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).

Greater Detail

The current system the business is using an Enterprise Resource Planning system (ERP) that runs on mainframe. The goal is to eventually **move the system to a client/server-based system**

( \*at some point)

Hardware specifications, acquisitions, and placement in production will be to satisfy the competed ERP ( \*at some point).

\*\*\* Hardware should include any computing devices for end-user, network file servers, networking equipment, and communications equipment, and Operating Systems.

**The only application we are required to move now is the Payroll system.**

Although, **we will need to purchase an ERP now, the implementation will come later.** Can be purchased from a vendor.

\*\*\* 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.**

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).

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.

Network / Communications Requirements

1. **Determine the Network Requirements and construction**
   1. This includes software, hardware, and communication tech (cables, modems, LAN connection, etc.)
   2. \*\*\* Keep costs in mind (we are doing this to save money in the long run. Document the gross cost of the things we will need.
   3. You may use Windows 2008/2012, Linux, or other systems
   4. Identify programing languages that will be used and why
   5. ID LAN and WAN requirements
2. **Identify and Document type of data that will be distributed**
   1. What type of data will be distributed? Who send and receive this data? Where will this data be distributed?
   2. Develop a location decomposition diagram for the system for this process.
3. **Create location connectivity diagrams** 
   1. This will help document location of buildings and the connections required between them
   2. Use a location connectivity diagram for this portion.
4. **Identify each Relationship between Entities**
   1. Must describe the relationship (action occurring) between two entities.
   2. Develop a legend and description to teach users how to read diagrams.

Include

* Why particular configurations were chosen.
* Only represent major connections in diagrams
* Include one-time purchases (like hardware, cables, etc.) and continual costs (internet or intranet contract costs, licensing deals, cloud servers contract costs if used, etc.)