DAD (Doctor At Doorstep)

A Smart City Initiative

Overview:

DAD is a service utility for the people who need emergency attention during times of severe health issue at their door-step. DAD is proposed to be medical practice management software that also provides doctors with appointment scheduler and electronic medical record services. It is aimed at improving the Quality of Service of various medical attendants by providing a statistical report
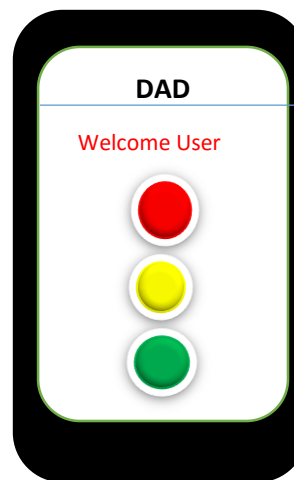
Problem Targeted: Medical emergency can happen to anyone. What if we do not have phone number or any contact detail of nearest clinic or doctor. Adding to it, a well maintained appointment scheduler is also a need for the doctors and clinics.

Solution Proposed: A solution proposed – On push of a button of the application on the smart phone, the doctor or doctor assistant is made available at the doorstep. Hence the name *Doctor at Doorstep.*

Proposed Features of the App:

Patient

1. User Log in / Authentication feature
2. User Interface will be simple containing 3 push- buttons
   - Emergency (Red Button) : User needs to press the button and the system will fetch the nearest doctor available
   - Medium Emergency(Yellow Button) : where in User selects the doctor of his/her choice / requests for Clinic support
   - Book an appointment(Green Button):where User books an appointment for Clinical check – up / laboratory / Hospital

3. Browse Services: User can browse other services through
   -
   User can search through Specialities,Doctors,Clinics,labs,Hospitals
4. Find and book the clinic / Doctor for an appointment
   User will have the filters – location,popularity,etc.
5. Review and Give feedback
6. Accept Bills

Doctor

1. Doctor Log-in /Sign-up feature   *Doctor can register for the applications*
1. Accept / Log appointments   *The request may of any of three types mentioned : Red,Yellow,Green*

2. Schedule the daily appointments
3. Generate Bills
4. Maintain Patient's Vital-sign History

Clinic

1. Log-in / Sign up feature
2. Add services   *Services may be of any type- Blood Tests,Lipid tests,pregnancy tests, CT Scan, etc.*
3. Update services   *The pricing / features of services can be updated*
4. Generate Bill
5. Maintain Patient's Report History

Hospital

6. Log-in / Sign up feature
7. Add services — *Services may be of any type- Doctors List, OPT*
8. Update services — *The pricing / features of services can be updated*
9. Generate Bill
10. Maintain Patient's Report History

Admin

1. Super User Feature
2. Generating report — *The report may be the feedback on the quality of services based on the heuristic analysis of feedbacks, pricing and timely acceptance / attendance of patient. These will help in maintaining the **QoS (Quality of Service)***

The major roles of the System: Patient/Users, Doctor, Clinics / Hospital and Super Admin

Approach of Implementation: The application will be developed on Swing simulating Online and Mobile view

Future Enhancement: Android, iOS or Windows App

Conclusion: The proposed project is an initiative under *Smart City* using *IoT* (Internet of things, here smart phones) where in Users connected through internet can make an appointment with the doctor at button push. The heuristic or the statistical report of all the entities in the Health domain can give a picture of **QoS** in a particular city

Keywords: Smart City, IoT, QoS