```java
 1 package inputManagePackage;
 2
 3 import java.io.File;
19
20
21 public class InputSystemTxt {
22
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             i++;
48             checkStream.nextLine();
49         }
50
51         if(i<4){
52             JOptionPane.showMessageDialog(null, "Invalid input file. Reached eof while
   on General Info.");
53             return;
54         }
55
56
57         String applicantName = inputStream.nextLine().substring(6);
58         String applicantAddress = inputStream.nextLine().substring(9);
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();
```

enumerate steps
on the board

```java
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
109             cvtemplate.addSectionObj(sectionCounter , new Section("Additional
    Information:"));
110             cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine(
    ).substring(1));
111
112
113         }else if(checkNextLine.equals("Interests:")){
114
115             cvtemplate.addSectionObj(sectionCounter , new Section("Interests:"));
116             cvtemplate.getSectionObj(sectionCounter).addParagraph(inputStream.nextLine(
    ).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:"));
137             inputCvAddBulletList(sectionCounter , cvtemplate);
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;
158         String checkNextLine=inputStream.nextLine();
159
160         while (checkNextLine.substring(0, 2).equals("  ")){
161
162             cvtemplate.getSectionObj(sectionCounter).addBulletList(listCounter , new
    BulletList(checkNextLine.substring(2)));
163             checkNextLine=inputStream.nextLine();
164
165
166             while (checkNextLine.substring(0, 4).equals("    ")){
167                 cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter).ad
    dBulletListItem(new BulletListItem(checkNextLine.substring(4)));
168                 checkNextLine=inputStream.nextLine();
169
170                 if(checkNextLine.isEmpty()) break;
171
172             }
173
```

```java
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                  }else{
213                      System.out.println("Wrong Input Professional Experience");
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{
```

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226                    System.out.println("Wrong Input Professional Experience");
227                    break;
228                }

230                while (checkNextLine.substring(0, 6).equals("      ")){

232                    cvtemplate.getSectionObj(sectionCounter).getBulletList(listCounter)
   .addBulletListItem(new BulletListItem(checkNextLine.substring(6)));
233                    checkNextLine=inputStream.nextLine();
234                    listItemCounter++;
235                    if(checkNextLine.isEmpty()) break;

237                }



241            if(checkNextLine.isEmpty()) break;
242            listCounter++;
243        }
244        notSkipLine=1;
245    }

247    private static boolean sectionRepetitionCheck(String checkNextLine, CVTemplate
   cvtemplate){
248        for(int i=0; i<cvtemplate.getNumberOfSectionObj(); i++){
249            if( checkNextLine.equals(cvtemplate.getSectionObjTitle(i))){
250                JOptionPane.showMessageDialog(null, "Repeated section of " +
   checkNextLine + ". Skipping.");
251                if(checkNextLine.equals("Professional Profile:") ||
   checkNextLine.equals("Additional Information:") ||
252                    checkNextLine.equals("Interests:")){
253                inputStream.nextLine();

255                return true;
256                }

258            }
259        }
260        return false;

262    }

264    private static Date getDate(String input) throws ParseException{
265        Date date;

267        SimpleDateFormat sdf = new SimpleDateFormat("dd-MM-yyyy");
268        date = sdf.parse(input.substring(input.length() - 10));

270        return date;


272    }

274    private static String getWithoutDate(String input){

276        return input.substring(0, input.length() - 12);
277    }

279    public static void templateTypeIdentifier(CVTemplate cvtemplate){
280        int checkForFunctional=0;
```

```java
281            int checkForChronological=0;
282            int checkForCombined=0;
283
284            for (int i=0; i<cvtemplate.getNumberOfSectionObj(); i++){
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.");
306            }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            }else{
311                JOptionPane.showMessageDialog(null, "CV type not identified.");
312            }
313
314        }
315
316    public static int templateTypeSilentIdentifier(CVTemplate cvtemplate){
317            int checkForFunctional=0;
318            int checkForChronological=0;
319            int checkForCombined=0;
320
321            for (int i=0; i<cvtemplate.getNumberOfSectionObj(); i++){
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;
341         }else if(checkForChronological==2 && checkForCombined!=2 &&
    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             i++;
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
```