IMES

IMMEDIATE MEDICAL EMERGENCY SYSTEM

<u>ABSTRACT</u>

Immediate Medical Emergency System (IMES) provides a instantaneous medical support in accordance with the requirements. It navigates the Ambulance or the User to nearest Hospital which provides medical-aid as requested to improve patient's condition. This software helps in increasing the chance of survival in critical cases.

There is an application in Android which takes the requirements such as location coordinates, medical requirements etc. from user end and store it at firebase.

Data from firebase extracted and send to the R server where server extracts location data from the database of the hospitals and then analyzes most suitable hospital using R analysis. After analyzing the nearest hospital it further checks for the availability of beds/wards in the hospital and then further it checks and analyzes the availability of doctors for that particular situation or medical condition. After arriving at a conclusion for the best suitable hospital it returns the coordinates for that particular hospital to the app. And then redirecting those coordinates on the google maps enrouting user with the best route directly to that hospital.

TECHNICAL DETAILS:

PLATFORM:

1)Django

2)RStudio

3)Android Studio

4)FireBase

LANGUAGES:

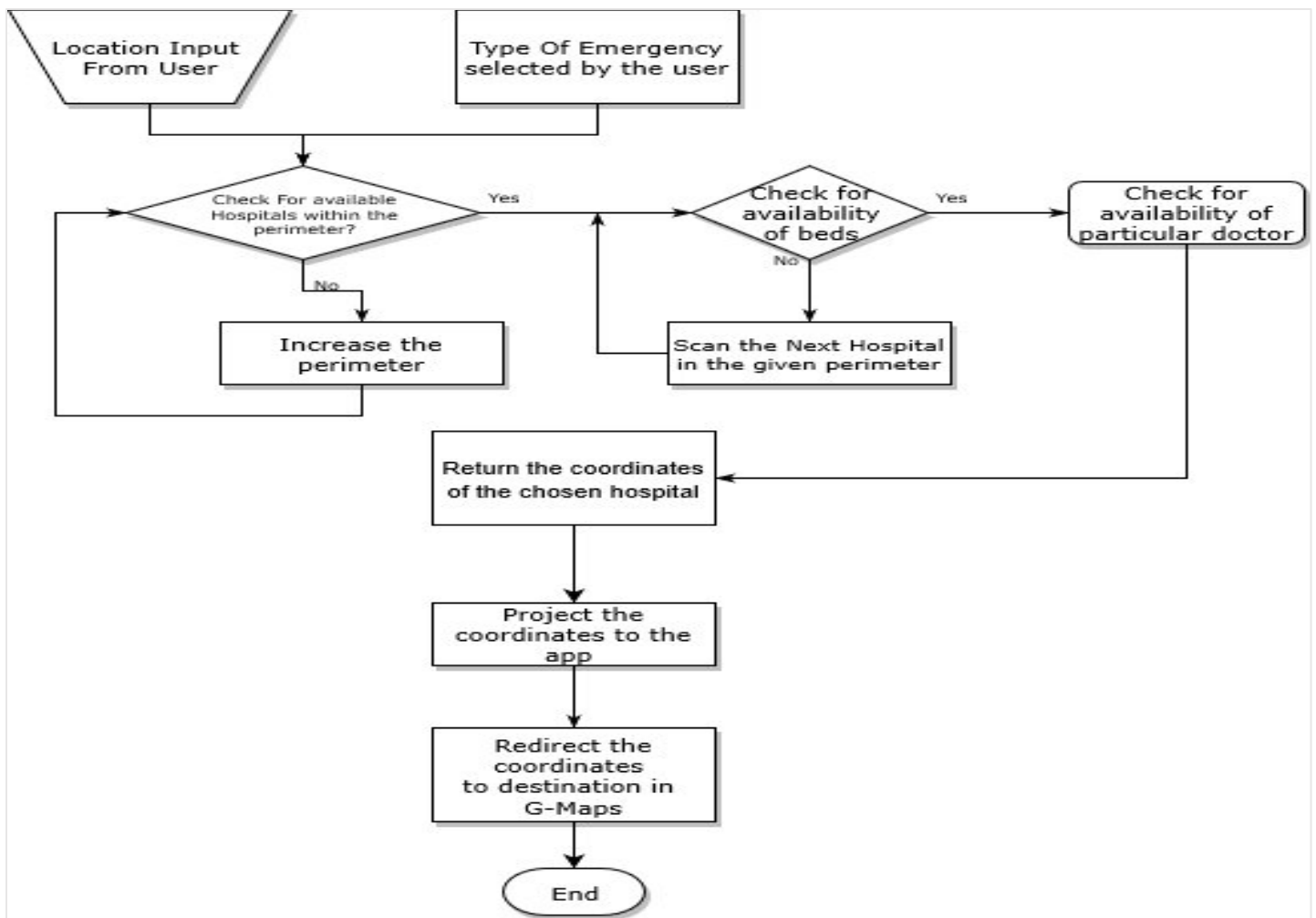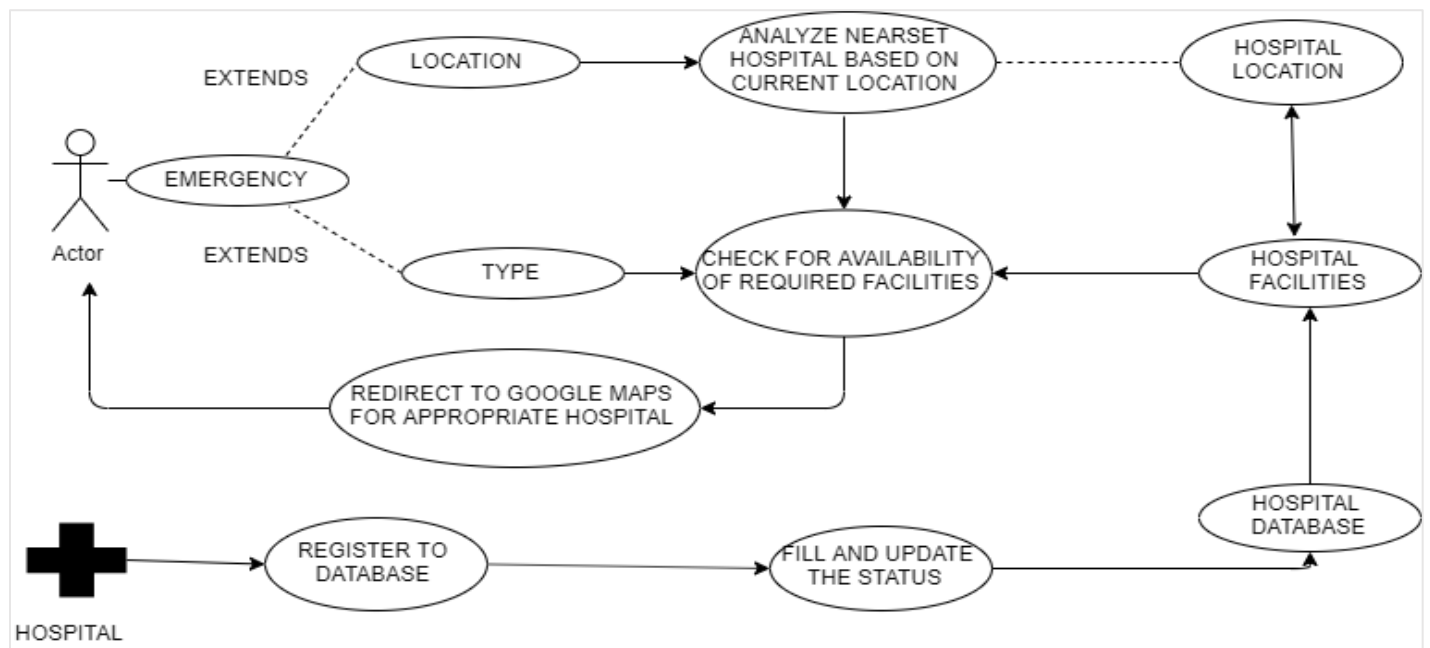1)Python

2)R

3)Java

LIBRARIES:

1)RJSONIO

2)RCurl

3)DBI

4)odbc

5)RSQLite

6)fireData

ARCHITECTURE DIAGRAM:

USECASE:

DETAILED DESIGN OF MODULES:

Modules created (Registration End):

- CustomUser / HospitalUser
  - Username
  - Password
  - Hospital name
  - Hospital registration
  - Hospital telephone
  - Hospital address
  - Hospital Pincode
  - G-maps cords latitude
  - G-maps cords longitude
  - Facilities
  - Doctors
  - Total Number of beds
  - Total Number of wards
- Doctors
  - Doctor name
  - Doctor id
  - Registration Number
  - Specialization
  - Patient
- Patient
  - Patient id
  - Patient name