# An Online Appointment of Patients with Assignment of Proper Doctor and Recruitment of Clinicians Using Mobile Application.

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**ABSTRACT:**The new hospitals/clinics faces problem in connecting the patients, doctors, and hospitals And in recruiting of new clinicians also. So to fix their connectivity issues our project presents a mobile application. For taking doctor's appointments online and recruiting clinicians for hospitals. We made a web-based mobile application that helps patients to take appointments of particular doctor and do recruitment of new staff for hospitals. This mobile application has lots of features like registration, hiring, reviewing, and taking appointments. In registration, the details of clinicians are analyzed and stored in the database for verification and future work. Then by using the data given on the registration the clinicians are segregated according to the area of specialization and recruited according to the purpose of work given. All users of the application will get notification of recruitment when any hospital publishes vacancies of jobs.

**KEYWORDS:**doctor's appointment, online recruitment, clinicians, recruiter.

## I.    INTRODUCTION

The scheduling of appointments and reservations is an important task in the hospital sector. Our mobile application is set out to modernize healthcare recruiting. The physicians and entrepreneurs have come together to solve a major and current problem faced by medical professionals. This project makes it easy for both clinicians and administrators to connect about open roles. Healthcare is one of the noblest professions in the world which was overburdened and increased intermediaries between patients and providers. This current project now offers faster, more transparent, and more affordable recruiting solutions that help providers to focus on better care.

It is also helpful if patients provide basic information about the reason for their intended visit. Patients can make appointments with their desired clinic or hospital 24/7 with the doctor of their choice, easing the pressure on reception and the phone system. Our project is a web-based mobile application designed to help in patient scheduling. Patient treatment after the appointment is an integral part of daily work for wellness professionals, from family practices to large clinics, from physician offices to hospitals. Appointments need to be coordinated and medical support staff has to be constantly aware of all new patients' doctor's schedules. The main problem tries to notice in this paper is how to defeat the limitations of the current manual medical appointment system. The things we tried to implement are as follows:
1. Design an application that gathers a few medical practices together.
2. Enable users to choose their desired medical practices and the suitable time to make an appointment using our mobile Application.

## II.    EXISTING SYSTEM

The present hospital System is going through lots of drawbacks. Such as hospitals keep the working doctor's data in hard copies. Maintaining these data is not easy. And many hospitals keep the data in local machines. If the machine gets crashed then data loss could be there.

Similarly, For storing patients data and appointment history many hospitals use local machines of hard copies. Indirectly, which cost losing vital data. When hospital needs to do recruitment of new staff/clinicians for specific work is still done in an offline way.

## III.     LITERATURE SURVEY
**1)     Literature review On Patient Scheduling Techniques [G Mageshwari, E.G. Kanaga]**

Patients need to undergo several checkups, tests, surgery, and treatments according to their illness. This paper describes the challenges of patient scheduling and patient scheduling techniques. An efficient scheduling technique is needed to minimize the waiting time of patients and improveresource utilization. The patient treatment processes are not completely decided at the beginning of treatment. The goal of patient scheduling is to develop a scheduling system that manages patient-focused schedules and treats the patients immediately. Patient scheduling is difficult to deal with because of the complexity involved in the problem. A Software agent based-scheduling system is a good option to schedule the patients efficiently in the hospital.

**2)     Literature review On An Online Recruitment of Clinicians and Appointment of Patients using Mobile Application[Ms.MargretSharmila.F]**

The patient always needs fast services for their treatment.They always try to take fast ways to get treatment from the doctors. And on the other side hospitals frequently needs new staff for different work. This paper addressed some problems of old health care organizations and gave some modern and faster ways to manage the workload of the hospital sector. This paper focused on how the patient could take appointments easily ina secure way. and how hospitals can manage their all recruitment process faster and securely.This paper gives a solution as an android application that helps patients for taking appointments with doctors and For hospitals to make the recruitment process of clinicians transfer.

## IV.     PROPOSED SYSTEM

With online appointment applications, Patients do not need to go to the hospital/clinic for confirming whether the doctor is available or not and if a doctor is available then take the appointment. It could be frustrating, But by using our application patients can check the availability of doctors and book their appointments. In our application patients can search doctors by area code or by doctor's name or hospital name.

**Management Model**

Broadly we have two models in our project. Admin Model and user model(patient). Admin model is further divided into three sub-models. Management model, Doctor model, Recruiter model. For any hospital to use our features, they first need to register their hospital in our application. It means that owner/manager needs to create a profile for their hospital by giving some basic information about the hospital. In the Management model hospital, the owner or manager can control all the staff of the hospital. i.e. Doctors, recruiters, clinicians staff. When any doctor tries to access the application without management permission. Then he/she will not be able to access any functionality. Management has all rights to give permission to the doctors.

Similar to doctors, recruiters and other staff also be controlled by the management Model.

**Doctor Model**

In the Doctor model, firstly doctors need to register in our application. While registering doctors need to fill in their information and upload the documents. In registration, one list of the registered hospital will come. Doctors need to select any one of the hospitals. Selected hospital management will check the documents and other details of the doctor and will give access to our application.

If the doctor is legal. Then he can do login and can access different features. There is some basic functionality that doctors can use. Like, For a doctor's working status- doctors can change their working status. Active or inactive just by clicking one button. If Doctor is not active then patients will not be able to take an appointment with that particular doctor. And if the doctor's working status is active then his name will come on the doctor's list while the patient taking an appointment. Those who are taking appointments with a particular doctor their name will come in the appointment list tab. By clicking the row of the appointment list. Doctors can check the patients. By clicking on the row new tab will open and information about a particular patient will come in that tab. Doctors just need, to give a prescription, advice and the next, meeting date. When a doctor submits a patient's prescription that time that particular patient's name will delete from the appointment list. If the doctor needs any clinicians. Then he can request out to the recruiter. By filling one form.

**Recruiter Model**

Similar to like a doctor, the recruiter needs to register first. The recruiter's main work is to hire the new staff for the hospital as per the requirement of the doctor. When the doctor requests the clinician that time that doctor's name comes in the requested tab. and from there recruiter publishes the advertisement for hiring. And those all advertisement is visible to the patients/users who are registered to our application.

**Patient Model**

In Patient, the Patient Needs to create a user profile. While creating profile patients need to submit basic information and a profile photo. When a patient wants to make an appointment with a doctor he can check the working status of doctors and can book an appointment with a particular doctor. That doctor will see this patient's name on his appointment list. When the doctor check patient the patient can see his prescription in the health history tab.

When a recruiter does an advertisement for a job. all jobs are visible on the main page of the user model. If users want to get hired. Then the user needs to click on the apply button and upload their resume. Those all applied users will be visible to the recruiter in the applicant tab and can book an appointment for an interview also.

## V.    ARCHITECTURE
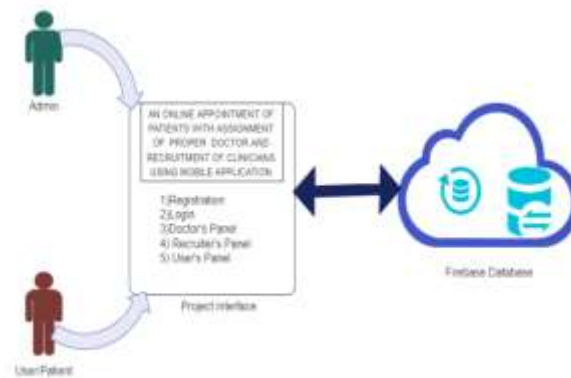


Fig 5.1. System Architecture
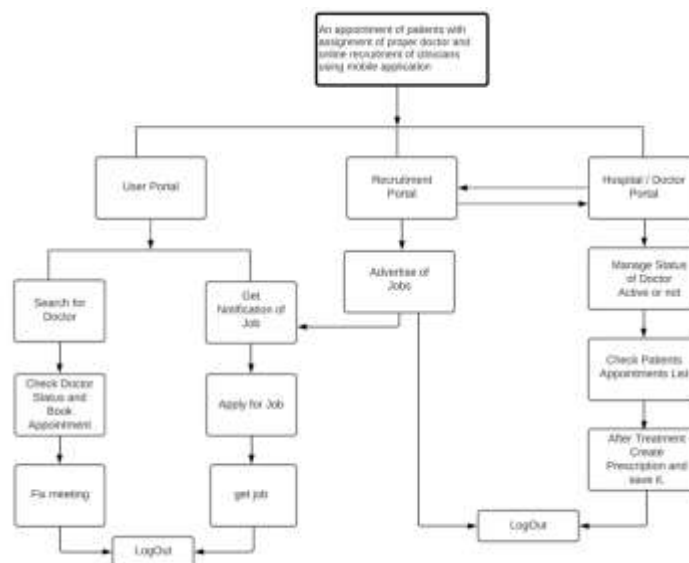
## VI.    FLOWCHART



Fig. 5.2.  Flowchart

## VII. ALGORITHM

```
session_start();
include 'header.php';
include
'DoctorAdminPanels/AdminDoctor/includes/dbconfi
g.php';

$userstate="false";
$pastate="false";
$access="false";
if(isset($_POST['login'])){

$user=$_POST['username'];
$pass=$_POST['password'];

$_SESSION["status"]=false;

$fetchdata=$database-
>getReference('doctor_registration')->getValue();
foreach($fetchdata as $key => $value){
$username=$value['email'];
$password=$value['password'];
```

```
if($username==$user){
$userstate="true";
if($password==$pass){
$pastate="true";
if($value['access']=="allow"){
$access="true";
$_SESSION["name"]=$value['doctorName'];
$_SESSION["education"]=$value['education'];
$_SESSION["profile"]=$value['image'];
$_SESSION["hosp"]=$value['hospitalName'];
break;
}
}
}
}

if($userstate=="true" && $pastate=="true" &&
$access=="true"){
echo '<script>alert("Login successfully")</script>';
$_SESSION["email_id"]=$user;
$_SESSION["password"]=$pass;
$_SESSION["status"]=true;
```

## VIII. EXPERIMENTAL RESULT

On our website user can be login through 4 ways as Management, as Doctor , as Recruiter, as Patient.
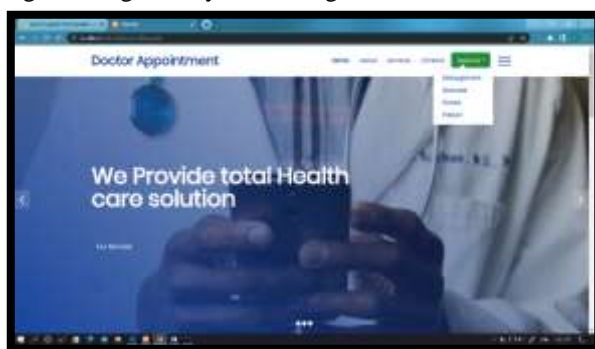


**Fig.8.1 Home Page**

When Hospital owner/manager come on our website. That time they need to create profile for their hospital by filling some basic informations. To fill this form they need to click on management tab under login button.
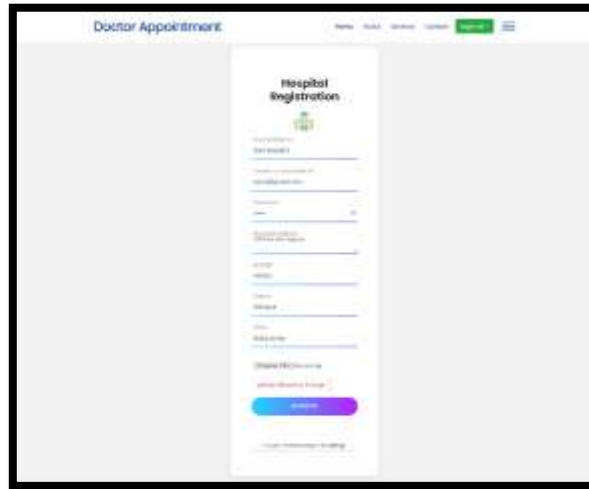
**Fig.8.2 Management Registration**

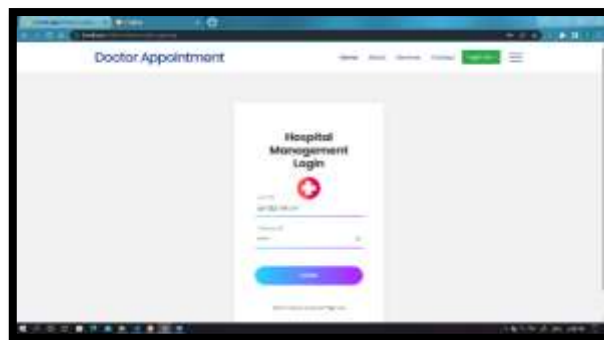After successful registration. Management should do login through their email and password.



**Fig.8.3 Management Login**

After successful login user will reach to the Management Dashboard.



**Fig.8.4 Management Dashboard**

When any new doctor do registration and select particular hospital then those all doctor's name will be visible under Doctor's list tab of that perticular hospital .It's similarly work for recruiters.
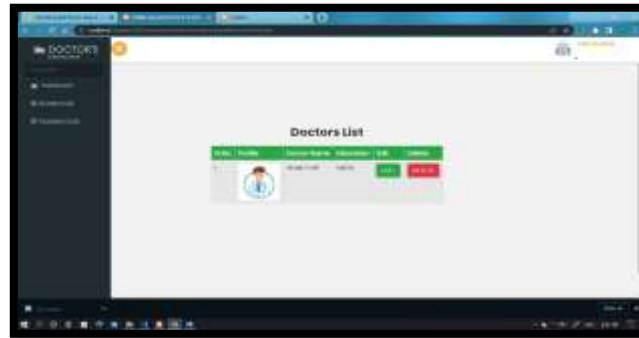
**Fig.8.5 Doctor's List**

When any new doctor visit our website that time he/she needs to do registration and must select particular hospital name from dropdown list.
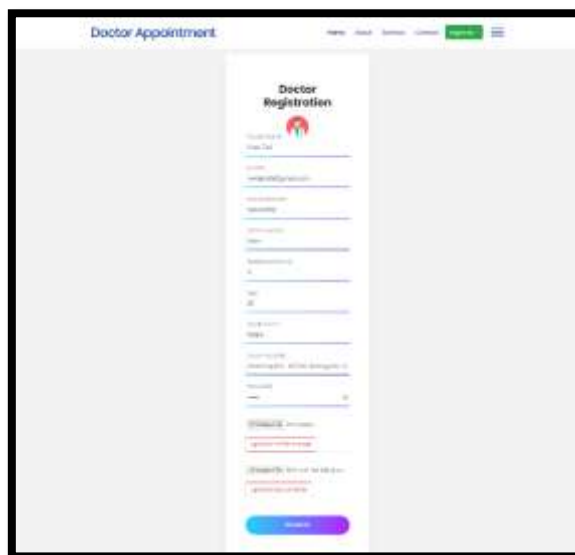


**Fig.8.6 Doctor's Registration**

After registration when doctor do successful login then he/she will bring to the Doctor's Dashboard Panel.



**Fig.8.7 Doctor's Dashboard**

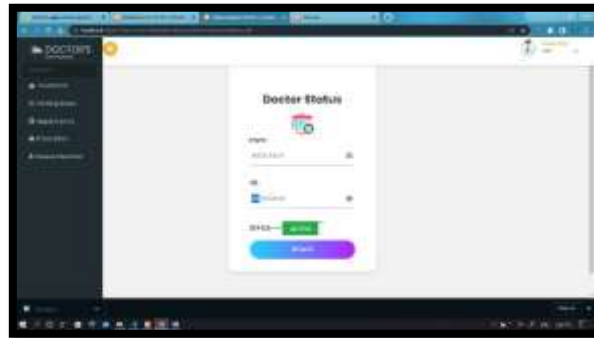When Doctor's want to change their working status. Then doctor's needs to go in working status tab.

**Fig.8.8 Doctor's working status**

When any patient takes appointment of specific doctor. Then those patients name will visible under "Appointments" tab.


**Fig.8.9 Appointments List**

When doctor click on the check button then then data of specific patient will open in prescription tab.


**Fig.8.10 Patient's Prescription**

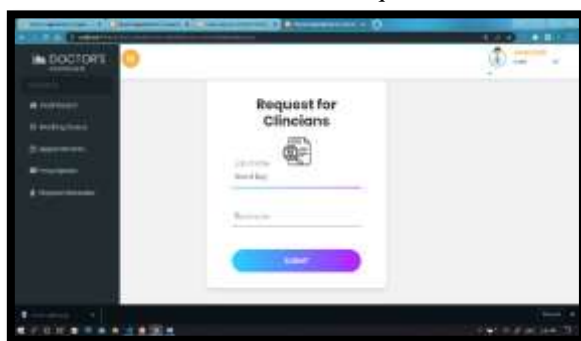When Doctor want some technical staff then doctor needs to request Recruiter. Through Request Recruiter tab.



**Fig.8.11 Request Recruiter**

When any new Recruiter visit our website that time he/she needs to do registration and must select particular hospital name from dropdown list.
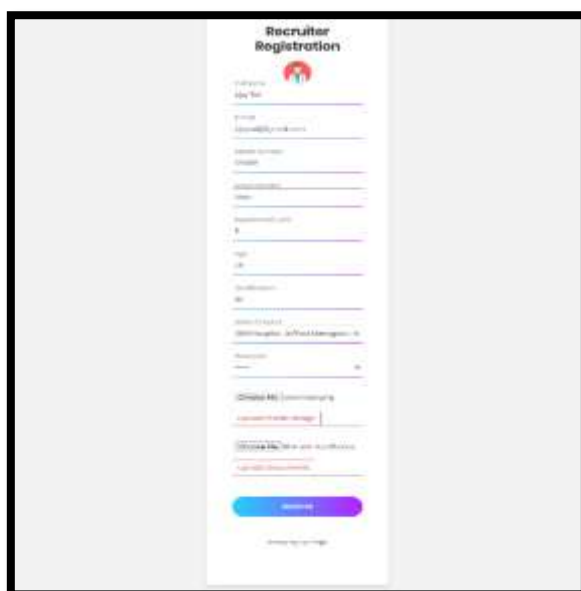


**Fig.8.12 Recruiter Registration**

When recruiter do successful login then he/she will bring to the recruiter Dashboard Panel



**Fig.8.13 Recruiter Dashboard**

When any doctor do request to the recruiter. Those all doctor's name will be visible inDocotr's request tab.
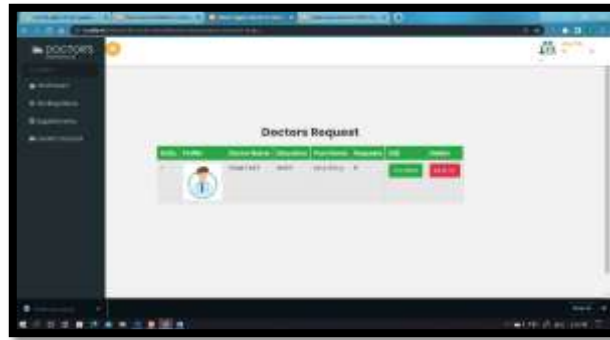
**Fig.8.14 Doctor's Request**

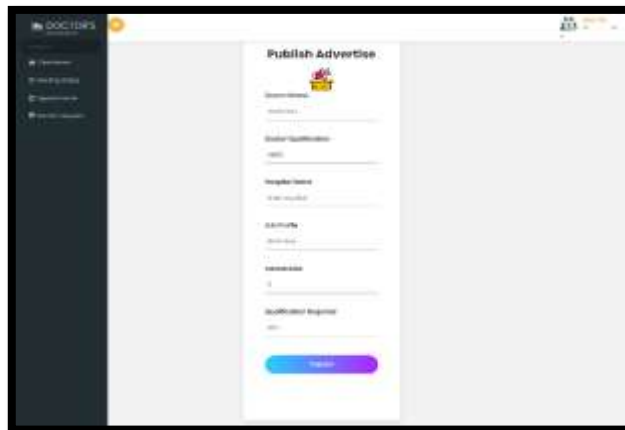By Clicking on Publish button recruiter can Publish Advertise.



**Fig.8.15 Publishing Advertise**

To take doctor's appointment Patient needs to do registration and while doing registration Patient needs to select specific doctor which are available.
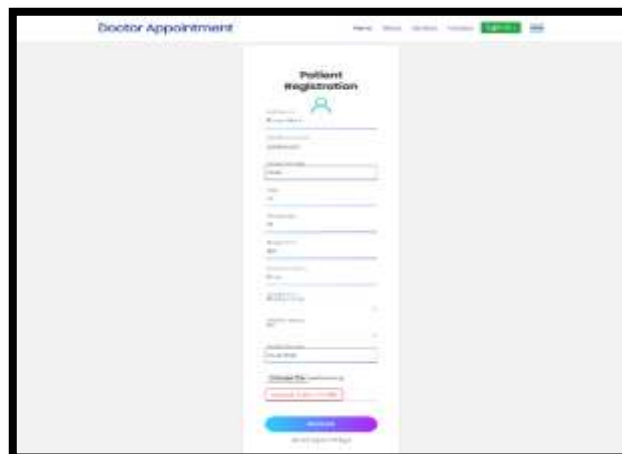


**Fig.8.16 Patient Registration**

When doctor checks patient then that check-up history will visible in check-up history tab.
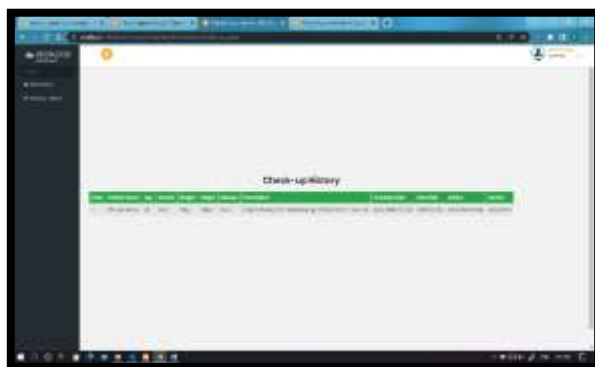
**Fig. 8.17 Check-up History**

## IX.    CONCLUSION

This application creates a platform for patients and doctors to connect digitally. And it can be created with many custom features like displaying doctors' current day schedules, free appointment slots, locality of the doctor, area of specialization, reviews and rating of a doctor, contact details of patients and doctors, Emergency situation alert, Emergency hiring of doctors, etc. So, this software overcomes the difficulties of the customer.

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