IACSD

INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT AKURDI, PUNE

Documentation On

"Government Healthcare System"
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1. Introduction

Generally, in now a day's all the government hospitals are not providing services as we are expecting like campus clean-up, best doctors etc and there no one to observe doctors work, how is the hospital campus and what are the past feedbacks of patients , are they satisfied with their services and what is the average success rate of doctors etc so our "Government Healthcare System " provides or allows to take patients online appointments, feedback and one of the state health officer can monitor on all the government doctors and hospitals over the patients feedback .

Document Purpose

Government Health care system is a web based application is intended to improve entire Governments hospitals working process in the states. This System provides a facility to patients, to online schedule an appointment with a doctor for check-up. For doctors This System Provide a facility, they can have access to see the history reports of patients. This system also provides facility to admin who is health officer, admin role is to monitor doctor's work and have access to see all the doctor's success rate as well as patients feedback towards doctor.

Following services:

Enhance in Hospitals Inspection:
In this system patients can give the feedback about hospital and doctor, health officer can see all the feedbacks and over the feedback health officer can easily monitor their service.

Online Appointment:
Patient can schedule their appointments online to their nearest government hospitals.

History Report :
This system provides facility for doctors to check the patient history report.

Patient's Feedback :
Allows patients to give their feedback about doctor and hospital.

Problem Statement

 Generally, in now a day's all the government hospitals are not providing services as we are expecting like campus clean-up, best doctors etc. and there no one to observe doctors work, how is the hospital campus and what are the past feedbacks of patients , are they satisfied with their services and what is the average success rate of doctors etc. Hence this system is proposed to overcome the flaws of the existing system and giving power to the admin who is health officer to monitor on government doctors and hospitals.

Product Scope

- This system allows patients to schedule appointment and cancel appointment.
- Doctors have access to see all the upcoming appointments and patients history report.
- In this system doctors can make prescriptions and doctors can take a printout of that prescription for patients.
- This system allows admin to monitor all doctors and hospitals success rate.
- This System allows mailing service to patients.

Aims & Objectives

Specific goals are: -
- To produce a web-based system that allow the admin to monitor on all the government doctors and hospitals.
- To easy patients to Schedule their appointments online.
- To ease for doctors to check patients history report

Overall Description:

Overview:

This system Improves the Existing government hospitals working system. With this system patients can easily schedule their appointment with their nearer government hospital. Doctors have a access to see all the upcoming appointments and according to appointments regular check-up will be done. And there is admin who is state health officer, admin role is to observe the doctors work, how doctor behaves towards the patients with patients feedback, and also admin have access to see the success rate of all the doctors.

Users and Characteristics:

Admin:

- Admin can login to system.
- View the list of all Doctors and Hospitals.
- View the review of doctors and hospitals.
- View the Feedback of patients .

Patients:

- Patient can login to system

- Patient can schedule Appointment

- Patient can view history appointments

- Patient can fill feedback

Doctor:

- Doctor can login to system
- Doctor can view upcoming appointment list
- Doctor can view Patient profile

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space
RAM: Minimum 2GB

OS:
Windows 8.1, Linux 6

Client Side (minimum requirement):

Processor: Intel Dual Core

HDD: Minimum 80GB Disk Space

RAM: Minimum 1GB

OS: Windows 7, Linux

Technologies:-

- Angular 10
- Spring Boot Rest Api
- Mysql

Non-Functional Requirements

1.Security:

The System use SSL (Secure Socket Layer) in all transactions that include any confidential customer information.

The system must automatically log out all customers after a period of inactivity.

The system should not leave any cookies on the customer's computer containing user's password.

The system's back-end servers shall only be accessible to authenticated administrators.

Sensitive data will be encrypted before being sent over insecure connections like internet.

The proper firewalls should be developed to avoid intrusions from the internal or external sources.

2.Reliability:

The system provides storage of all databases on redundant computers with automatic switchover.

The main pillar of reliability of the system is the backup of the database

Which is continuously maintained and update to reflect the most recent changes.

3: Availability:

The system should be available at all times. Meaning the user can access it using web browser, only restricted by the down time of the server on which the system runs.

In case of a of a hardware failure or database corruption, a replacement page will be shown.

4: Maintainability:

A commercial database is used for maintaining the database and application server takes care of the site.

The maintainability can be done efficiently.

5.Portability:

The application is HTML and scripting language based (JavaScript). So the end user part is fully portable and any system using any web browser should be able to use the features of the system, including any hardware platform that is available or will be available in the future.

An end-user is used this system on an OS;either it is Windows or Linux.

The System shall run on PC, Laptops and PDA.etc.

The technology should be transferable to different environments easily.

6.Accessibility:

Only registered users should be allowed to process the to schedule appointment after authentications.

Only GUI access of the system should be permitted to end users.

7.Policies:

The system should adhere to all the legal formalities of the particular countries.

The system should maintain security related to sensitive data.

8.Efficiency:

The system should provide good throughput and response to multiple users without burdening the system by using appropriate number of servers.

9.Safety:

Software should not harm ethical and environmental conditions of the end users machine.
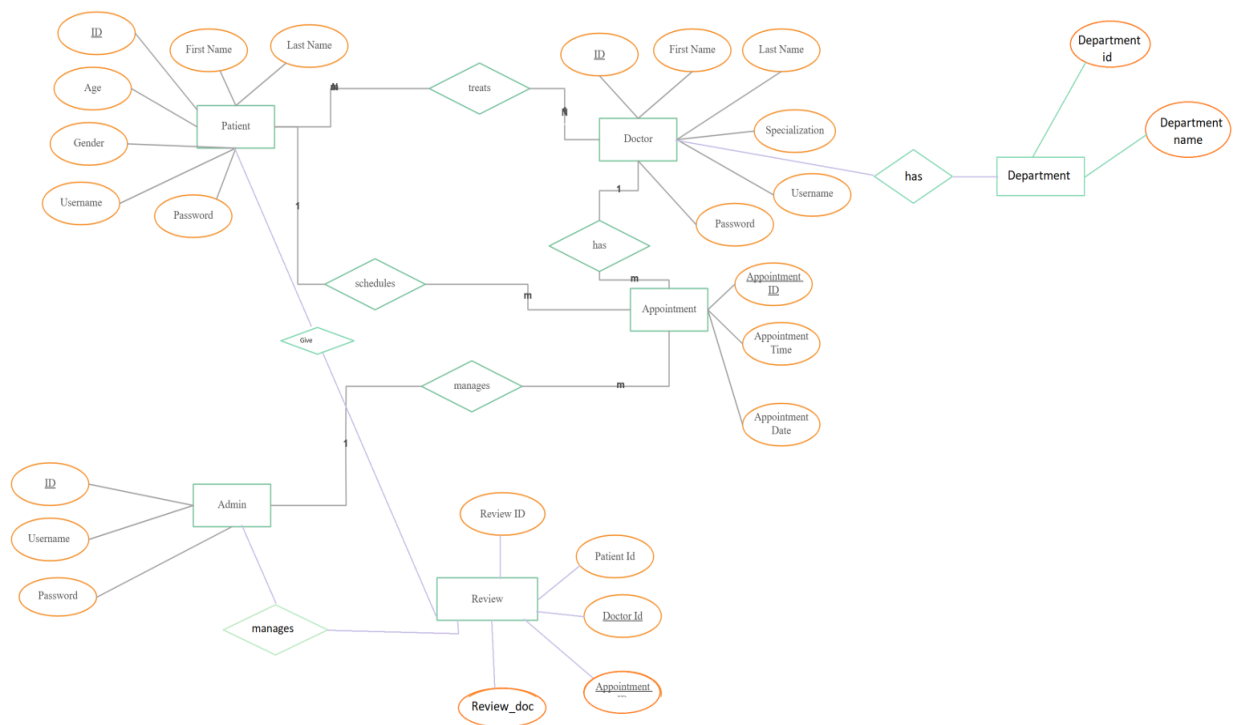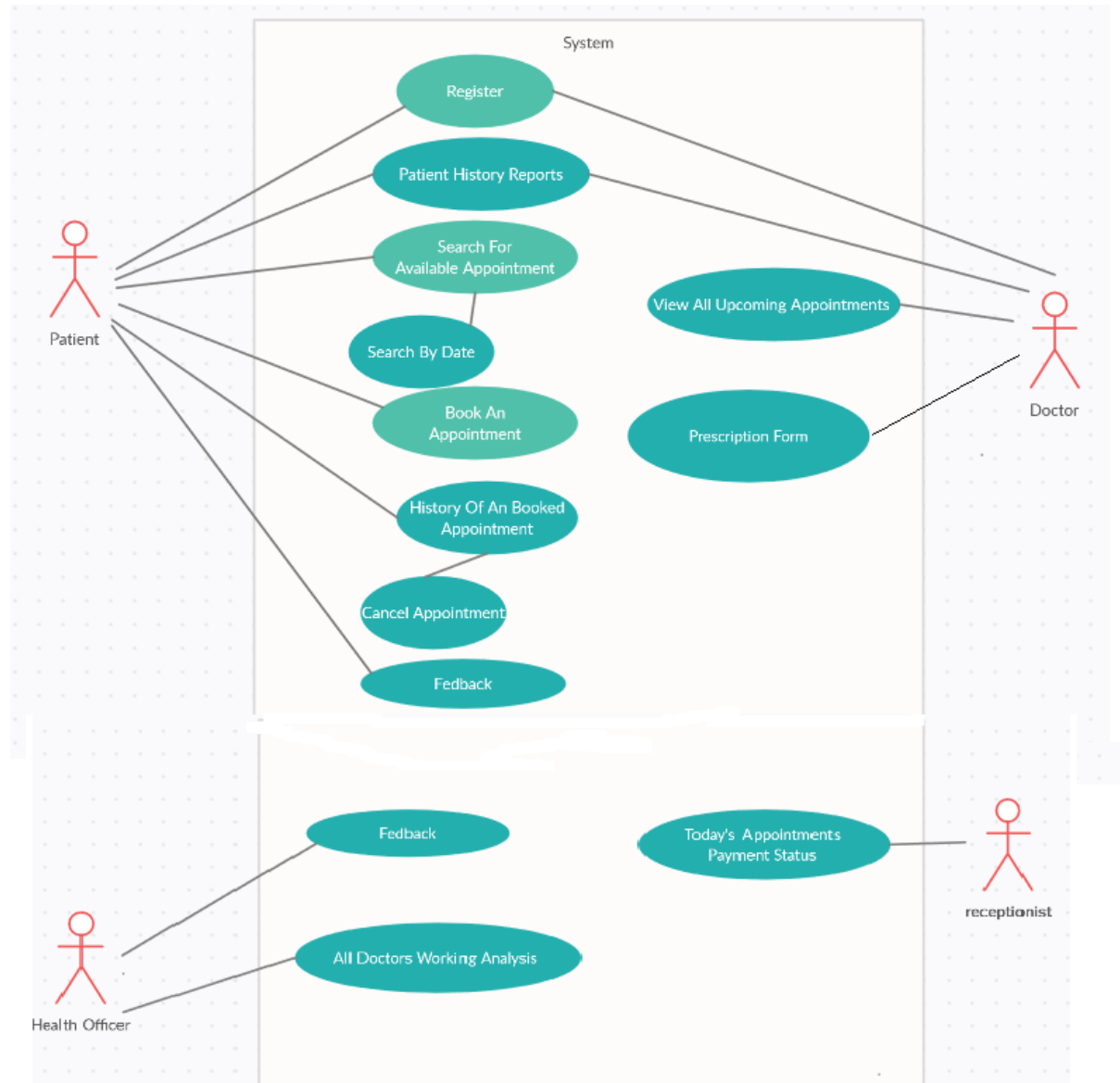
10.Modulariy:

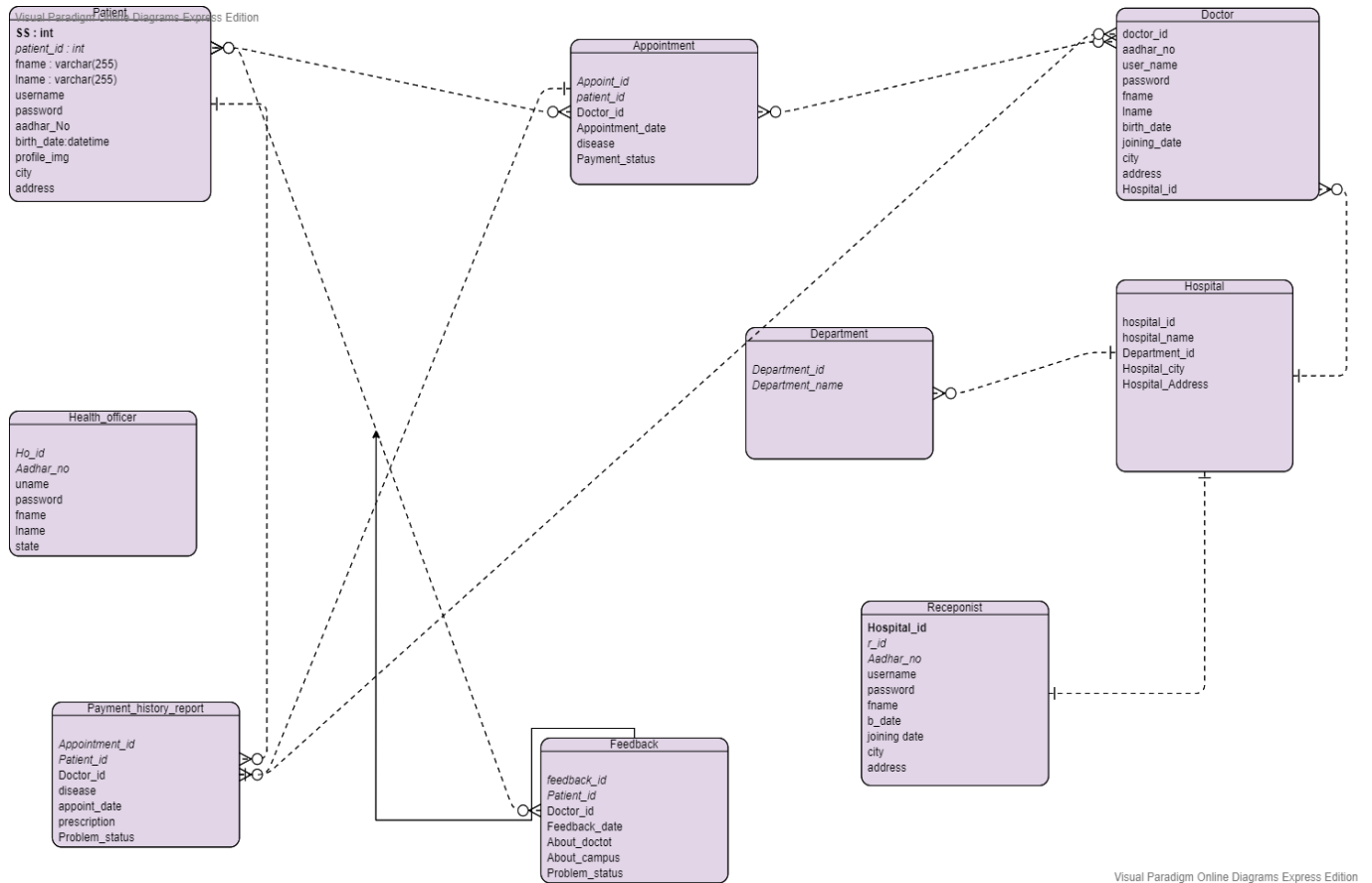The system should have user friendly interface.

It should be easily updated, modified and reused.

System Design:

Class Diagram:-

Use-Case Diagram:

ER Diagram:

Patient

SS : int
patient_id : int
fname : varchar(255)
lname : varchar(255)
username
password
aadhar_No
birth_date:datetime
profile_img
city
address

Appointment

Appoint_id
patient_id
Doctor_id
Appointment_date
disease
Payment_status

Doctor

doctor_id
aadhar_no
user_name
password
fname
lname
birth_date
joining_date
city
address
Hospital_id

Hospital

hospital_id
hospital_name
Department_id
Hospital_city
Hospital_Address

Department

Department_id
Department_name

Health_officer

Ho_id
Aadhar_no
uname
password
fname
lname
state

Receponist

Hospital_id
r_id
Aadhar_no
username
password
fname
b_date
joining date
city
address

Payment_history_report

Appointment_id
Patient_id
Doctor_id
disease
appoint_date
prescription
Problem_status

Feedback

feedback_id
Patient_id
Doctor_id
Feedback_date
About_doctot
About_campus
Problem_status

Conclusion:-

Government HealthCare System improves the current government hospital monitoring process and by observing the patients feedback they can improve the government medical service and patient also can schedule their appointments online.

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