**Project plan**

This assignment consists of two (2) sections: a design document and a revised Gantt chart or project plan. **You must submit both sections as separate files for the completion of this assignment.**Label each file name according to the section of the assignment for which it is written. Additionally, you may create and / or assume all necessary assumptions needed for the completion of this assignment.

One (1) of the main functions of any business is to transform data into information. The use of relational databases has gained recognition as a standard for organizations and business transactions. A quality database design makes the flow of data seamless. The database schema is the foundation of the relational database. The schema defines the [tables](http://en.wikipedia.org/wiki/Table_(database)), [fields](http://en.wikipedia.org/wiki/Field_(computer_science)), [relationships](http://en.wikipedia.org/wiki/Relational_model), [views](http://en.wikipedia.org/wiki/View_(database)), [indexes](http://en.wikipedia.org/wiki/Index_(database)), and other elements. The schema should be created by envisioning the business, processes, and workflow of the company.

**Section 1: Design Document**

1. Write a five to ten (5-8) page design document in which you:

* 1. Create a database schema that supports the company’s business and processes.
  2. Explain and support the database schema with relevant arguments that support the rationale for the structure. **Note:** The minimum requirement for the schema should entail the [tables](http://en.wikipedia.org/wiki/Table_(database)), [fields](http://en.wikipedia.org/wiki/Field_(computer_science)" \o "Field (computer science)),[relationships](http://en.wikipedia.org/wiki/Relational_model), [views](http://en.wikipedia.org/wiki/View_(database)), and[indexes](http://en.wikipedia.org/wiki/Index_(database)).
  3. Create database tables with appropriate field-naming conventions. Then, identify primary keys and foreign keys, and explain how referential integrity will be achieved.
  4. Normalize the database tables to third normal form (3NF).
  5. Create an Entity-Relationship (E-R) Diagram through the use of graphical tools in Microsoft Visio or an open source alternative such as Dia. **Note:** The graphically depicted solution is not included in the required page length but must be included in the design document appendix.
  6. Explain your rationale behind the design of your E-R Diagram.
  7. Create a Data Flow Diagram (DFD) through the use of graphical tools in Microsoft Visio or an open source alternative such as Dia. **Note:** The graphically depicted solution is not included in the required page length but must be included in the design document appendix.
  8. Explain your rationale behind the design of your DFD.
  9. Create at least two (2) sample queries that will support the organizational reporting needs.
  10. Create at least two (2) screen layouts that illustrate the interface that organizational users will utilize.

Your assignment must follow these formatting requirements:

* Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
* Include a cover page containing the title of the assignment, the student’s name, the professor’s name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.
* **Include charts or diagrams created in MS Visio or Dia as an appendix of the design document. All references to these diagrams must be included in the body of the design document.**

**Section 2: Revised Gantt Chart / Project Plan**

Use Microsoft Project or an open source alternative, such as Open Project,