People's Doctor – An effort to use technology to bring expert medical help to the needy at no cost.

Introduction

People's Doctor is a web application that serves as an exchange of philanthropic medical consulting given *free* by expert Doctors to people who are in need of it.

The system will register doctors, their specialities, consulting hours, locations and such in a schedule that will be published online. Multiple channels such as email notification, SMS alerts, facebook posts and messages on the website will be used to disburse information about a new schedule or change in a schedule (including cancellation).

Patients needing services can look up the services in an interactive manner based on a map and predefined search parameters such as city, location, speciality and so on. They can register to make an appointment, make or cancel appointments and update their profiles.

YouSee Administrators should be able to add and approve Doctors, Patients registering in the System and update their data. They should be able to approve/reject/change schedules and perform other administrative tasks.

Use Cases

Add Patient **Register a new Patient into the System.**

Actor: Patient – Patients can register themselves.

Test Scenario	**Outcome**
All Details are correctly entered	Patient is registered successfully and an email is sent to the Administrator and the Patient with relevant details.
Email format is incorrect	Throw error message
Mobile has non numerics	Throw error message
First Name not entered	Throw error message
Last Name not entered	Throw error message
Phone number not entered	Throw error message
Captcha not correctly entered	Throw error message

The form to add a patient should have similar look and feel as the donor/NGO registration page. Most of that code can be reused. Patient details must be entered in the Peoples_Doctor database and a table called Patient in YouSee Database. This is to enable a single sign-on for Doctors and Patients into the system(Yousee and Peoples_Doctor).

Add Doctor **Register a new Doctor into the system.**

Actor: Doctor – Doctors can register themselves.

Test Scenario	**Outcome**
All Details are correctly entered	Doctor is registered successfully and an email is sent to the Administrator and the Doctor with relevant details.
Email format is incorrect	Throw error message
Mobile has non numerics	Throw error message
Picture file is not a valid image file	Throw error message
First Name not entered	Throw error message
Last Name not entered	Throw error message
Phone number not entered	Throw error message
Captcha not correctly entered	Throw error message

The form to add a patient should have similar look and feel as the donor/NGO registration page. Most of that code can be reused. Doctor details must be entered in the Peoples_Doctor database and a table called Doctor in YouSee Database. This is to enable a single sign-on for Doctors and Patients into the system(Yousee and Peoples_Doctor)

Add Schedule **Add a new Schedule into the system.**

Actor: Doctor, Administrator – Doctors or Administrator can make a schedule.

To make a schedule show a screen similar to the volunteering activity screen on www.yousee.in and add the extra fields in the Schedule table.

Test Scenario	**Outcome**
All Details are correctly entered	Schedule is created successfully and an email is sent to the Administrator and the Doctor with relevant details.
From Time is greater than To Time	Throw an error message that From Time cannot be greater than To Time.
From Date is greater than To Date	Throw an error message that From Date cannot be greater than To Date.
Doctor chosen has a Schedule already at the same time in a different venue	Throw an error message that there is a conflicting schedule
Either or Both From and To Date are earlier than Current Date	Throw an error message that Schedule cannot start or end on a past date

Add Request **Add a new Request into the system.**

Actor: Patient, Administrator – Patient or Administrator can make a new Request.

To make a Request show a screen similar to the volunteering activity screen on www.yousee.in and add the extra fields in the Schedule table.

Test Scenario	**Outcome**
All Details are correctly entered	Request is created successfully
From Time is greater than To Time	Throw an error message that From Time cannot be greater than To Time.
From Date is greater than To Date	Throw an error message that From Date cannot be greater than To Date.
Doctor chosen has a Schedule already at the same time in a different venue	Throw an error message that there is a conflicting schedule

Modify Request To Understand about the Request Status changes please click (ctrl+click) on Lifecycle of a Request

Actor: Patient, Administrator, Doctor

To make a Request show a screen similar to the volunteering activity screen on www.yousee.in and add the extra fields in the Schedule table. In the scenarios 1,2,3,4 an email is sent to the Patient and the Administrator.

Test Scenario	**Outcome**
Request Status is changed from Pending to DeActivated by Patient, Administrator or Doctor	Change is accepted
Request Status is changed from Pending to Activated by Administrator, Doctor	Change is accepted
Request Status is changed from Activated to Complete by Administrator, Doctor	Change is accepted
Request Status is changed from Activated to DNA by Administrator, Doctor	Change is accepted

Edit Patient Details Edit Patient data and modify it.

Actor: Patient, Administrator

Test Scenario	**Outcome**
All Details are correctly entered	Patient data is updated successfully and an email is sent to the Patient and Administrator on modified details
Email format is incorrect	Throw error message
Mobile has non numerics	Throw error message
First Name not entered	Throw error message
Last Name not entered	Throw error message
Phone number not entered	Throw error message
Captcha not correctly entered	Throw error message

Edit Doctor Details Edit Doctor data and modify it.

Actor: Doctor, Administrator

Test Scenario	**Outcome**
All Details are correctly entered	Doctor Data is updated successfully and an email is sent to the Doctor and Administrator on modified details
Email format is incorrect	Throw error message
Mobile has non numerics	Throw error message
Picture file is not a valid image file	Throw error message
First Name not entered	Throw error message
Last Name not entered	Throw error message
Phone number not entered	Throw error message
Captcha not correctly entered	Throw error message

Edit Schedule Details Edit Schedule data and modify it.

Actor: Doctor, Administrator – Doctors or Administrator can make changes to a schedule.

Test Scenario	**Outcome**
All Details are correctly entered	Schedule is modified successfully and an email is sent to all Patients who made a Request to be in this Schedule along with an email to the Doctor and to the Administrator. If Patients have any conflicting Schedules because of a date change their request is DeActivated and they are sent a separate email that states
From Time is greater than To Time	Throw an error message that From Time cannot be greater than To Time.
From Date is greater than To Date	Throw an error message that From Date cannot be greater than To Date.
Either or Both From and To Date are earlier than Current Date	Throw an error message that Schedule cannot start or end on a past date
Doctor chosen has a Schedule already at the same time in a different venue	Throw an error message that there is a conflicting schedule
Doctor chooses changes to the date such that some Patients have another Schedule at that date and time with another Doctor.	Cancel that Patient's request and send an email to them stating the reasons for cancellation. The email should also state they have a choice to cancel the other request and make this one if they wish to.

Entities and Attributes

Doctor (has a many-to-one relationship with Qualification Table)

Attribute Name	Datatype and Length	Notes
Doctor_id	Integer	Primary Key
First Name	Varchar (50)	
Last Name	Varchar (50)	
Preferred_Email	Varchar (100)	
Alternate_Email	Varchar (100)	
Mobile	Varchar(20)	
Speciality	Varchar(50)	
Gender	Char(1)	
Address for Communication	Varchar(200)	
City	Varchar(50)	Create an Index for this field
State	Varchar(50)	
Country	Varchar(50)	
Speciality_SubSpeciality_link_id	Integer	Foreign Key to SubSpeciality
Current Hospital	Varchar(100)	
Experience	Varchar(100)	Doctors need to give feedback on this column
Date_of_Birth	Date	
Age	Number(3)	

Qualification

Attribute Name	Datatype and Length	Notes
Qualification_id	Integer	Primary Key
Doctor_id	Integer	Foreign Key
Degree	Varchar (50)	
Year	Integer	
University	Varchar(20)	

Speciality

Attribute Name	Datatype and Length	Notes
Speciality_id	Integer	Primary Key
Speciality	Varchar (200)	

SubSpeciality

Attribute Name	Datatype and Length	Notes
SubSpeciality_id	Integer	Primary Key
SubSpeciality	Varchar (200)	

Speciality_SubSpeciality_Link (has a many-to-one relationship with Speciality and SubSpeciality Tables)

Attribute Name	Datatype and Length	Notes
SubSpeciality_Link_id	Integer	Primary Key
Speciality_id	Integer	Foreign Key to Speciality
SubSpeciality	Integer	Foreign Key to SubSpeciality

Patient

Attribute Name	Datatype and Length	Notes
Patient_id	Integer	Primary Key
First Name	Varchar (50)	
Last Name	Varchar (50)	
Email	Varchar (100)	
Mobile	Varchar(20)	
Gender	Char(1)	
Age	Number(3)	
Date_of_Birth	Date	
Address	Varchar(200)	
Parent/Guardian	Varchar(100)	

Schedule (has a many-to-one relationship with Doctor and Location)

Attribute Name	Datatype and Length	Notes
Schedule_id	Integer	Primary Key
From_Date	Date	
To_Date	Date	
From_Time	Time	
To_Time	Time	

Location_id	Integer	Foreign Key to Location
Doctor_id	Integer	Foreign Key to Doctor
Description	Varchar(100)	

Patient Request (has a many-to-one relationship with Patient and Schedule Table)

Attribute Name	Datatype and Length	Notes
Request_id	Integer	Primary Key
Patient_id	Integer	Foreign Key to Patient
Schedule_id	Integer	Foreign Key to Schedule
Problem_History	Varchar(500)	
Actual_Date_of_Consultation	Date	
Time_of_Consultation	Time	
Status_type	Character(10)	Is Pending, Activated or DeActivated or Complete or DNA (Did not Attend)
Status_Date	Datetime	Date on which the status of a request changed..

City

Attribute Name	Datatype and Length	Notes
city_id	Number	Primary Key
Lat	Number	
Long	Number	
City	Varchar(50)	Create a Unique Index for this field

Location (has a many-to-one relationship with City Table)

Attribute Name	Datatype and Length	Notes
Location_id	Number	Primary Key
Lat	Number	
Long	Number	
City_id	Number	Foreign Key to City
Location	Varchar(50)	

Request_Status_Change

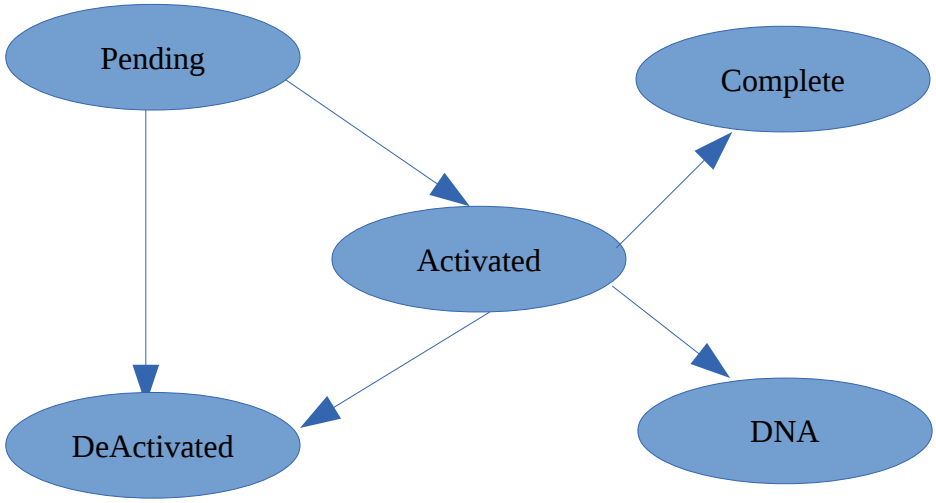
Attribute Name	Datatype and Length	Notes
Status_Change_id	Number	Primary Key
Status_from	Varchar(20)	
Status_to	VarChar(20)	
Actor	Varchar(20)	Can be one of Doctor, Patient, Administrator

Lifecycle of a Request.

A Request has 5 Status' – Pending, Activated, DeActivated, Complete and DNA (Did not Arrive).

Pending	When a Request is first Created it is given this Status
Activated	When a Request has been Activated by the Administrator it is given this Status
DeActivated	When a Request has been DeActivated before the Schedule (by the Administrator or the Patient) it is given this Status
Complete	When the Patient has attended the Clinic (Schedule) the Request is considered Satisfied and closed
DNA	When the Patient has NOT attended the Clinic (Schedule) the Request is considered DNA and closed

DNA – Did not Attend



Actor	**Use Case**	**Status Transition**	
		Status From	**Status To**
Patient	Add a Request	None	Pending
Administrator, Doctor	Approve a Request	Pending	Activated
Administrator, Doctor, Patient	Modify a Request	Pending	DeActivated
Patient	Modify a Request	Activated	DeActivated
Administrator, Doctor	Complete a Request	Activated	Complete
Administrator, Doctor	Complete a Request	Activated	DNA