!=2 && checkForCombined!=2 && checkForFunctional==2){
340
               return 0;
           }else if(checkForChronological==2 && checkForCombined!=2 &&
341
  checkForFunctional!=2) {
342
               return 1;
343
           }else if(checkForChronological!=2 && checkForCombined==2 &&
   checkForFunctional!=2) {
344
               return 2;
345
           }else{
346
               return -1;
347
           }
348
349
350
       }
351
352
       public static int checkIfCVFile(String filePath) {
353
354
           Scanner fileStream = null;
355
           try {
356
               fileStream = new Scanner(new FileInputStream(filePath));
357
           } catch (FileNotFoundException e2) {
358
               // TODO Auto-generated catch block
359
               e2.printStackTrace();
360
361
           int i=0;
362
           while(fileStream.hasNextLine() && fileStream.nextLine().length()>0) {
363
364
               fileStream.nextLine();
365
           }
366
367
           if(i<4){
368
               JOptionPane.showMessageDialog(null, "Invalid input file. Not a CV file.");
369
               return 1;
370
371
           return 0;
372
       }
373
374}
375
```