

## COPY RIGHT



**ELSEVIER**  
**SSRN**

**2019 IJIEMR.** Personal use of this material is permitted. Permission from IJIEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJIEMR Transactions, online available on 10th Apr 2019. Link

[:http://www.ijiemr.org/downloads.php?vol=Volume-08&issue=ISSUE-04](http://www.ijiemr.org/downloads.php?vol=Volume-08&issue=ISSUE-04)

Title: **DOCTOR TACTIC**

Volume 08, Issue 04, Pages: 184–191.

Paper Authors

**P.BALAJI, K.MOUNIKA, M.MOUNIKA, K.VENKATA LAKSHMI**

WISTM College, Pendurthi, Visakhapatnam, A.P



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

## DOCTOR TACTIC

<sup>1</sup>P.BALAJI, <sup>2</sup>K.MOUNIKA, <sup>3</sup>M.MOUNIKA, <sup>4</sup>K.VENKATA LAKSHMI

<sup>1,2,3</sup>Student, Dept. of CSE,WISTM College,Pendurthi,Visakhapatnam,A.P

<sup>4</sup>Assistant ProfessorHoD,Dept. of CSE,WISTM College,Pendurthi,Visakhapatnam,A.P

<sup>1</sup>balaji9725@gmail.com,<sup>2</sup>mounikarri99@gmail.com,<sup>3</sup>mouikamaddala97@gmail.com,<sup>4</sup>hodcsewistm@gmail.com

### Abstract:

DoctorTac Tic is an mobile app for helping doctors plan their appointments, out-patient & in-patient care, handover of patients in case of leaves for seamless continuity of care. It is a userfriendly mobile application which can be installed in any smart phones. It helps doctors to view and manage their daily appointments, their patient details and much more. Doctors get updated information regarding in-patients, out-patients details and emergency cases. In case of leaves and emergency, doctors can reschedule the appointments with the availability of other doctors or can cancel the appointments easily. Doctors also connected with in and out patients with live chat facility to provide their valuable suggestions in emergency needs. They also get notified through online about the number of appointments in every session. Doctors can create their availability chart with their daily schedule. They also can view their feedbacks provided by patients to improve their service.

### 1.Introduction:

A mobile app for helping doctors plan their appointments, out-patient & in-patient care, handover of patients in case of leaves for seamless continuity of care. Doctor Tac Tic app contains four modules- Doctor , patient, Nurse, Admin.Doctor Tac Tic is a user friendly mobile application which can be installed in any smart phones. Doctor Tac Tic app helps doctors to view and manage their daily appointments, their patient details and much more. Doctors get updated information regarding in-patients, out-patients details and emergency cases. In case of leaves and emergency, doctors can reschedule the appointments with the

availability of other doctors or can cancel the appointments easily. Doctor ask the patient to assign the another doctor ok or not. If patient send the ok message then doctor assigned the another doctor. Doctors also connected with in and out patients with live chat facility to provide their valuable suggestions in emergency needs. They also get notified through online about the number of appointments in every session. Doctors can create their availability chart with their daily schedule. They also can view their feedbacks provided by patients to improve their services. Doctor Tac Tic also helps the patients to book their appointments depends

on the availability of required doctors. Also cancel or reschedule their appointments as per patient's requirement. Patient get notified with appointment details before they visit the doctor. Also get notified about the intake medicine and revisit details. In case of the unavailability of a required doctor, patients are rescheduled with other doctors with their permission, instead of cancelling the appointment. Live chat facility to the patients allows them to get suggestions from doctors.

Doctor Tac Tic app also helps the nurse add the patient daily report, live chart with patient and doctor.

Doctor Tac Tic app can also be used by Hospital authorities. Hospital authorities use this app to track their doctors' appointment, billing procedures, in-patient admit and discharge procedures.

## **2.Literature Survey**

We have conducted an survey regarding the preparation of the doctor application. There are some of the difficulties faced by the doctor, patient so on basis of it we have created four different types of applications. The doctor patient and nurse will be using android application and the admin will be using web application.

- Online notifications of appointments are provided to doctors for their convenience.
- Appointments get rescheduled easily with other doctors in case of leaves and emergency cases with the help of available doctors.
- Doctors can handover in-patients' profiles to available doctors in case he/she is in leave. Doctors can view

patient profile along with treatment given.

- Doctor Tac Tic app can also be used by Hospital authorities. Hospital authorities use this app to track their doctors' appointment, billing procedures, in-patient admit and discharge procedures.
- According to the convenience of both doctor and patient "speech assistance" is developed in both the apps.
- Live chatting is done in between doctor and patient so that the patient can ask any type of questions regarding their problems from there place itself and doctor will provide some precautions.
- Sending Offline notification to both patients and doctors.
- And the next feature is "language conversation" in doctor application so that it will be feasible to use the app.

Doctor login into their account and see the in patients list, out patients list, feedbacks, chat with patient as well also nurse.

Patient login in their particular account and performs the operations are book the appointment, cancel the appointment, give the suggestions to the doctor, chat with the doctor as well as the nurse.

Nurse login in to their registered account and perform the operations like add the daily report in patients, connect with doctor as well as the patient.

Admin also login into their registered account and admin managed the add or delete the doctor details, add in-patient details, add or delete the nurse details,

assign the nurse and different operations performed.

### 3.Existing System:

In previous days, if people went to the hospital to meet the doctor only to do offline. So that people are very troubled and it get time taken process.

### 4.Proposed System:

Doctor Tac Tic is a user friendly mobile application which can be installed in any smart phones. Doctor Tac Tic app helps doctors to view and manage their daily appointments, their patient details and much more. Doctors get updated information regarding in-patients, out-patients details and emergency cases. In case of leaves and emergency, doctors can reschedule the appointments with the availability of other doctors or can cancel the appointments easily.

#### Advantages:

- The main thing in this system is to maintain the Patient continuity.
- It is not necessary to go to hospital for taking appointment. By using this application we can book our appointments for home easily.

If the person need not want to go to hospital after booking the appointment then also cancel or reschedule their appointments.

### 4.1 System Architecture:

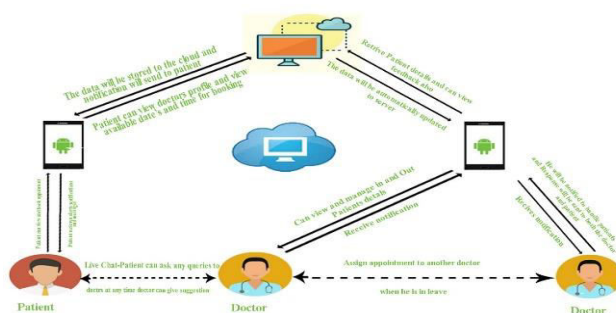


fig: system architecture

### 4.2 Modules Description:

#### 4.2.1 Doctor:

- Login
- My Profile
- Dashboard
- In-Patient appointments
- Out-patient appointments
- Emergency Cases
- My calendar
- Connect With Patient
- Notifications
- Feedback
- Logout

#### Outpatientlist screen :



#### Dashboard screen





## Features:

- Login: This option provides the authorised or verified doctors to securely login to the application
- Dashboard: Dashboard will be home screen once doctor login to application. This screen provides information about the calendar, total appointments for the day, notifications.
- My profile: This option allows the doctors to view or update profile details like qualification, experience, achievements, certifications, awards, specialization and personal details like photo, contact number.
- In-patient appointments: Doctor can view their in-patients' details and assign the responsibility to other doctor in case of their absence.
- Out-patient appointments: By this option, doctor can view the general patients' appointments and can
- Emergency cases: Doctors can view the appointments of emergency cases and reschedule the with other doctors in their absence.
- Connect with Patient: Doctor will respond by this options to the In and Out patients' queries.
- Notifications: This option allows the doctor to view the online notifications about all types of appointments, rescheduling appointments etc.
- Feedback: Doctors can view feedbacks given by the patients to improve their services.
- My Calendar: This option allows the doctors to create, view and manage their schedules which helps the other doctors to reschedule the appointments.
- Logout: This option allow doctor to securely exit from application.

## Sign in screen:

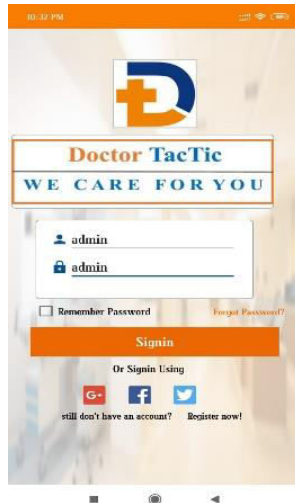


cancel or reschedule with other doctors in case of their absence.

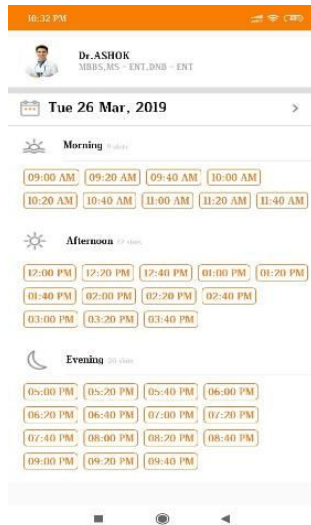
## 4.2.2 Patient :

- Login
- My Profile
- Dashboard
- Book appointment
- Cancel appointment
- Reschedule appointment
- Connect with Doctor
- Notifications
- Search for Ambulance
- Suggestions
- Refer and earn
- Logout

## Login Screen



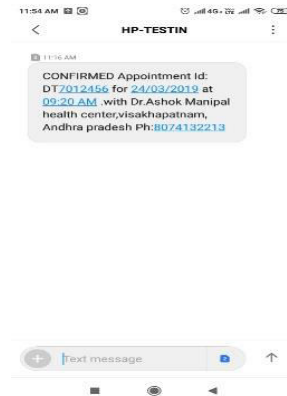
## Appointment Screen



## Appointment Details



## Appointment Booked



## Features:

- Login: Patient can securely log into their account
- My Profile: Used to view or edit patient details. This also includes their past doctor visits, their feedbacks, patient medication history, treatment history, diagnosis reports and history.
- Dashboard: User can have a look of their active appointments, upcoming doctor visits, active medication schedule. See important and recent diagnosis information. Also, shows the prediction of health conditions (based on past diagnosis parameters using regression algorithms).
- Book appointment: This option allows patient to book an appointment with required doctor for required date & time considering doctors' availability.
- Cancel appointment: Patient can cancel appointment by mentioning a reason.

- Reschedule appointment: Patient also reschedule appointment with changes of date and time.
- Connect with Doctor: Live chat with doctor to get the suggestions on their diseases.
- Notifications: Get the notifications of bookings and cancellation of appointments.
- Search for Ambulance: Ambulance services can be booked using this app.
- Suggestions: Patients provide suggestions and feedback with this option.
- Refer and earn: get the concession of fee by referencing the friends.
- Logout: Securely exit from application.

#### 4.2.3 Nurse:

- Login
- My Profile
- Dashboard
- Add daily report
- Connect with doctor/patient

#### Daily Report Screen



#### Features:

- Login: Nurse can securely log into their account.

- My Profile: Used to view or edit Nurse details. This also includes their past doctor visits, treatment history, diagnosis reports and history.
- Dashboard: User can have a look of their activity. To view their daily report on patient
- Add daily report: Nurse view or edit the in-patient daily report and also send their reports to doctor.
- Connect with doctor/patient: : Live chat with doctor to get the suggestions on their diseases on patient. : Live chat with patient which medicine to use.
- Logout: Securely exit from application.

#### 4.2.4 Admin:

- Login
- Add / delete doctor
- Add/ delete nurse
- Assign Nurse
- Generate Bills
- Logout

#### Features:

- Login: Admin can securely log into their account.
- Add/ delete doctor: Admin purpose to add the new doctors and delete any doctor details.
- Add/ delete nurse: Admin purpose to nurse details add or deleted.
- Assign Nurse: particular ward to assign the nurses.

- Generate Bills: Patients bills generated this also admin purpose.
- Logout: Securely exit from application

### 4.3 Methodology:

#### First Come First Serve Scheduling Algorithm:

**Step-1.** Input the process along with their burst time (bt)

**Step-2.** Find waiting time(wt) for all process

**Step-3.** As first process that comes need not to wait so.

Waiting time for process 1 will be 0. i.e  $w_t[0]=0$ .

**Step-4.** find waiting time for all process. i.e for

Process  $i \rightarrow$

$$w_t[i]=b_t[i-1]+w_t[i-1]$$

**Step-5.** Find turnaround time=waiting time+burst\_time for all process.

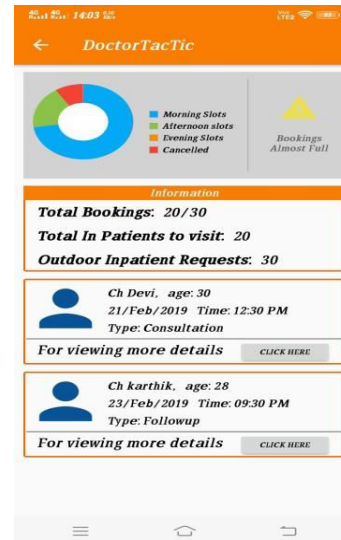
**Step-6.** Find average waiting time= total\_waiting\_time/no\_of\_process.

**Step-7.** Similarly, find average turn around time=totalturn\_around time/no\_of\_process.

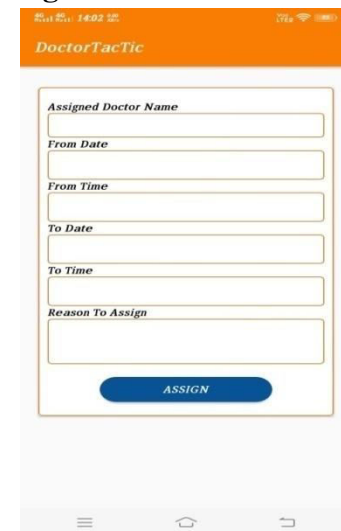
First come, first serve (FCFS) is an operating system process scheduling algorithm and a network routing management mechanism that automatically executes queued requests and processes by the order of their arrival. With first come, first served, what comes first is handled first; the next request in line will be executed once the one before it is complete. FCFS is also known as first-in, first-out (FIFO) and first come, first choice (FCFC)

### 5.Results:

#### Analysis screen



#### Nurse Assign Screen



### 6. Conclusion:

We have been concluding our current research work with efficient design architecture through base station and mobile nodes. Initially request made from the source node and transmitted through intermediate nodes and base station through



mobile terminal. Receiver end nodes can be clustered based on the trust factor and generates the set of nodes and search for the destination node. Our implementation gives more efficient results than traditional models.

### **Future Enhancement:**

- Based on doctor tac tic application we can implement this is in offline mode.
- Patients can book appointments in waiting list. If any patient cancels the appointment, the waiting listed patient's appointment will be confirmed automatically. Appointment confirmation will be notified to patient and doctor as well.
- We can also integrate ambulance and cab services. So patient can easily travel.

### **7. References:**

- [1]<http://www.eresearchnzconference.org.nz/wpcontent/uploads2017/01/55.chandra.pdf>
- [2]<https://www.engpaper.com/android-system-2017.html>
- [3]<http://www.enpapersagriculture.com/android-system-2018.html>
- [4] <https://youtu.be/mN6kM-1M0cY>
- [5] <https://youtu.be/G7ZOU8yKmdi>
- [6] <http://youtu.be/nLOK2usU718>
- [7] <http://youtu.be/8-7lp6xum6E>
- [8]<http://youtu.be/5Y4plQv8c4s>