Group 5 Database Project 3: Revised ERD for Mileage Flying

1. What changes were made in the ERD?

First of all, all the wrong crows-foot notations were changed. Some of them were put in the wrong direction or connected to wrong tables. And wrong foreigh keys were deleted or moved to another entity table, in order to make sure that we are not limiting or keeping one data for one variable unchanged forever in a table. Additional tables were added necessarily, for example, the special need type table was added to describe different special needs for diverse customers. Also, gender and citizenship tables were added to keep track of gender and citizenship in a specific format and abbreviation for both customers and staff, because gender and citizenship can have different types of abbreviations, such as USA, US, U.S.A. for just the United States. Lastly, new columns were added to some entity tables to fully accommodate the needs for this business.

1. WHY were these changes made? What were the underlying principles or best-practices that I was following? In other words, how was the ERD better able to accommodate the business needs of the organization both current as well in the future?

The changes listed above help the organization to better accommodate and track their customers and flights. For example, the “TotalMileage” were added to the customer entity table, so that in the future the company can easily know their loyal customers, and may reward coupons, gifts, and other premium rights to them. Also, the “SpecialNeedType '' table was added to help airlines provide better and thoughtful service to those in need. The corrected crows-foot notations made the database more logical and erased ones made it more concise.