Entity Relationship Diagram (ERD)

Departments
DepartmentID, Name, Location

One-to-Many

Doctor
DoctorID, Name, Specialization
Phone, DepartmentID(FK)

One-to-Many

Appointments
AppointmentsID, Date, Time,
Status, DoctorID(FK),
PatientID(FK)

Patients
Patients ID, Name, Age
Gender, Phone,

One-to-Many
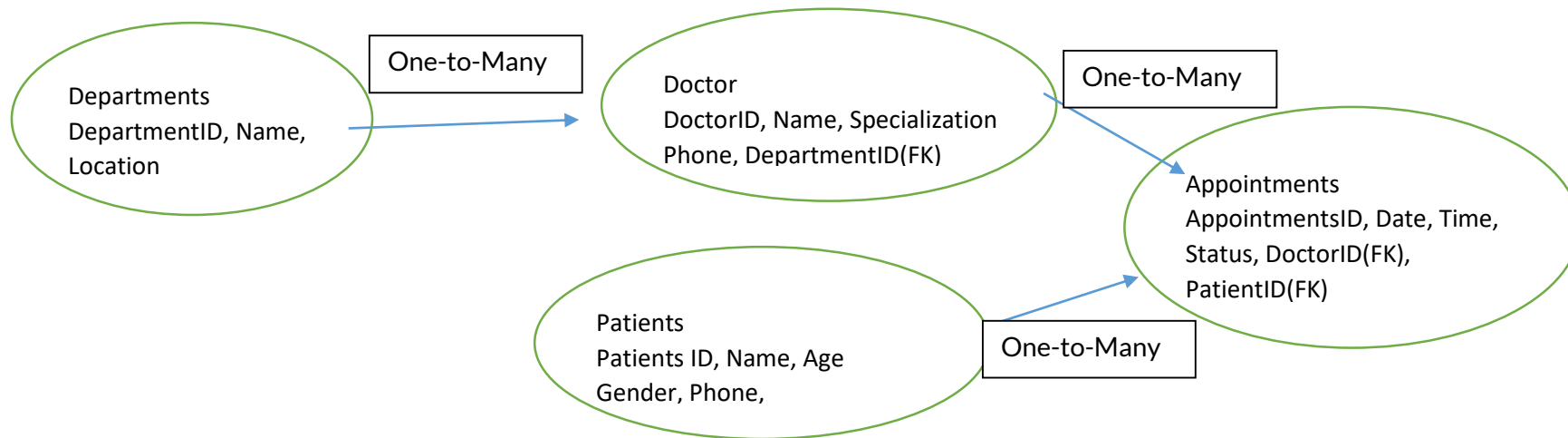
Hospital Management System Database Design Project

1. Entity Relationship Diagram (ERD)

The ERD will illustrate the relationships between the entities (tables) and their attributes. The relationships can be defined as follows:

- **Doctors**: Primary key is DoctorID.
- **Patients**: Primary key is PatientID.
- **Appointments**: Primary key is AppointmentID. Foreign keys: DoctorID (references Doctors), PatientID (references Patients).

- **Departments**: Primary key is DepartmentID. Foreign key: DoctorID (a doctor belongs to a department).

Diagram Components:

- Doctors to Appointments: One-to-Many (A doctor can have multiple appointments).
- Patients to Appointments: One-to-Many (A patient can have multiple appointments).

Departments to Doctors: One-to-Many (A department has multiple doctors).