1. Relational Database Design

Recently I have been obsessed with the old AMC television series Mad Men. So when I first looked at this project I thought it would be interesting to build a database for the company in the show. The main characters run an advertising agency in downtown New York. I noticed three major components to their operations: the creative department, the accounts department, and their billings. The creative department was responsible for creating the advertisement campaigns that would be either in radio, print, or as in the series went on in television. The accounts department was responsible for finding and maintaining new business relationships. This included wine and dinning them. Then the third function was to bill the clients for their work.

In order to create a database I thought about the personnel of the company. This led me to create the Creative table and the accounts table. These tables have the names of the employees in each department. Next I created a Client table because the agency has to have clients in order to function. This table includes the Clients name, address, and the dates of when they started using the firm or left the firm. I also made a Product table connecting to the Client table because clients can have multiple products that they want to bring to the firm. I then created a Project table to show the projects the creative and accounts department are working for the clients. I created a one to many relationship with the Product table and the Project table because a product can have many projects but a project can only have one product. When I created a one to many relationship to the project table with the Creative and Accounts table I assumed that only one creative employee and one account employee could work on a project at a time. I then created a Billing table that connects to the project table. There is a one to many relationship between the Project table and the Bill table because a project might have many bills but a bill can only be charged to one project

