Mini Project

Project Name : E-Health Portal

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Guided By :

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Project Title : E-HealthCare

The proposed system is an website designed , integrated with deep learning algorithms that fetches the information of patients diagnosis from the records, prescription given by doctor during each treatment, so that doctor will able to know past history of patient any time, which will help the doctor to analyse the diseases of patient. The patient's data will be authenticated via aadhaar id. The patient will be able to remotely access the health related data anywhere at anytime via aadhaar id.

Literature Review :

- So far the healthcare is the big point of concern in the today's world . There are system which holds the patients data digitally but due to the fact that every system can't be accessed remotely by patients.
- Most of the multi-speciality hospital maintain the records of patients which are never use in the future for any purpose .
- There is no system which is actively working globally for the patient's data handling and analysis.

Scope of project :

In current scenario, patient visit doctor each time and this data of diagnosis is just kept on piece of paper which may lost anytime.

Some diseases of patient depends on past treatment hence it is important to preserve the data of patient during each treatment securely so that doctor can easily access that data and know about the diseases suffered by patient and cure the patient has taken. Depending upon the data doctor can give prescription.

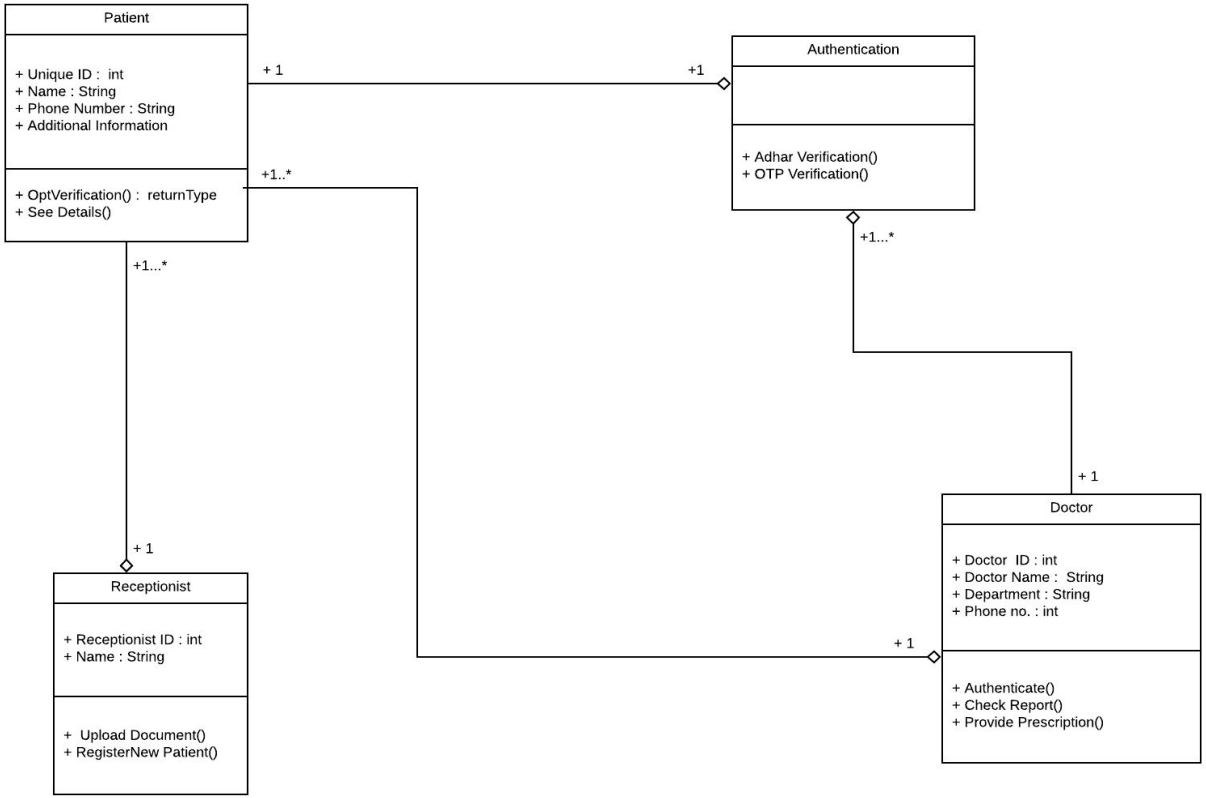
Objective :

- To make the healthcare system more effective via giving the option to past data analysis.
- Centralizing the Patient’s data and remote access for patient.
- To study the Concepts of Deep Learning , Angular 6 , NodeJS and MongoDB.
- To implement the Convolutional and Recurrent Neural Network Model .
- To implement NodeJS and Angular 6 for System Interface.
- Reducing the misleads in judging the patient’s condition.

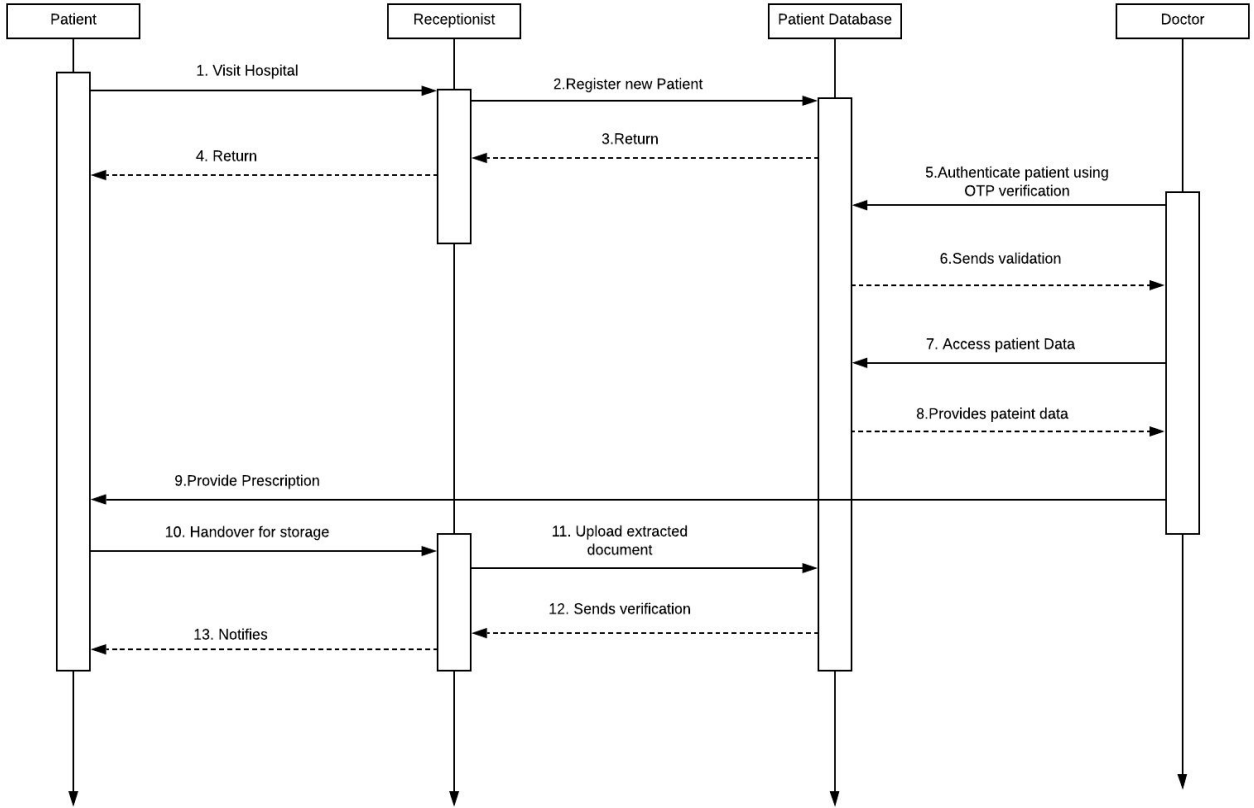
Methodology :

- The E - Health Portal will be implemented using the Angular 6 , NodeJS and MongoDB. Since the data is user need then NodeJS is best in the business.
- The reports will be scanned and uploaded . The data from reports will be extracted using CRNN model for Optical Character Recognition.
- CNN will be use for the feature extraction and LSTM for the sequence character prediction.
- CTC (Connectionist Temporal Classification) is use to provide the probabilistic character prediction from character score .
- The user will be uniquely identified by using Aadhaar ID and OTP will be use for proper authentication while updating the account.

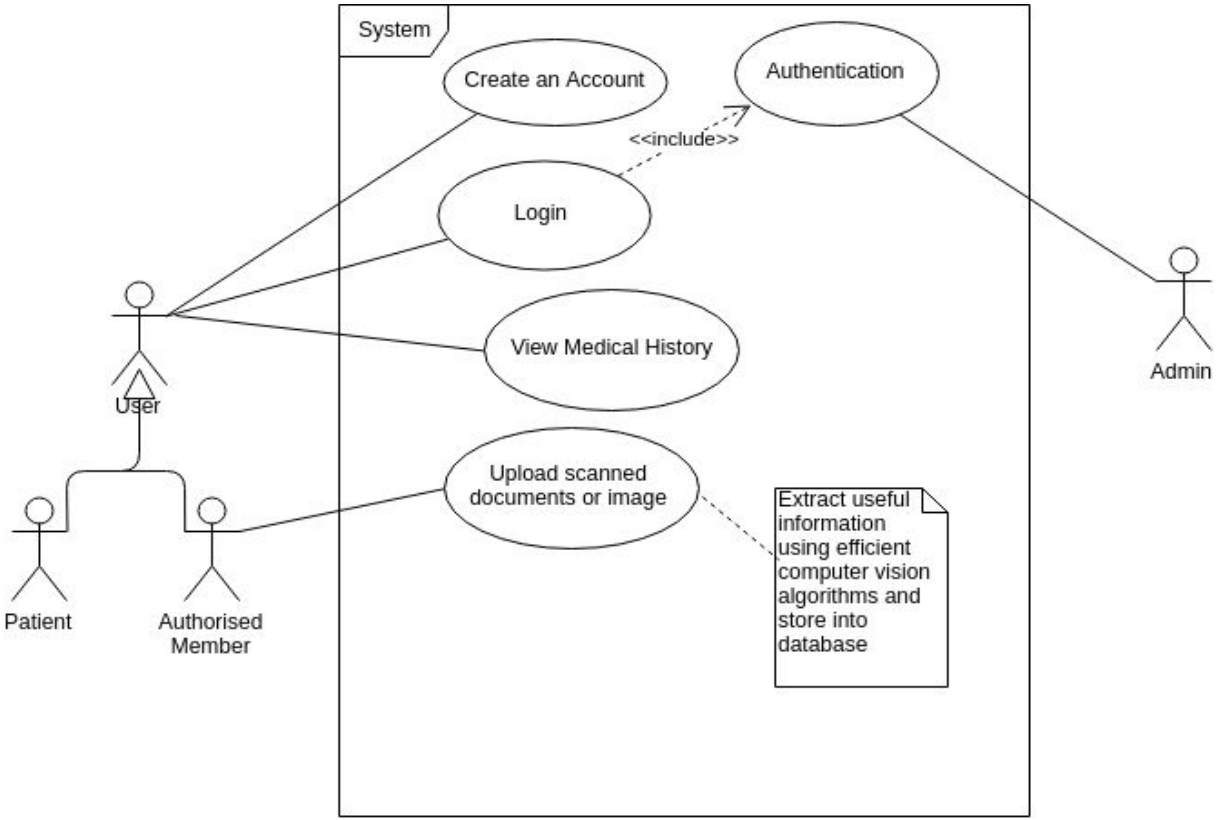
Class Diagram :



Sequence Diagram :



Use Case Diagram :



Future Scope:

- The statistics of this system can be used to monitor the diseases in the country.
- The project can used by government to predicts the future thrust in the medical era.
- This can be useful for creating healthcare network in the country which will help the doctor to redirect the patients properly among the themselfs.

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THANK YOU