Create a logical ERD for the problem below. The ERD should not include any M:N relationships and all attributes should be placed within a table. Include a verb phrase for each relationship. Please include all required foreign keys. You are welcome to use Visio for this ERD, but you do not have to use it for this assignment.

The Temporary Employment Corporation (TEC) places temporary workers with specialized technical skills in companies during peak working periods or during times when those specialized skills are critical but unavailable from the permanent employees. TEC wants a database to keep track of the job applicants, the job openings that are available, and the applicants placed in job openings.

TEC's general manager gave you the following description of the business:

- TEC has a file of job applicants who are interested in working on a temporary basis. TEC keeps data such as the name, address and telephone number for all applicants. (See Figure 1 for an example of data about the job applicant).

- TEC has a file of companies with whom they place workers. TEC keeps information such as the name, address, phone number, and email address of all companies. Sometimes TEC has a temporary worker placed at a company, and sometimes not.

- Each job applicant has earned at least one and potentially several different qualifications. A "qualification" is knowledge, experience, skills, or certification possessed by a job applicant. Each qualification may be earned by more than one job applicant. For example, it is possible for more than one job applicant to have earned a bachelor's of science (BS) degree or a Microsoft Network Certification or have experience as a JAVA programmer. And clearly a job applicant may have earned both a BS degree and a Microsoft Network Certification. TEC keeps track of the qualification, the date it was earned, years of experience with the qualification and the job applicant's proficiency level. (See Figure 1 for an example of the "qualifications" of a job applicant.)

- TEC keeps track of a standard description for all qualifications so that the same qualification descriptors can be used for both job applicants and for position requests.

- Each time a company requests a temporary employee, TEC fills out the position request form shown in Figure 2. It is possible that a position request form will generate more than one position. For example, the position request form shown in Figure 2 is asking for 3 people with the same qualifications. If positions require different qualifications, then different forms are filled out. The contact name and email address on the position request form are related to the company rather than to a given position request.

- It is possible that a given opening will require more than one job applicant (as shown in Figure 2). When a job applicant is given a job, that information should be recorded in the database. Right now, the company usually attaches a post-it note to the position request with the ID of the job applicant who accepted the position, the date that the applicant accepted the position, and the date that the applicant will start working for that position. Data stored in the database should replace the post-it note used in the current system.

- If the job applicant has worked in the past at a temporary job found by TEC, then that job applicant has a specific job history. TEC wants to keep track of the job history of each job applicant. (Naturally, no job history exists if the job applicant has never worked.) Each time a job applicant finishes a temporary position found by TEC, one additional job history record is created. TEC keeps track of the opening that the job applicant filled, the company that the job applicant worked for, the start_date, end_date, hourly_pay, and total_hours_worked. This is currently done on a spreadsheet as shown in Figure 3, but the data should be part of the database.

Job Applicant #90225				
Name	John T. Smith			
Address	756 Elm Avenue			
City	Anaheim			
State	CA			
Zip	92100			
Phone	502-271-6003			
Email	jtsmithbody@hotmail.com			
Qualifications				
Type	**Description**	**Date Completed**	**Years Experience**	**Proficiency Level (1 low to 5 high)**
Education	Associate Degree – Computer Networking	05/12/2011	n/a	n/a
Education	Bachelor's Degree – Information Systems	05/19/2013	n/a	n/a
Experience	Hardware Repair	n/a	7	5
Experience	Help Desk Support	n/a	1	3
Experience	Network Support	n/a	3	4
Certification	Cisco CCNA	07/15/2013	n/a	n/a

Figure 1. Job Applicant Form

Position Request #1775				
Company Name	Smithson Trust Company			
Address	6781 Double M Blvd.			
City	Irvine			
State	CA			
Zip	92711			
Phone	503-772-7881			
Contact	Joni Wilson	**Email**		J_wilson@smithson.com
Number of positions	3	**Start Date**		03/01/2016
Hourly pay	$40.00	**End Date**		07/31/2016
Qualifications				
Type	**Description**	**Priority of Qualification**	**Years Experience**	**Proficiency Level (1 low to 5 high)**
Education	Bachelor's Degree – Information Systems	3	n/a	n/a
Education	Bachelor's Degree – Computer Science	3	n/a	n/a
Experience	Network Support	1	5	5
Certification	Cisco CCNA	2	n/a	n/a

Figure 2. Position Request Form

Temp Worker	Company	Start Date	End Date	Hourly Pay	Total Hours Worked	Job Opening
John Smith	Kingston Electronics	07/25/2012	03/10/2013	25.00	1376	1258
John Smith	Bradley Industries	08/12/2013	10/01/2013	25.00	180	1263
John Smith	Blaisdell Gardens	11/15/2013	04/15/2014	30.00	870	2271
John Smith	KPH	06/12/2014	08/15/2015	35.00	516	8546
John Smith	Bradley Industries	09/15/2015	01/10/2016	34.50	445	7834

Figure 3. Job History Spreadsheet