Assignment 4 COSC 3336 Spring 2022

Using the Crow's Foot methodology, create an ERD that can be implemented for a medical clinic, using at least the following business rules:

- a) A patient can make many appointments with one or more doctors in the clinic, and a doctor can accept appointments with many patients. However, each appointment is made with only one doctor and one patient.
- b) Emergency cases do not require an appointment. However, for appointment management purposes, an emergency is entered in the appointment book as "unscheduled."
- c) If kept, an appointment yields a visit with the doctor specified in the appointment. The visit yields a diagnosis and, when appropriate, treatment.
- d) With each visit, the patient's records are updated to provide a medical history
- e) Each patient visit creates a bill. Each patient visit is billed by one doctor, and each doctor can bill many patients.
- f) Each bill must be paid. However, a bill may be paid in many installments, and a payment may cover more than one bill.
- g) A patient may pay the bill directly, or the bill may be the basis for a claim submitted to an insurance company.
- h) If the bill is paid by an insurance company, the deductible is submitted to the patient for payment.