Let’s review some of the important aspects of the demo program:  
(1) There is a job table, whose structure is described in class website and in class  
presentation d discussions. The basic job search front end (HTML code) provides  
search drop down menus based on discussion forum database.  
(2) When a job search request is received by the web server, the server application  
will first format a SQL query.  
(3) For some search menu choices (such as job region, state, city), the program will  
not add a condition in the where clause. Rather, it will do a rating based on the  
region, state, or city provided.  
(4) For some other search menu choices (such as job type, job title, specialization),  
the program will add a condition in the where clause. So, for example, if the user  
searches for jobs with job title analyst, the search will only return job with job  
title "analyst". Those jobs with title senior analyst, or title programmer analystwill not be returned. If the user specifies search of data administrator, then those  
jobs with specialization database development will not be returned.  
2 The projectThe project asks you to expand the class demo in three different ways:  
(1) Use the job title field as part of the ratings. For example, if the user searches for  
jobs with job title analyst specified, the search will return all jobs with related  
 to job title "analyst". Those jobs with title senior analyst, or title programmeranalyst, and etc., will also be returned, with some rating penalty.  
(2) Use the specialization field as part of the ratings. For example, if the user searches  
for jobs with job title database administrator specified, the search will return all  
jobs with related to job title "database". Those jobs with title database development, or anything related to database, will also be returned, with some rating  
penalty.  
(3) Implement the keyword feature. The current version of the front end has such  
a choice, but the code was not provided. In implementing such feature, you can  
search the job description for the keyword, and search job table for the keyword.  
You can provide your own rating ideas in this feature.

3 The main requirementsThis project requires you to understand the class demo application first. A thorough  
understanding will facilitate your implementation.  
You may feel difficult as where to start for this option of the project. This section  
provides some hints about this.  
There is no need of modifying any tables used by the class demo application. However, if you feel the need of modifying any tables, please justify it and document the  
modification clearly.  
4 Project report and hand-inYour project report must include the following:  
(1) Project description. This is a very important part of your project. A sloppy  
description may hurt your grade, even if your actual implementation is excellent.  
Your description has to include at least the following components.  
{ An itemized description about what features are implemented or not implemented.  
{ For each implemented feature, what special techniques/skills are used.  
{ A README file that clearly instructs how to compile and run your program.  
{ A complete URL that access/test your project.  
(2) Source program.  
a. The whole program must be well-commented. For instance, important functions must be concisely commented about the parameters needed, the main  
duty performed, values returned, and etc.  
2  
b. As your implementation is on the department Linux virtual machine newfirebird.cs.txstate.edu, your do not have to upload your source code. Leave  
them on your own directory and document it clearly where it is in your  
project description. I will test it from that directory if needed. Just upload  
your project description through class homework/project submission panel.  
c. You do not have to hand in hard-copy of your source code orproject description.  
(3) No email submissions of your project is accepted.  
(4) You shouldn’t modify anything of your source code/files after project submission.  
Any changes will result in severe penalty.  
(5) A thread will be created on class forum. You should post in that thread the two  
group members of your group.  
3