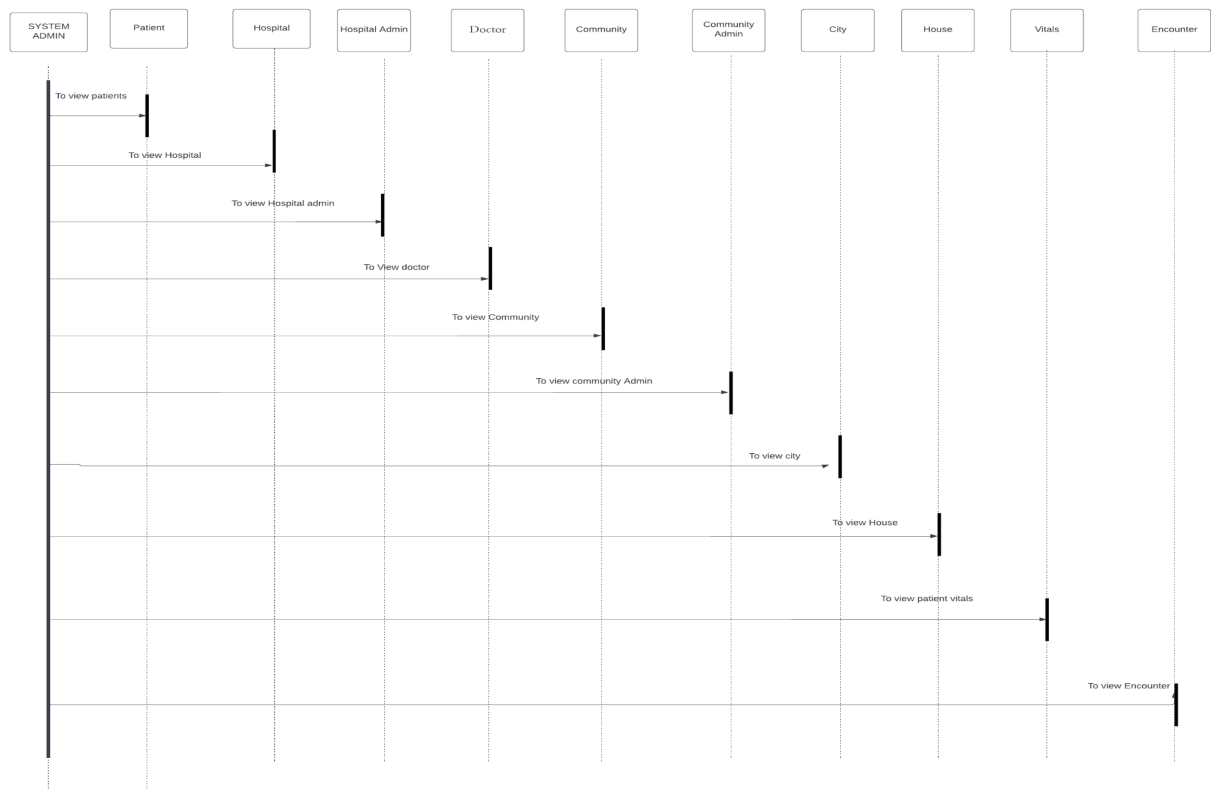# Assignment 2 Medical Resources

This application creates an access to people in order to find various health and medical resources around the city. This application can be widely used for cities and states as well. Due to its simplified version, this platform enables selective access to selective classes such as doctors, hospital admin, system admin etc.

System Admin Sequence Admin

The System admin is a selective entity who has access to all fields that include Patient, Hospital, Hospital admin, Doctor, Community, Community Admin, City, House, Vitals, Encounter. Data fields such as Patient name, Doctor name and id, community id, hospital id, House id and name are entitled under these fields.

The System admin can primarily CRUD i.e Create, Read, Update, Delete data in all the mentioned classes and data fields.

Hospital Admin Sequence Admin
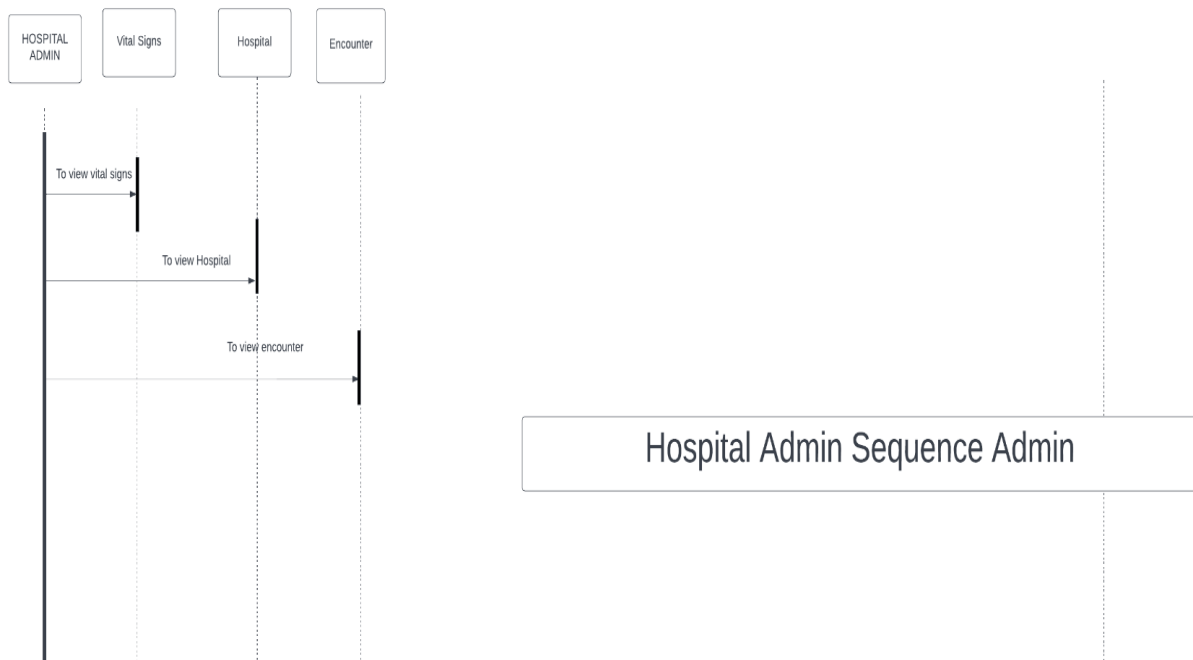
All the Hospital Data is managed by Hospital Admin. By having access to vital signs; hospital admin can analyse a patient's blood pressure, body temperature, heart admin etc. By encounter field, hospital admin has a clear knowledge of the number of times and which dates the patient has appeared for an appointment with the hospital.

Hospital admin is entitled to create CRUD (Create, Read, Update and Delete) operations of data.

```
COMMUNITY        Community        Hospital         City            House
  ADMIN

  │                  │               │               │               │
  │ To view community│               │               │               │
  │─────────────────▶│               │               │               │
  │                  │               │               │               │
  │      To view Hospital            │               │               │
  │─────────────────────────────────▶│               │               │
  │                  │               │               │               │
  │              To view City        │               │               │
  │─────────────────────────────────────────────────▶│               │
  │                  │               │               │               │
  │                  To View House   │               │               │
  │─────────────────────────────────────────────────────────────────▶│
```

Community Admin Sequence Admin
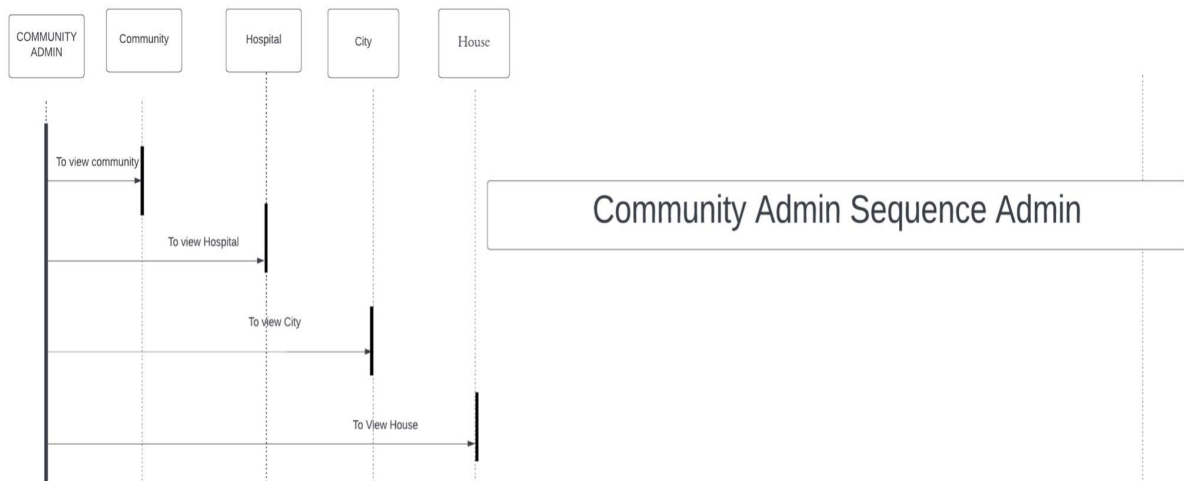
Typically all the community data is well managed by the community head, here as in community admin. City names, City ids could be viewed under the community field entity as well as all the nearby Hospitals and medical resources near houses.

Community head also has access to CRUD (Create, Read, Update and Delete) operations of data.

DOCTOR   Encounter   Vital Signs

To view encounter

TO manage Encounter

To view vital signs

Doctor Sequence Admin
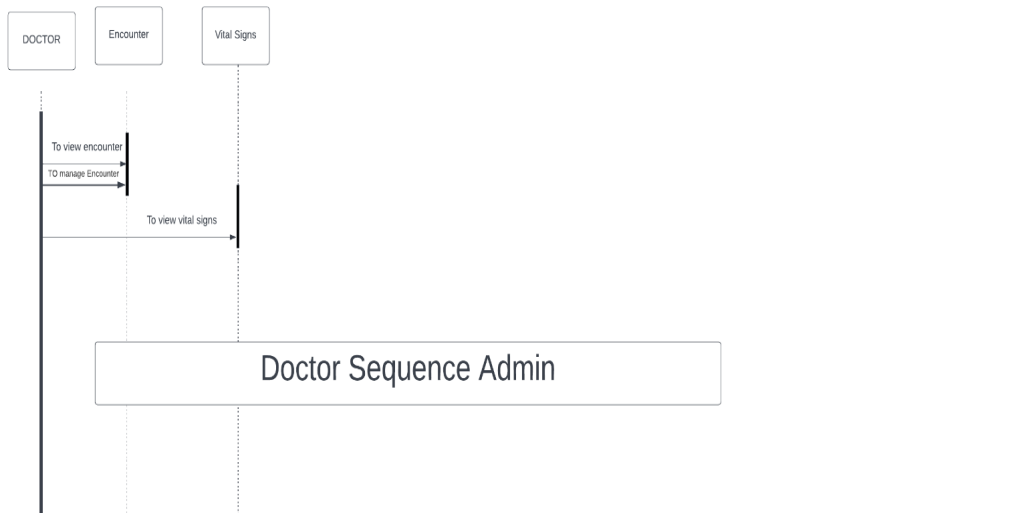
Doctor is entitled to have access to all the encounters the patient has previously had with the hospital. Encounter meaning appointments also give information on patients vital signs that display a patient's medical history.

All the encounters and vital signs are accessible to the doctor.

PATIENT | Encounter | Doctor

To view encounter

To view Doctor

Patient Sequence Admin

A Patient is typically a human being who has a necessity to view medical resources and visit a hospital and schedule an appointment.

The patient entity has access to patient id, patient name and patient username and password.

Patient also can view all the appointment (encounters) that are scheduled with the hospital.

CLASS DIAGRAM :-

Assignment 2 class diagram

Patient
- PatientId : String
- PatientName : String
- HouseName : String
- CommunityId : String
- UserName : String
- Pwd : String
- HospId : String

+getPatientId()
+getPatientName()
+getHouseName()
+getCommunityId()
+getUserName()
+getPwd()
+getHospId()
+setPatientId(String PatientId)
+setHouseName(String HouseName)
+setCommunityId(String CommunityId)
+setUserName(String UserName)
+setPwd(String Pwd)
+setPatientName(String PatientName)
+setHospId(String HospId)

Doctor
- docID : String
- docName : String
- hospID : String

+getDocID()
+getDocName()
+getHospID()
+setDocName(String docName)
+setDocID(String docID)
+setHospID(String hospID)

Hospital Admin
- hAdminId : String
- hAdminName : String
- hAdminUserName : String
- hAdminPassword : String

+gethAdminId()
+gethAdminName()
+gethAdminUserName()
+gethAdminPassword()
+sethAdminId(String hAdminId)
+sethAdminName(String hAdminName)
+sethAdminUserName(String
hAdminUserName)
+sethAdminPassword(String hAdminPassword)

Community Admin
- id : String
- userName : String
- password : String
- name : String

+getName()
+getId()
+getUserName()
+getPassword()
+setName(String name)
+setId(String id)
+setUserName(String userName)
+setPassword(String password)

System Admin
- sysID : String
- sysName : String
- sysUsername : String
- sysPassword : String

+getSysID()
+getSysName()
+getSysUsername()
+getSysPassword()
+setSysID(String sysID)
+setSysName(String sysName)
+setSysUsername(String sysUsername)
+setSysPassword(String sysPassword)

Encounter
- date : String
- pid : String
- did : String
- VitalId : String

+getPid()
+getDid()
+getVitalId()
+getDate()
+setPid(String pid)
+setDid(String did)
+setVitalId(String VitalId)
+setDate(String date)

Vital Signs
- date : String
- pulse : int
- age : int
- bodyTemperature : double
- respirationRate : int
- bloodPressure : double
- patientId : String

+getDate()
+getPulse()
+getAge()
+getBodyTemperature()
+getRespirationRate()
+getBloodPressure()
+getPatientId()
+setDate(String date)
+setPulse(int pulse)
+setAge(int age)
+setBodyTemperature(double
bodyTemperature)
+setRespirationRate(int respirationRate)
+setBloodPressure(double bloodPressure)
+setPatientId(String patientId)

House
- houseName : String
- houseId : String
- communityId : String

+getHouseName()
+getHouseId()
+getCommunityId()
+setHouseName(String houseName)
+setHouseId(String houseId)
+setCommunityId(String communityId)

Hospital
- hospitalId : String
- hospitalName : String
- communityId : String

+getHospitalId()
+getHospitalName()
+getCommunityId()
+setHospitalId(String hospitalId)
+setHospitalName(String hospitalName)
+setCommunityId(String communityId)

Community
- communityName : String
- communityId : String
- cityId : String

+getCommunityName()
+getCommunityId()
+getCityId()
+setCommunityName(String
communityName)
+setCommunityId(String communityId)
+setCityId(String cityId)

City
- cityName : String
- cityId : String

+getCityName()
+getCityId()
+setCityName(String cityName)
+setCityId(String cityId)