BUAD 5272: Database Management
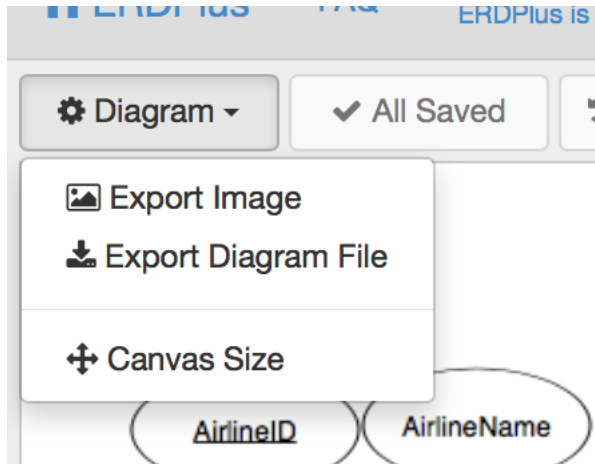**Term: Fall 2018**
Assignment 1

Please draw the corresponding ERD for the following requirements:

You are to assume the role of a database analyst that has been assigned to develop an entity relationship diagram (ERD) for a small outpatient clinic, ReadyClinic. The database will track prescriptions.
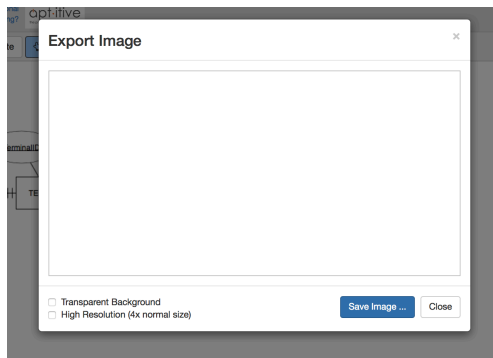
- The ReadyClinic database will keep track of patients, doctors, prescriptions, drugs, pharmacies and pharmaceutical companies.
- For each patient, the database will keep track of a unique patient ID, the patient's name (which consists of the patients first name, patients middle initial and patients last name), patient's date of birth. The patient's age will be calculated when needed.
- For each doctor, the database will capture the doctors NPI (a unique identifier for physicians), the doctor's first name and last name, the expiration date of the doctor's license, in the year the doctor received his/her medical degree. The database will optionally store what country the doctor received his/her medical degree.
- For each prescription, the database will track the unique prescription ID, the dosage, and the date that the prescription was written.
- For each pharmacy, the database will capture a unique pharmacy ID, a pharmacy name, pharmacy address, and several pharmacy phone numbers.
- For each pharmaceutical company, the database will capture the unique pharmaceutical company ID, contact email address, and the name of the pharmaceutical company.
- For each drug, the database will capture the drug formula and drug name (partially unique, i.e. unique for the pharmaceutical company supplies it).
- A doctor is the primary doctor for one or more patients.
  A patient will have exactly one primary doctor.
- The patient can have more than one prescription, but does not have to have any prescriptions.
  A prescription is written exactly for one patient.
- A doctor can write more than one prescription, or may not write any prescriptions.
  A prescription is written exactly by one doctor.
- Each prescription consists of exactly one drug.
  A drug can be contained in more than one prescription or may not yet be used in any prescriptions.
- A pharmacy may sell more than one drug, but doesn't have to sell any drugs.
  A drug could be sold by more than one pharmacy, but it does not have to be sold by a pharmacy (stocked by clinic).
  When the pharmacy sells a drug, the database will capture the price.
- A pharmaceutical company supplies one or many drugs.
  A drug is uniquely supplied by one pharmaceutical company.

Turning in the Assignment

Export your diagram from ERD Plus by selecting "*Export Image* (**do not** select "*Export Diagram File*"):

Click save image, and place the file somewhere on your computer where you can find it.

Rename your file with the following format: YourLastNameYourFirstName (leave the png extension).

Upload this file to Blackboard, under Assignment 1.