```
1 package outputManagePackage;
 3 import java.util.ArrayList;
14 public class OutputMerge {
15
16
      static CVTemplate cvtemplatemerge;
17
      static int checkDifferent, objectIndex;
      static int checkDifferentPE=0;
18
19
20
      public static void mergeTwoCv(CVTemplate cvtemplate1, CVTemplate cvtemplate2,
  JList<String> firstCVSectionsJList, JList<String> secondCVSectionsJList, int
  outputType) {
21
22
23
          objectIndex=0;
24
25
          String applicantName = cvtemplate1.getApplicantName();
26
          String applicantAddress = cvtemplate1.getApplicantAddress();
27
          String applicantHomeTelephone = cvtemplate1.getApplicantHomeTelephone();
28
          String applicantWorkTelephone = cvtemplate1.getApplicantWorkTelephone();
29
          String applicantEmail = cvtemplate1.getApplicantEmail();
30
          cvtemplatemerge= new CVTemplate(applicantName, applicantAddress,
  applicantHomeTelephone,
31
                   applicantWorkTelephone, applicantEmail);
32
33
          for (int i=0; i<firstCVSectionsJList.getSelectedValuesList().size(); i++) {</pre>
              checkDifferent =0;
3.5
              for (int j=0; j<secondCVSectionsJList.getSelectedValuesList().size(); j+</pre>
  +) {
  (firstCVSectionsJList.getSelectedValuesList().get(i).equals(secondCVSectionsJList.getS
  electedValuesList().get(j))){
37
                       addToCVSameSection(cvtemplate1,cvtemplate2,firstCVSectionsJList.ge
  tSelectedValuesList().get(i));
38
                       checkDifferent=1;
39
                       break;
40
41
42
              }
43
              if (checkDifferent==0) addToCVDifferentSection(cvtemplate1, cvtemplate2
  , firstCVSectionsJList.getSelectedValuesList().get(i));
4.5
46
47
          for (int i=0; i<secondCVSectionsJList.getSelectedValuesList().size(); i++) {</pre>
48
              checkDifferent =0;
49
              for (int j=0; j<firstCVSectionsJList.getSelectedValuesList().size(); j++) {</pre>
50
  (secondCVSectionsJList.getSelectedValuesList().get(i).equals(firstCVSectionsJList.getS
  electedValuesList().get(j))){
                       addToCVSameSection(cvtemplate1,cvtemplate2,secondCVSectionsJList.g
51
  etSelectedValuesList().get(i));
52
                       checkDifferent=1;
53
                       break;
54
                   }
55
56
              }
57
```

```
58
                if (checkDifferent==0) addToCVDifferentSection(cvtemplate1, cvtemplate2
   , secondCVSectionsJList.getSelectedValuesList().get(i));
 59
 60
           }
 61
 62
 63
           cvtemplatemerge=sortSections(cvtemplatemerge);
 64
 65
           Database.addCVtemplateToList(cvtemplatemerge);
 66
           if (outputType==0) {
                OutputSystemTxt.saveApplicantInfoToTxt("outputFiles",
   Database.getCVtemplateArrayListSize()-1);
 68
           }else if(outputType==1){
 69
                OutputSystemLatex.saveApplicantInfoToLatex("outputFiles",
   Database.getCVtemplateArrayListSize()-1);
 70
           }else if(outputType==2){
 71
                OutputSystemTxt.saveApplicantInfoToTxt("outputFiles",
   Database.getCVtemplateArrayListSize()-1);
 72
               OutputSystemLatex.saveApplicantInfoToLatex("outputFiles",
   Database.getCVtemplateArrayListSize()-1);
 73
           }
 74
 75
       private static void addToCVSameSection(CVTemplate cvtemplate1, CVTemplate
   cvtemplate2, String section) {
 77
           if(section.equals("Professional Profile") || section.equals("Additional
   Information")
                    || section.equals("Interests") ) {
 79
                for(int i=0; i < cvtemplate1.getNumberOfSectionObj(); i++) {</pre>
 80
                    if(cvtemplate1.getSectionObjTitle(i).equals(section+":")) {
 81
   (checkIfSameSection(cvtemplatemerge, cvtemplate1.getSectionObj(i)) == 0) {
 82
                            cvtemplatemerge.addSectionObj(objectIndex,
   cvtemplate1.getSectionObj(i));
 83
                            objectIndex++;
 84
 85
                    }
 86
 87
                }
 88
 89
 90
           }else if(section.equals("Career Summary") || section.equals("Education and
 91
   Training")
 92
                    || section.equals("Further Courses") ) {
 93
 94
 9.5
                for(int i=0; i < cvtemplate1.getNumberOfSectionObj(); i++) {</pre>
 96
                    for (int j=0; j < cvtemplate2.getNumberOfSectionObj(); j++) {</pre>
                        if(cvtemplate1.getSectionObjTitle(i).equals(section+":") &&
   cvtemplate2.getSectionObjTitle(j).equals(section+":")){
 98
 99
                            addToCVSameSectionCompareItems(cvtemplate1.getSectionObj(i),
   cvtemplate2.getSectionObj(j), section);
100
101
                        }
102
                    }
                }
103
104
```

```
105
106
            }else if(section.equals("Skills and Experience")){
107
108
                for(int i=0; i < cvtemplate1.getNumberOfSectionObj(); i++) {</pre>
109
                    for(int j=0; j < cvtemplate2.getNumberOfSectionObj(); j++) {</pre>
110
                         if(cvtemplate1.getSectionObjTitle(i).equals(section+":") &&
   cvtemplate2.getSectionObjTitle(j).equals(section+":")) {
111
                             addToCVSameSectionCompareLists(cvtemplate1.getSectionObj(i),
   cvtemplate2.getSectionObj(j), section);
112
113
                         }
114
                    }
115
                }
116
117
118
119
            }else if(section.equals("Professional Experience")){
120
121
                for(int i=0; i < cvtemplate1.getNumberOfSectionObj(); i++) {</pre>
122
                    for(int j=0; j < cvtemplate2.getNumberOfSectionObj(); j++) {</pre>
123
                        if(checkDifferentPE==0 &&
   cvtemplate1.getSectionObjTitle(i).equals(section+":") &&
   cvtemplate2.getSectionObjTitle(j).equals(section+":")){
124
                             //addToCVSameSectionCompareListsAndItems(cvtemplate1.getSectio
   nObj(i), cvtemplate2.getSectionObj(j), section);
125
126
                             cvtemplatemerge.addSectionObj(objectIndex,
   cvtemplate1.getSectionObj(i));
127
                             objectIndex++;
128
                             checkDifferentPE=1;
129
130
                         }
131
                    }
132
                }
133
134
            }
135
136
137
        }
138
139
       /* beta stage */
140
141
       private static void addToCVSameSectionCompareListsAndItems(Section section1,
   Section section2, String section) {
142
            Section tempSection = new Section(section+":");
143
144
            for(int i=0; i<section1.getSizeOfSingleBulletListItems()-1;i++) {</pre>
                for(int j=0; j<section2.getSizeOfSingleBulletListItems()-1;j++) {</pre>
145
146
                    if(!section1.getBulletListItem(i).getContents().equals(section2.getBul
   letListItem(j).getContents())){
147
                        int checkOne=0, checkTwo=0, bulletListCounter1=0,
148
   bulletListCounter2=0;
149
150
                        for (int p=0; p<tempSection.getSizeOfSingleBulletListItems(); p+</pre>
   +) {
151
                             String
   tempSectionCVItem=tempSection.getBulletListItem(p).getContents()+
152
                                     tempSection.getBulletListItem(p).getStringDate();
```

```
OutputMerge.java
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```
153
                            if(section1.getBulletListItem(i).getContents().equals(tempSect
   ionCVItem)){
154
                                 checkOne++;
155
                             }
156
                            if(section2.getBulletListItem(j).getContents().equals(tempSect
   ionCVItem)){
157
                                 checkTwo++;
158
159
                            if (checkOne==1 && checkTwo==1) break;
160
161
                            }
162
163
                            if (checkOne==0) {
164
165
                                 tempSection.addBulletListItem(section1.getBulletListItem(i)
166
                                 tempSection.addBulletList(bulletListCounter1, new
   BulletList (section1.getBulletListItem(i).getContents()));
167
                                 bulletListCounter1++;
                                 for (int
   k=0; k<section1.getBulletList(i).getNumberOfItems(); k++) {</pre>
169
                        tempSection.addBulletListItem(section1.getBulletList(bulletListCou
   nter1).getBulletListItem(k));
170
171
172
173
                            if (checkTwo==0) {
174
                                 tempSection.addBulletListItem(section2.getBulletListItem(j)
   );
175
                                 tempSection.addBulletList(bulletListCounter2, new
   BulletList (section2.getBulletListItem(j).getContents()));
176
                                 bulletListCounter2++;
177
                                 for (int
   k=0; k<section2.getBulletList(j).getNumberOfItems(); k++) {</pre>
178
                        tempSection.addBulletListItem(section2.getBulletList(bulletListCou
   nter2).getBulletListItem(k));
179
180
181
182
183
184
185
186
187
188
                }
189
190
191
            }
192
193
            cvtemplatemerge.addSectionObj(objectIndex, tempSection);
194
            objectIndex++;
195
       }
196
197
       /* beta stage */
198
199
       private static void addToCVSameSectionCompareLists(Section section1, Section
```

```
section2,String section) {
200
            Section tempSection = new Section(section+":");
201
            int bulletListIndex=0;
202
            for (int i=0;i<section1.getNumberOfBulletLists();i++) {</pre>
203
                for (int j=0; j<section2.getNumberOfBulletLists();j++) {</pre>
204
205
                    if(!section1.getBulletList(i).getTitle().equals(section2.getBulletList()
   j).getTitle())){
206
                         if(checkIfBulletListExists(tempSection, section2.getBulletList(j)) =
   =0) {
207
                             tempSection.addBulletList(bulletListIndex, section2.getBulletLi
   st(j));
208
                             bulletListIndex++;
209
                         }
210
211
                    }else{
212
                         for(int k=0;k<section1.getBulletList(i).getNumberOfItems();k++){</pre>
213
                             for(int p=0;p<section2.getBulletList(j).getNumberOfItems();p+</pre>
   +) {
214
                                 if(!section1.getBulletList(i).getBulletListItem(k).getCont
   ents().
215
                                          equals (section2.getBulletList(j).getBulletListItem(
   p).getContents())){
216
                                      if (checkIfBulletListItemExists(tempSection.getBulletLi
   st(bulletListIndex-1),section2.getBulletList(j).getBulletListItem(p))==0) {
                                          tempSection.getBulletList(bulletListIndex-1).addBu
217
   lletListItem(section2.getBulletList(j).getBulletListItem(p));
218
219
220
221
222
223
224
                             }
225
226
                         }
227
228
229
230
                         tempSection.addBulletList(bulletListIndex,
   section1.getBulletList(i));
                        bulletListIndex++;
231
232
233
234
235
236
            }
237
238
            for(int i=0; i<tempSection.getNumberOfBulletLists();i++) {</pre>
239
                for(int j=i+1;j<tempSection.getNumberOfBulletLists();j++) {</pre>
240
                    if(tempSection.getBulletList(i).getTitle().equals(tempSection.getBulle
   tList(j).getTitle())){
241
                         tempSection.removeBulletList(j);
242
243
                    }
244
245
246
                }
247
```

```
248
249
            }
250
2.51
           if (checkIfSameSection(cvtemplatemerge, tempSection) == 0) {
252
253
                cvtemplatemerge.addSectionObj(objectIndex, tempSection);
254
                objectIndex++;
255
            }
256
257
       }
258
259
       private static int checkIfBulletListItemExists(BulletList toCheckList,
   BulletListItem toCheckItem) {
260
            int checkIfExists=0;
261
            for (int i=0;i<toCheckList.getNumberOfItems();i++) {</pre>
262
                if(toCheckList.getBulletListItem(i).getContents().equals(toCheckItem.getCo
   ntents())){
263
                    checkIfExists=1;
264
                    break;
265
                }
266
267
268
            return checkIfExists;
269
270
       }
271
272
273
       private static int checkIfBulletListExists (Section toCheckSection, BulletList
   toCheckList) {
274
            int checkIfExists=0;
275
            for (int i=0;i<toCheckSection.getNumberOfBulletLists();i++) {</pre>
276
                if(toCheckSection.getBulletList(i).getTitle().equals(toCheckList.getTitle()
   ))){
277
                    checkIfExists=1;
278
                    break;
279
                }
280
281
282
           return checkIfExists;
283
284
       private static void addToCVSameSectionCompareItems(Section section1, Section
   section2,String section) {
286
287
            Section tempSection = new Section(section+":");
288
            for (int k=0; k<section1.getSizeOfSingleBulletListItems();k++) {</pre>
289
                for (int 1=0; 1<section2.getSizeOfSingleBulletListItems();1++) {</pre>
290
                    String tempCVItem1 = section1.getBulletListItem(k).getContents()+
   section1.getBulletListItem(k).getStringDate();
291
                    String tempCVItem2=section2.getBulletListItem(1).getContents()+
   section2.getBulletListItem(1).getStringDate();
292
                    if(!tempCVItem1.equals(tempCVItem2)){
293
                        int checkOne=0, checkTwo=0;
294
295
                        for (int p=0; p<tempSection.getSizeOfSingleBulletListItems(); p+</pre>
   +) {
296
                             String
   tempSectionCVItem=tempSection.getBulletListItem(p).getContents()+
297
                                     tempSection.getBulletListItem(p).getStringDate();
```

```
OutputMerge.java
```

```
298
                             if (tempCVItem1.equals(tempSectionCVItem)) {
299
                                 checkOne++;
300
301
                             if (tempCVItem2.equals(tempSectionCVItem)) {
302
                                 checkTwo++;
303
304
305
                             if (checkOne==1 && checkTwo==1) break;
306
307
                        }
308
309
                        if (checkOne==0)
   tempSection.addBulletListItem(section1.getBulletListItem(k));
310
                        if(checkTwo==0)
   tempSection.addBulletListItem(section2.getBulletListItem(1));
311
312
313
314
315
                }
316
           }
317
318
            if (checkIfSameSection(cvtemplatemerge, tempSection) == 0) {
319
                cvtemplatemerge.addSectionObj(objectIndex, tempSection);
320
                objectIndex++;
321
           }
322
       }
323
324
325
       private static int checkIfSameSection(CVTemplate cvtemplatecheck, Section
   cvsectioncheck) {
326
           int checkIfSameSection=0;
327
            for (int i=0;i<cvtemplatecheck.getNumberOfSectionObj();i++) {</pre>
328
                if (cvtemplatecheck.getSectionObj(i).getTitle().equals(cvsectioncheck.getTi
   tle())){
329
                    checkIfSameSection=1;
330
                    break;
331
                }
332
           }
333
334
           return checkIfSameSection;
335
336
337
       private static void addToCVDifferentSection(CVTemplate cvtemplate1, CVTemplate
   cvtemplate2, String sectiontitle) {
338
339
            for(int i=0; i < cvtemplate1.getNumberOfSectionObj(); i++) {</pre>
340
                if(cvtemplate1.getSectionObjTitle(i).equals(sectiontitle+":")) {
341
342
                    cvtemplatemerge.addSectionObj(objectIndex,
   cvtemplate1.getSectionObj(i));
343
                    objectIndex++;
344
345
346
           }
347
348
       }
349
350
       private static CVTemplate sortSections(CVTemplate cvtemplate) {
```

```
CVTemplate tempCVTemplate = new CVTemplate(cvtemplate.getApplicantName(),
351
   cvtemplate.getApplicantAddress(),
352
                   cvtemplate.getApplicantHomeTelephone(),
   cvtemplate.getApplicantWorkTelephone(), cvtemplate.getApplicantEmail());
353
           int tempCount=0;
354
           for (int i=cvtemplate.getNumberOfSectionObj()-1; i>=0; i--){
355
356
               if(cvtemplate.getSectionObjTitle(i).equals("Professional Profile:")) {
357
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
358
                    tempCount++;
359
               }else if(cvtemplate.getSectionObjTitle(i).equals("Skills and
   Experience:")){
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
360
361
                    tempCount++;
362
               }else if(cvtemplate.getSectionObjTitle(i).equals("Core Strengths:")) {
363
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
364
                    tempCount++;
365
               }else if(cvtemplate.getSectionObjTitle(i).equals("Professional
   Experience:")){
366
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
367
                   tempCount++;
368
               }else if(cvtemplate.getSectionObjTitle(i).equals("Career Summary:")) {
369
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
370
                    tempCount++;
371
               }else if(cvtemplate.getSectionObjTitle(i).equals("Education and
   Training:")){
372
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
373
                    tempCount++;
374
               }else if(cvtemplate.getSectionObjTitle(i).equals("Further Courses:")) {
375
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
376
                    tempCount++;
377
               }else if(cvtemplate.getSectionObjTitle(i).equals("Additional
   Information:")){
378
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
379
                   tempCount++;
380
               }else if(cvtemplate.getSectionObjTitle(i).equals("Interests:")) {
381
                    tempCVTemplate.addSectionObj(tempCount, cvtemplate.getSectionObj(i));
382
                    tempCount++;
383
               }
384
385
386
           }
387
388
           cvtemplate = tempCVTemplate;
389
           return cvtemplate;
390
       }
391
392 }
393
```