

Mankind Rejuvenation and Physiotherapy website

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Submitted: 01-04-2022

Revised: 06-04-2022

Accepted: 11-04-2022

ABSTRACT: There are a number of people living with disabilities in this sizably voluminous world who have no remedy for their quandaries, and some people are not cognizant of the remedies additionally. Sometimes it takes too long to dispense immensely colossal physical issues like unable to ambulate due to instability of legs, no kineticism in hands and legs or in another body part, in this situation a person becomes dependent on the other for their survival as well for their quotidian routines. So to surmount these issues we mentally conceived of this project which is a website made with the latest technologies to provide the best accommodations at their location with many subsidiary ways like booking appointments with medicos, sharing daily follow ups, checking medicines, and taking the exhortation of the medicos.

Keywords: Rejuvenation, physiotherapy, doctors, appointments, body pain, muscles pain, etc.

I. INTRODUCTION

Physiotherapy is nothing but the treatment of dormant muscles in the body. It fixates on rehabilitation. In this diligent world only we are the person who can avail ourselves to dispense things that cause a barrier to our career or lifestyle. Like if the person is not able to peregrinate from a place without someone's avail it becomes a very arduous task to live life customarily. There is no doubt that we have so many medical facilities today but for major muscle injuries, body pain physiotherapy is the best option ever, as it helps to rejuvenate from the root of the pain.

The main aim of this project is to provide the best consultation and treatment to the patients and provide facilities like booking appointments with the medicos, checking daily reports, like a medico-patient portal utilising the latest

technologies for web development which will avail both the medico as well as the patient to make a smooth conversation as well as get in touch without waiting for long in a clinic's queue. This will abbreviate the public rush in the hospitals and provide a facility to make an appointment that can be scheduled according to the patient's as well as medicos' availability. The patient will not have to wait for long-standing queues for their turn; they can book a slot and come on that time.



Fig 1 Types of Physiotherapy

II. LITERATURE SURVEY

Richard Tang et al.,[1], Some patients with physical problems try to do exercise alone at home resulting in injury because they do not have the correct form of exercise and guidance of a therapist. We added some videos on our website, users can refer to them and try to do exercise in the correct form. Although if they still suffer from their problems they can reach to the therapist for guidance and treatment.

Richa Bharadwaj et al.,[2], In various healthcare applications accurate and precise motion tracking of limbs and human subjects has technological importance. UWB antenna, when it is

placed on the human body. The results reported with the accuracy of 90% in the range from 0.5 to 2.5 cm using simple and cost-effective techniques.

Karishma Daswani et al.,[3], for various chronic lung conditions pulmonary rehab is very effective. Corona virus leads to conditions like SARI, ARDS wherein pulmonary rehab has been shown to be effective. ReLiva Physiotherapy & Rehab initiated tele-pulmonary rehab for the patients who are suffering from covid-19 known as "Respirehab".

Alessandro Scano et al.,[4], the main reason that may reduce motor functionality is Neurological diseases and traumas. The technique is called functional electrical stimulation that helps patients to regain motor function and assists patients in daily life activities and in rehabilitation practices. Adaptive Functional Electrical Stimulation Kinesitherapy(AFESK) treatment induced favourable changes in muscle activation patterns in chronic neurologic patients. when performing test exercises allows to assess the results of rehabilitation measures in patients with impaired locomotor functions.

Avi D. Goodman MD et al.,[5], crush injury of the hand is a way of injuring the hand that can damage important structures such as bone, ligaments, blood vessels and nerves. The patient must be evaluated in a systematic fashion to avoid missed injuries. If several different structures are damaged, recovery will be a lot longer. You may also need surgery to repair broken bones or damaged tendons. Many such injuries are associated with Advanced Trauma and high-energy trauma Life Support principles must be applied as necessary to preserve life over limb.

Avijit Mahajan et al.,[6], practised in relation to crush injuries involving hands. Thorough knowledge of rehabilitative techniques is needed for a mutilated hand and for its treatment, and an in-depth knowledge about the anatomy of the hand, in order to achieve successful outcomes. It must be treated aggressively and efficiently to achieve good functional results. Delay in effective management leads to very poor functional results and stiffness.

Hultman et al.,[7], Hot-press hand injuries create significant challenges, in terms of restoration of function, acute coverage and long-term outcomes are largely unknown. Hot-press hand burns can be devastating, but it is possible for the

patients to return to work. We recommend early aggressive perioperative hand therapy, wound excision, low threshold for rehabilitative support and reconstructive procedures.

Christopher J. Hodgetts et al.,[8], Shoulder pain is a common ailment — affecting 18% to 26% of adults — but that doesn't mean it's ever convenient. The shoulder has the most range of motion of all our joints, so it's not surprising that shoulder pain and injuries are both common and incredibly uncomfortable. Whether it's rotator cuff tears or other injuries to the muscles surrounding the shoulder, physical therapy for shoulder pain is often a successful, non-surgical treatment. It aims to strengthen the muscles around your shoulder to improve its function and your mobility.

III. PROPOSED METHODOLOGY

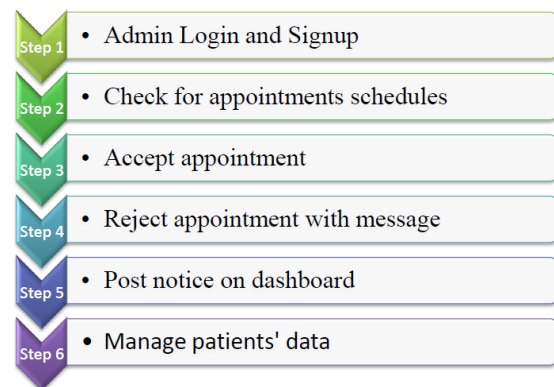


Fig. 2 Admin Module Flow

As shown in the above figure admin's flow is described in steps:

In step 1: The login and signup panel will appear if the admin is already registered then he/she can login the panel using username and password. And if the user is new then signup is required with basic information needed.

In step 2: Admin can keep track of daily booked appointments and checkout the time slots with availability of doctors on that time. And can see the patient details while confirming appointments.

In step 3: Admin can accept the appointment request sent by the patient with confirmation.

In step 4: Admin can cancel appointments anytime if there is unavailability of doctors at the booking time, or there is another emergency in the hospital

etc. And an appointment cancellation message will be sent on the registered mobile number of the patient with cancellation reason.

In step 5: Admin can post important notices or alerts on the dashboard that can be seen by everyone visiting the website.

In step 6: Admin has the privilege to manage data of the registered users on the website, like editing information, removing patients from the database etc.

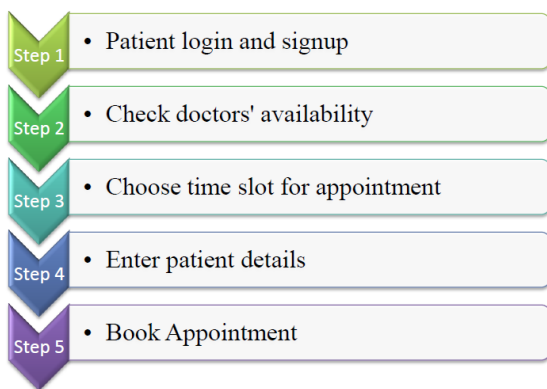


Fig. 3 Patient Module Flow

The website is designed in a way where the user can access the website for their appointment booking purpose. The privileges of the user shown in the fig. 2 is described below:

Step 1: Patients who are looking for an appointment from a doctor can visit the website and signup with basic details of them and get the username and password to login to the system.

Step 2: Now after the login process the user will be jumped to the dashboard of the website where they can book appointments with the concerned doctors' availability.

Step 3: While booking an appointment users have to select the time slot for the appointment and then the appointment can be scheduled. As there are many patients who are using this portal and everyone wants convenient timing.

Step 4: After selecting doctors and time slots, users have to fill in their details for the database maintenance to make it easy for admin as well as doctors to maintain records.

Step 5: After entering the complete details user can book an appointment with the doctors and after the

confirmation from the admin he/she will be notified.

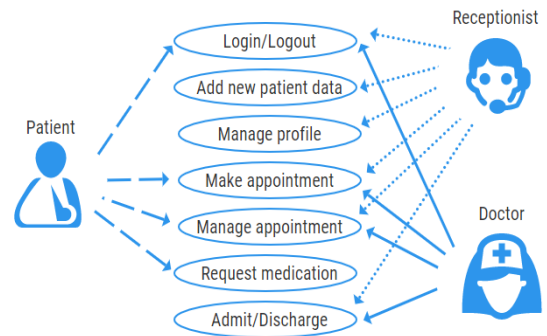


Fig. 4 Use Case Diagram

This use case diagram defines the use cases of all the members involved in the system to work properly.

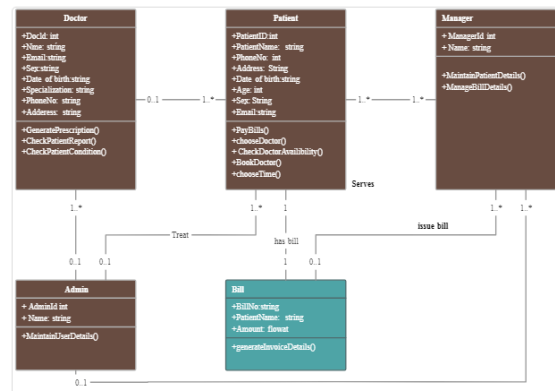


Fig. 5 Class Diagram

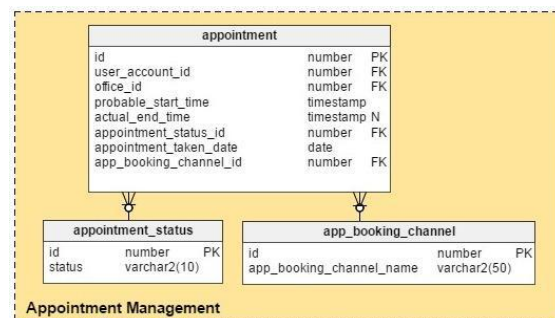


Fig. 6 Appointment Management

IV. RESULT



Fig. 7 Signup Screen



Fig. 8 Login Screen

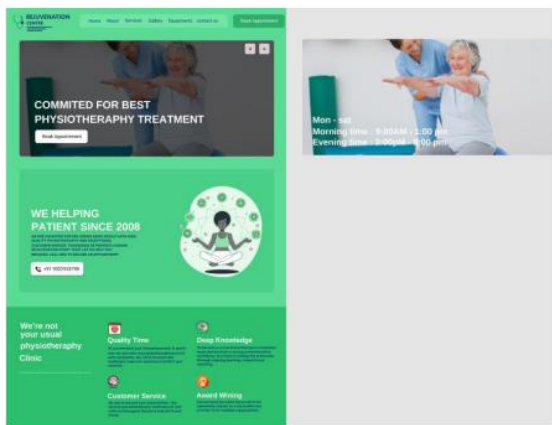


Fig. 9 Main Dashboard

V. CONCLUSION

This project is based on an appointment booking system that focuses on providing facilities to the patients suffering from major body pain issues, and persons with disabilities can book appointments online and consult the best physiotherapist. All the modules made in this project are user friendly and flexible so that it doesn't require high knowledge of technologies. From searching appointment slots to making an appointment it's all easy. In future we will try to add multiple features like payment options, online

consultation with doctors through video calls and provide doorstep services to those patients who are unable to come to the hospital.

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