The Goal

Your team has been assigned the task of **developing the system** **to facilitate the reengineering of purchase order generation and invoice processing.** The company you will be working for **needs a system that better serve the customer while reducing costs** (critical requirements).

Decide on a business or industry type to work in. Then, select a type of system to replace or upgrade (conduct a systems analysis first, and then select a system).

Company Info

1. The company/industry you choose will have multiple locations and they must be included in the new system upgrade.

2. The type of industry the team chooses will determine what will be used for security, placement of physical equipment, and how the Network (communication system) will be set up.

3. The team will determine the number of employees in each location (based on purpose of the location and the business type).

4. The system we will change is an Enterprise Resource Planning System (mainframe based).

5. Management requires that any database for these systems will reside on the client/server system, while **backups shall be the responsibility of the database admin.**

6. A consultant suggested for the payroll to be **an automatic payroll deposit with a manual interface** (for special circumstances) **to generate a physical check or a deposit.**

Keep in mind

There is a project in action that has contracts in negotiation. The contracts include agreements on delivery time for ordered materials. This is information that is used in the purchasing department (developing order points and quantities taken out of inventory).

\*\*\* Find a way to update the contracts once they are negotiated in order to assure the purchasing department they are ordering the correct amount of materials.

Database Requirements

1. **Identify and Describe Data Entities**
2. **Document Relationship between Entities**
   1. Use unique identification names for each entity to avoid confusion
   2. Use singular nouns (No attribute groups example: month1, month2, month3)
   3. Start out simple and only in later stages add Foreign Keys
      * 1. Relate every single attribute to the key, nothing but the key
        2. Do not populate the database, but show that it is functional and appropriate for the project.
3. **Must include an Entity Relationship Diagram (ERD)**
   1. Must normalize to the 3rd Normal Form
   2. Add clearly understood comments, documentation, and key explaining symbols
4. **Identify each Relationship between Entities**
   1. ID must describe the relationship (action occurring) between two entities.