**Database Systems**

**Final Project**

Hand in this with your Project Submission

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**Required Documents to be submitted:**

1 – A Job Posting from a customer

2 – Your write-up & response to the job posting

3 – Your personal assessment on the final project:

a – How this design fulfills the requirements of the job?

b – What issues you faced in creating your design?

c – What areas would you improve if you had more time?

d – Is your ER diagram in 3rd Normal Form? If so, why? If not, why not?

e – What grade do you think you deserve for this project?

4 – ER Diagram

5 – Project documentation

a - Business Section

b - Database Design

c - Database Scripts

6 – Project Timeline

7 – PowerPoint Presentation (6 minutes in length)

You will place all of these documents into PDF files, which will be placed into a ZIP format and emailed to the instructor before you give your presentation. The files will be named:

“1 – Job Posting”

“2 – Response”

“3 – Assessment of Project” (this will have 4 pages in it)

“4a – First ER Diagram”

“4b – Final ER Diagram”

“5a – Business Section”

“5b – Database Design”

“5c – Database Scripts”

“6 – Final Project Presentation” (Have in both PPTX and PDF formats)

“a – Executable Scripts” (this will be a single .SQL file that I will execute on my end)

The job postings, database designs and projects should NEVER match another individual’s design. Table structure, field names and relationships should be unique for each student.

**Other Requirements:**

You are to upload a timeline of what you will accomplish and by when. This will need to be uploaded prior to the Week 4 class.

Each week, you are to provide weekly updates on Blackboard of what you accomplished that week. You are to post your documents (even if they are drafts) on Blackboard & post your work.

At any point during the semester, the instructor may ask to see the work you said you completed. **You are required to bring your final project work with you to class each week (digital is fine).** Failure to do so will cause a deduction in point value from your Final Project.

Weekly updates must be placed in your thread under “Final Projects”

**Project Overview**

Congratulations, you have recently posted your resume on GURU.com and there are MANY project opportunities for you. Your final project is to do the following:

1. Create the job that was posted on Guru (it’s okay to copy an existing job)
2. Create your response to the job posting
3. A technical implementation to fulfill that job

Business Section…

1. Explain what the business is that hired you to develop a database (1-3 paragraphs)
2. Provide a brief description of the problem that the business has (1-3 paragraphs)
3. Provide a series of specifications that the business needs
4. Provide at least **8** reports that the business would want to see

2 – GROUP BY type 2 – JOIN type 2 – “Regular” 2 - Sub queries

Database Design

1. Convert the business requirements into a technical specification
2. Provide a copy of the list of assumptions you are making for this project
3. Provide your FIRST ER Diagram (prior to Normalization)
4. Provide your FINAL ER Diagram (after Normalizing to 3NF)
5. For your ER Diagram, explain why your diagram is in the 3NF
6. For each entity, provide a description as to what the purpose of this entity is
7. For each entity, provide approximately how many records this table should have
8. For each attribute, provide a description of what the attribute is supposed to describe

Database Scripting

1. DDL scripts to create your tables (CREATE & ALTER)
2. DML scripts to populate with data (INSERT & UPDATE)   
   ***Each table should have a sufficient amount of data to generate meaningful reports***
3. DML Script for report #1 and the output of your data
4. DML Script for report #2 and the output of your data
5. DML Script for report #3 and the output of your data
6. DML Script for report #4 and the output of your data
7. DML Script for report #5 and the output of your data
8. Provide several DML examples showing data “moving” through your database

Grading will be Points Culm

Quality of your ER Design 30% 30%

“Professionalness” & Cleanliness of your project 20% 50%

Quality of your write-ups & assessments 20% 70%

Accuracy of your SQL & quality of your reports 15% 85%

Relevance of your project to the problem 10% 95%

Robustness of your data 5% 100%

Score: \_\_\_\_/ 100\_