DATA MANAGEMENT AND DATABASE DESIGN

PROJECT_2

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Introduction:

- Background:

As per the current COVID-19 pandemic scenario, hospitals and governments are having hard time keeping track of the recovered and active COVID patients and plasma donors. In instances, it also has been observed that the plasma is issued to low-risk patients who do not have immediate necessity instead of high-risk patients. The existing system is based on assessment of biographical information and medical history of the donors and patients which is inefficient and does not incorporate key data like results of COVID tests, real-time health status of donors, current patients admitted and donors nearby hospitals, the demographical and geographical data of the hospitals etc. Considering this, there is a necessity of implementation of database management system in the aforementioned data system.

- Goal

The objective of this master's project is to create a database to centrally handle the information of all the Hospitals, Patients, Doctors and Plasma Banks in a region, and to provide access to this information with an easy to use web-based interface that can be accessed by any device with basic html rendering capabilities.

Attributes:

1. Hospitals
2. Doctors
3. Patients
4. Plasma Banks

Entities:

HOSPITAL	DATATYPE
Hospital Number	Integer
Hospital Name	Varchar (20)
Hospital Location	Varchar (20)
Patient Count (Active and Recovered)	Integer
Patient ID	Integer

PATIENTS	DATATYPE
Patient ID	Integer
Patient Name	Varchar (20)
Patient Age	Integer
Patient Status	Varchar (Active/Recovered)
Patient Blood Group	Varchar

PLASMA BANKS	DATATYPE
Plasma Bank Number	Integer
Plasma Bank Name	Varchar (20)
Blood Groups	Varchar
Available Plasma Inventory	Integer
Patient Blood Group	Varchar

DOCTORS	DATATYPE
Doctor ID	Integer
Doctor Name	Varchar (20)
Hospital Number	Integer
Patient ID	Integer

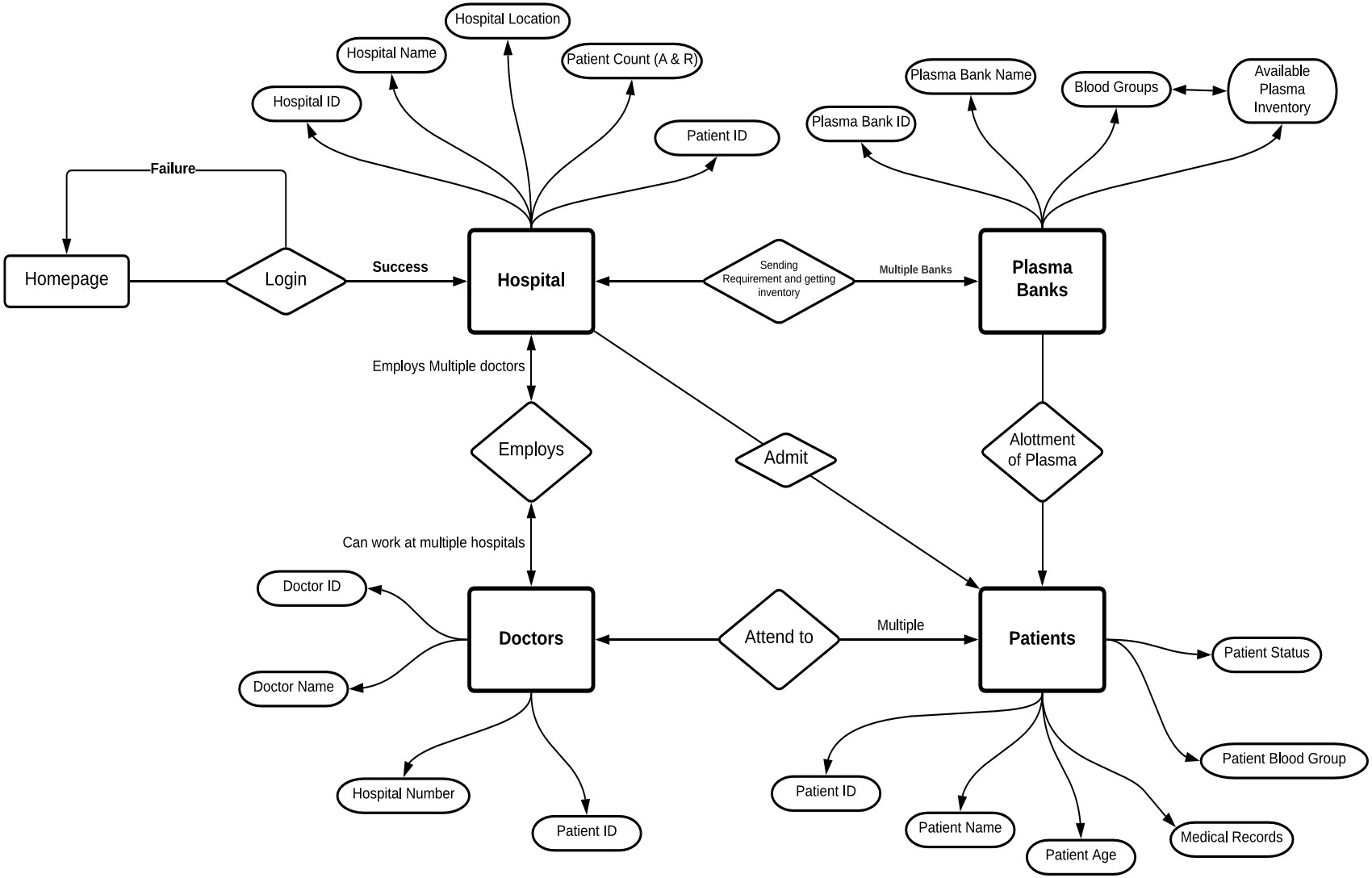

Fig.: Entity-Relationship Diagram