Abstract—Life is becoming too busy to get medical appointments in person and to maintain a proper health care. Enhancing patient care management is one of the major aims of healthcare industry today to improve the healthcare system worldwide. The main idea behind Online Patient Scheduling System is to help patients in taking appointment from doctors. This system aims to introduce a Patient Scheduling Online Service for health care institutions that would ease off the appointment-scheduling journey for users and pave the path of a better doctor-patient experience. Thus, an Online Patient Scheduling System is launched as an important component of scheduling and managing appointments. The web application acts as a client whereas the database containing the doctor’s details, patient’s details and appointment details is maintained by a website that acts as a server.

Keywords— appointment, online application, patient, doctor, scheduling, healthcare

I. INTRODUCTION

This project aims to introduce a Patient Scheduling Online Service for health care institutions that would ease off the appointment-scheduling journey for users and pave the path of a better doctor-patient experience. The proposed system advances with online facilities that eliminate the chaos of traditional appointment services. This system offers online appointment booking, to view doctors list, to cancel and update appointments with an administrative portal to manage all the sections.[3] It provides advanced functionality to streamline the process thus easy access to personal hospital services that help organizations to stay connected with their customers, clients and most importantly patients and can result in significant time and monetary savings. In order to develop a successfully running online Patient Scheduling, the system is required to interact with system database, scheduling module and the administrative module for example, to achieve the best implementation, the scheduling system would be able to interact with several medical health care staff such as physicians, nurses admin staff and patients.[1]

II. RELATED WORK

A number of schemes introduced and developed to improve the comfort and quality of services of passengers provided at the railway stations. Some of these schemes have been initiated by the government and some by private agencies.

A. A Mr. Doc: A Doctor Appointment Application System (2012)

The proposed online appointment system has been implemented in android studio for application development and website is developed using HTML and PHP. The tasks involved in this work are divided into modules. The data is approached and shared by using API’S between the website and the android application. This is web-based and mobile application

B. Online Appointment for Medical Services by MD Zahidur Rahman

This is a proposed researched system by MD Zahidur Rahman. The proposed system is designed to save effort, time and money of patients from waiting to make appointments as well as to reduce the work of the doctor and the hospitals and clinics to manage appointments easily.[4]

C. HSC Medical Center Appointment System

Nowadays the need to queue up for a long time to consult a medical officer has minimized by technological facilities available over the Internet. One such organization that has adapted the recent technological era is HSC Medical Center. The appointment system used by HSC Medical Center does not require any ID and password to log-in before making any appointment and the appointment is valid within 24 hours only. The users are required to complete a form and click the submit button to finalize the appointment.

III. PROBLEMS OF CURRENT SYSTEM

Every organization whether big or small, has challenges to overcome in managing the entire system. In the existing system, there is no system that facilitates its user to have online appointment process. In traditional appointment system patients has to come to the hospital and queue at the appointment window to make the appointment. The patients using this method waste unnecessary time standing in line at the registration window to ensure a successful registration with a certain doctor.
A. Manual System
Appointments are being recorded in an appointment book so it is difficult to maintain such large registers, and this might lead to loss of data in manual systems.

B. Difficult & Time-Wasting Process
Patients need to stand in long queues to get their appointment process done which is a time consuming and hectic process.

C. Slow
Manual system is slow as first appointment is registered. Then it is cross-checked by the doctor, whether he is available or not. Then it is informed to the patient.

D. Less Efficient and Human Effort
Manual systems are less efficient as they require time and extra effort.

E. No Feedback or Review Mechanism
In manual appointment system there is no mechanism for viewing the reviews and feedback of the concerned doctor prior to the appointment process.

IV. PROPOSED MODEL
A. Objectives of Proposed System
The main objectives of Online Patient Scheduling System are
• To develop a system that allows users to have control over their appointment making service.
• To facilitate the patients with real time healthcare scheduling.
• To manage staff resources needed for managing appointments.
• To make the use of online platform for less customer inconvenience and high productivity among staff.
• To optimize time savings and monetary savings as both staff time and services translate into expenses and revenue.[2]

B. Detailed Life Cycle of Project

C. Working of Proposed System
The working of the proposed system with the help of snapshots of various modules.

1. Home Page: Home page to navigate users for registration, login, view news, services etc.

2. Doctor Registration Page: Doctors can register themselves giving details such as name, fee, timing etc.
3. **Login Page for Doctor and Patients**: Doctors and patients can login using their username and password.

4. **Appointment Page**: Patient can book an appointment by selecting locality, category of doctor.

5. **Doctor’s profile Page**: Doctors can update their details such as timings, fee etc.

6. **Payment**: Patients need to complete payment process to confirm their appointment.

7. **Appointment Confirmation Page**: On successful confirmation patient can see the updated status of the appointment.
V. CONCLUSION AND FUTURE WORK

- The purpose of the project entitled as “Online Patient Scheduling System” is to design such a system that will make appointment & scheduling process online and fast.
- The Online Patient Scheduling System aims to ease off the appointment-scheduling journey for users and pave the path of a better doctor-patient experience.
- This system offers online appointment booking, to view doctors list, to cancel and update appointments with an administrative portal to manage all the sections.
- Further this system can be added with an online chat application that can ease the communication between patients and doctors.

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