* A short description of the company (feel free to edit your previous description as needed).
* Reasons why the company needs a database (feel free to edit your previous description as needed).

Hospital Management:

To manage dynamic interactions between patients, doctors by logging their appointments and prescriptions. This database can be used by a hospital for managing the doctors and patients.

* Reasons why the company needs a database.
* The system is dedicated to maintaining precise and secure records, covering comprehensive details such as Patient profiles, Doctor information, Treatment records as well as payment and Billing particulars.
* Every hospital needs a enhanced patient and appointment database to have a exact record for the respective future appointments and for the health insurance coverage as well.

Business rules that describe all entities, relationships, and constraints and follow the format used in this class (Example: “Each customer may have a purchase. Each purchase must belong to a customer.”).

* Entities: Patient, Doctor, Appointment, Billing, Prescription
* Relationships (Business rules):

1. Patient (0, n) -----> (Many to Many) Doctor (0, n):

Each patient can make appointments with any number of doctors based on the requirements and availability of doctors. Each doctor can also accept any number of appointments so the relationship will be many to many.

1. Patient (1,1) --------> (One to Many) Appointment (1, n)-> Every patient should have made at least one appointment, and Every Appointment must have only one patient.
2. Doctor (1,1) ---------> (One to Many) Appointment (1, n)->An appointment should have only one doctor and a doctor can take any number of appointments.
3. Each billing should be associated with only one appointment and each appointment should have a prescription. Each prescription should be associated to an appointment.

Prescription (1,1) ------> (One to One) Appointment (1,1)

Billing (1,1) -------------> (One to One) Appointment (1,1

1. NEW BUSSINESS RULE:

There is a many to many relationships between doctor and patient which can be simplified by adding a associative entity.

Treatment entity can be added to the existing Data Model, A patient can undergo any number of treatments and a treatment can be associated to one patient. A doctor can provide any number of treatments and each treatment must have a doctor. The cardinality between Patient and Treatment will be one to many and between Doctor and Treatment will be many to many. Only one patient and one doctor should be associated with the treatment.

A diagram of a computer

Description automatically generated