

## Thaddeus Stevens College of Technology | CNSA Interview Prompt

### Objective:

1. Use basic conceptual models such as the entity relationship (E-R) model for database design

### Overview:

#### Doctor's Scenario:

XYZ Inc. is a small doctor's office in the heart of downtown. The office comprises of several doctors/physicians that are specialized in various areas such as Pediatrics, Gynecology, ENT, etc. Patients can visit one or many of those doctors. When a patient visits a doctor and a payment is made, the amount is charged to that patient's account. A patient can be diagnosed with one or many ailments (headache, fever, cancer, etc). A record is kept of each patient's visit as well as his or her date of birth for any medication to be prescribed.

#### Requirements:

- (a) *The physician attributes include name, gender, salary, specialty, etc.;*
- (b) *The patient's attributes include name, date of birth, account balance and gender;*
- (c) *A patient can see one or more doctors;*
- (d) *Payment can be made in several ways including visa (other forms), check or cash;*
- (e) *A patient can be diagnosed with one or more ailments;*
- (f) *For each patient visit, the patient's balance amount is updated;*
- (g) *Display a patient's visit and his/her diagnosis(es);*
- (h) *Display summary of visits by diagnosis;*

Using a software of your choice create a UML and an Entity-Relationship Diagram of the above scenario explaining the decision of how you arrive at your final answer.