Project Part 1
Item 1
Team Number: 3
Team Members: Andrew Coffman, Shrey Patel, Michael Colbert (lead)
Database System Name: Vital Pathways Hospital Database
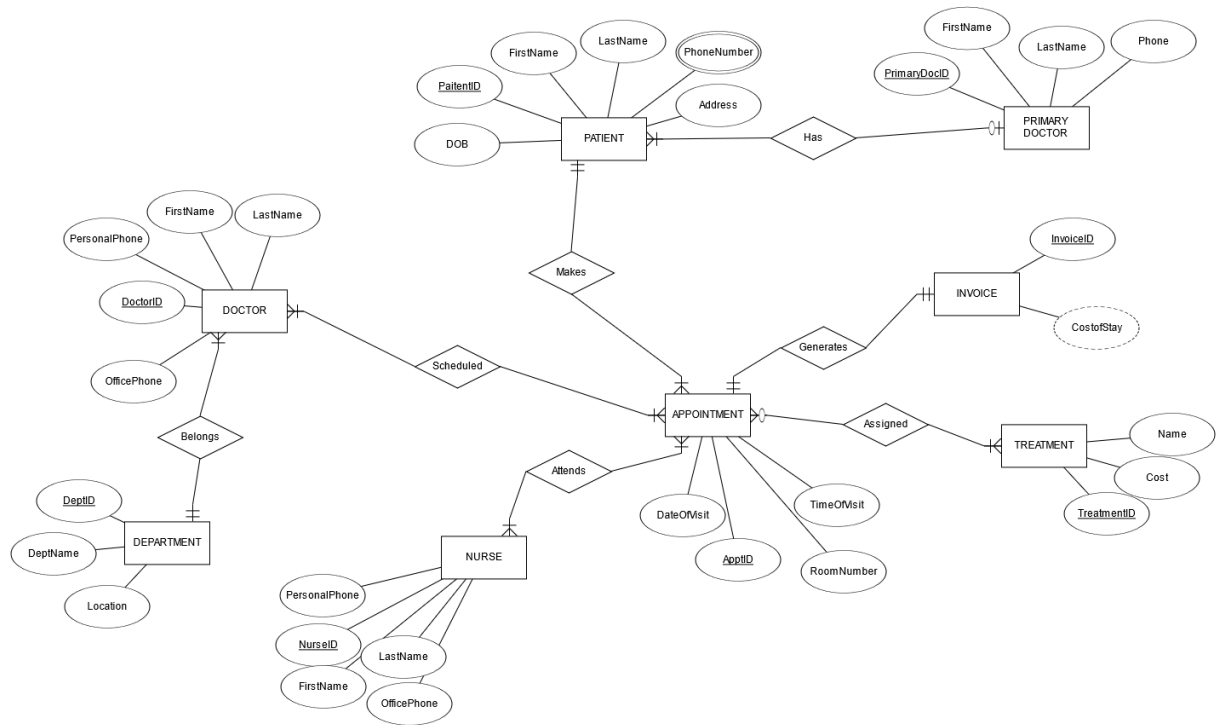
Item 2 - Database Requirements:

The Vital Pathways Hospital Database will keep track of information about patients, primary doctors, doctors, appointments, nurses, treatments, departments, and invoices.

- For each patient, the database will keep track of a unique patient id, the patient's first name and last name, the patient's date of birth, the patient's phone number(s), and their home address.
- For each primary doctor, the database will keep track of a unique primary doctor id, name, phone number, and address.
- For each doctor, the database will keep track of a unique doctor id, the doctor's first name and last name, and a specific personal phone number and office phone number.
- For each appointment, the database will keep track of an appointment id, the start date of the appointment, the starting time of the appointment, and the room the appointment was held in.
- For each nurse, the database will keep track of a unique nurse id, the nurse's first name and last name, and the nurse's personal phone and office phone.
- For each treatment, the database will keep track of a unique treatment id, the treatment's name, the treatment's cost, and the treatment's description.
- For each department, the database will keep track of a unique department id, the name of the department, and the location of the department within the hospital
- For each invoice, the database will keep track of a unique invoice id and the total cost of the stay.
- Each appointment must generate exactly one invoice, and each invoice pertains to only one appointment.
- Each patient may optionally be assigned to a primary doctor, but the doctor must be assigned to at least one patient and can be assigned to many more.
- A patient must have at least one appointment and can have multiple appointments over time, but each appointment is only associated with one specific patient.
- Each doctor is affiliated with one department within the hospital. Each department oversees at least one doctor, but each doctor belongs to exactly one department.
- An appointment must have one treatment and may have multiple treatments. Each treatment may have multiple appointments, but can exist in the database without being assigned to any appointments.
- Each appointment must have at least one doctor assigned, but it can have multiple doctors involved. Conversely, each doctor can be assigned to multiple appointments, and each doctor must be assigned to at least one appointment.

- Each nurse must attend at least one appointment, and may attend to multiple appointments, and each appointment may have 0 nurses, but can have multiple nurses as well.

Item 3 - ER Diagram:

Vital Pathways Hospital DB

Item 4 - Relationship Schema

Vital Pathways Hospital DB