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HOSPITAL MANAGEMENT SYSTEM WITH CHATBOT

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ABSTRACT:

Conversations may be initiated by humans using text or voice interfaces and answered by AI-generated chatbots. Applications where chatbots often engage in human-to-human interaction include online games, contact centres, and e-commerce customer care. When messages are received, these applications are programmed to reply automatically. A chatbot's replies may be set to remain constant, to change depending on keywords, or to use machine learning to adjust to varied situations. Websites of healthcare institutions like hospitals, nursing homes, and private practices are seeing an uptick in the integration of chatbots. These chatbots interact with users of the website to help them locate physicians, set up appointments, and get the care they need. The employment of AI in mission-critical industries like healthcare, however, begs the question of whether or not human workers should be replaced by machines. This healthcare chatbot system is available 24/7 and answers all of your general and particular queries about healthcare in a detailed and thorough manner. Leads may be more easily generated and sent to sales teams in an automated fashion. The bot helps people precisely determine their healthcare requirements by leading them through a series of questions.

I INTRODUCTION

Computers give us information; they engage us and help us in a lot of manners. A chatbot is a program intended to counterfeit smart communication on a text or speech. Yet, this paper concentrates only on text. Computers give us information; they engage us and help us in a lot of manners. A chatbot is a program intended to counterfeit smart communication on a text or speech. Yet, this paper concentrates only on text.

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restore their knowledge using human assistance or using web resources. This application is incredibly fundamental since knowledge is stored in advance. The system application uses the question and answer protocol in the form of a chatbot to answer user queries. This system is developed to reduce the healthcare cost and time of the users, as it is not possible for the users to visit the doctors or experts when immediately needed

The response to the question will be replied based on the user query and knowledge base. The significant keywords are fetched from the sentence and answer to those sentences. If the match is discovered or the significant, answer will be given or similar answers will be displayed. The complex questions and answers present in the database are viewed and answered by an expert. Here the users can personally ask any questions regarding healthcare, as not much time will be wasted by the user for consulting a doctor. The input sentence of the chat pattern is stored in an Relational Database Management System (RDBMS). The chatbot would coordinate the input sentence from the user keywords are extracted from the given input sentence and the sentence similarity is found. The keyword ranking and sentence similarity are found using the N-gram, TF-IDF, and cosine similarity. The interfaces are standalone built using the PYTHON programming language. In this project we are designing hospital systems where chatbot will accept symptoms from patient and then suggest doctor availability date and time for that symptoms. To send SMS to doctor we need to have mobile service provider without that this service will not work and you are asking to generate prescription by chatbot but we don't have diseases and related medicines to generate prescription so we are not doing this but chatbot will suggest doctor by taking symptoms from patients.

II EXISTING SYSTEM

In this project we are designing hospital systems where chatbot will accept symptoms from patient and then suggest doctor availability date and time for that symptoms. To send SMS to doctor we need to have mobile service provider without that this service will not work and you are asking to generate prescription by chatbot but we don't have diseases and related medicines to generate prescription so we are not doing this but chatbot will suggest

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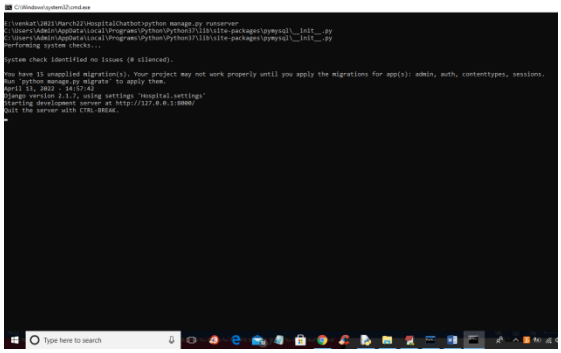
Vol 8, Issue 3, 2020

doctor by taking symptoms from patients.

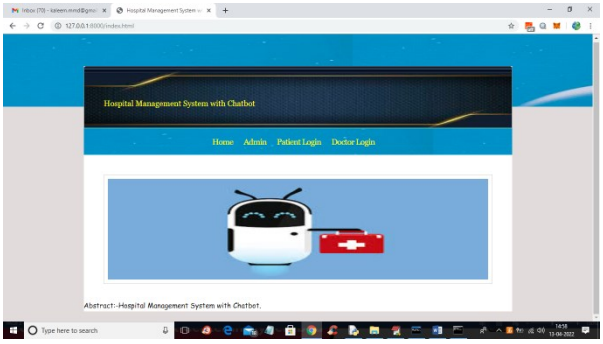
III PROPOSED SYSTEM

a chat bot will communicate with a real person. Chat bots are used in applications such as ecommerce customer service, call centres and Internet gaming. Chatbots are programs built to automatically engage with received messages. Chatbots can be programmed to respond the same way each time, to respond differently to messages containing certain keywords and even to use machine learning to adapt their responses to fit the situation. A developing number of hospitals, nursing homes, and even private centres, presently utilize online Chatbots for human services on their sites.

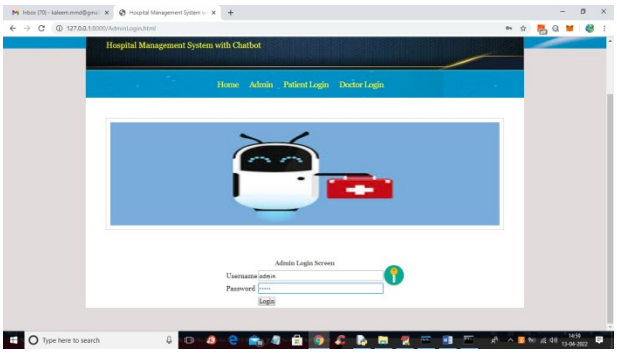
IV WORKING AND IMPLEMENTATION



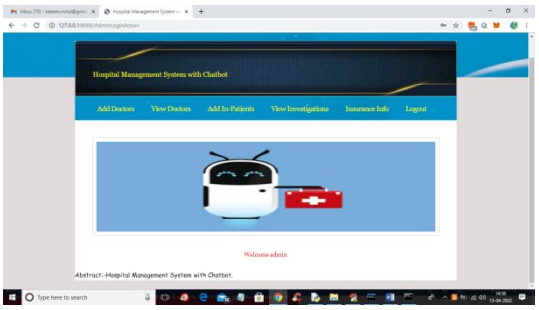
In above screen server started and now open browser and enter URL as http://127.0.0.1:8000/index.html and press enter key to get below output



In above screen click on 'Admin' link to get below screen

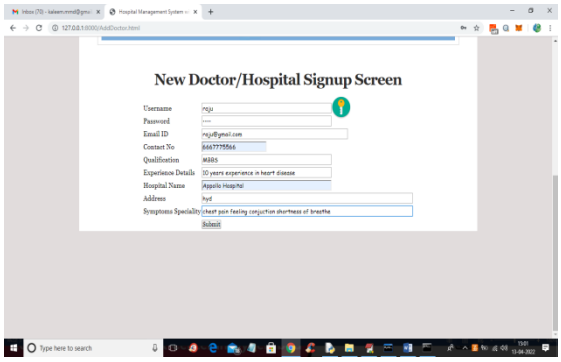


In above screen admin is login and after login will get below screen



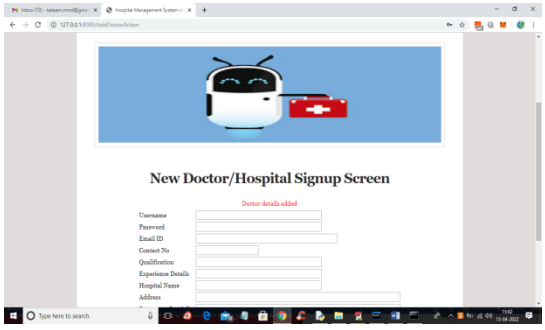
In above screen click on 'Add Doctors' link to add new doctor details

ISSN2321-2152
www.ijmece .com
Vol 8, Issue 3, 2020

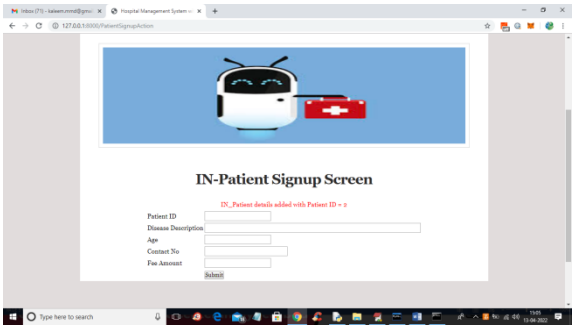


In above screen admin will ad doctor details and in last field admin will add doctor speciality separate with spaces so CHATBOT can match this with patient symptoms and suggest doctor and now press button to save details

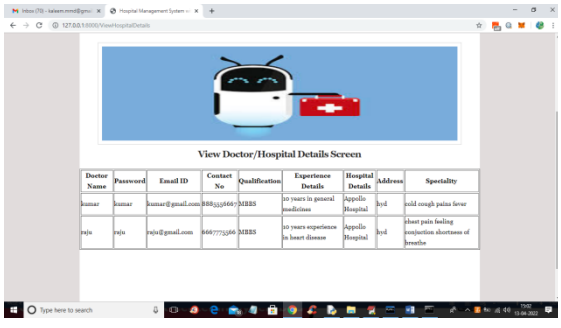
In above screen admin will select appropriate doctor for patient and then enter patient id as 0 if this patient is new so application will generate new ID and if old patient then you can enter existing patient ID and enter remaining details and press button to get below details



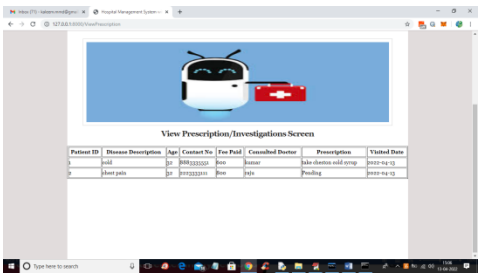
In above screen doctor details added and now click on 'View doctors' link to view all available doctors



In above screen patient details added and generated ID is 2 and now click on 'View Investigations' link to view all patients details



In above screen we can see all doctor details and now click on 'Add In-Patients' link to add patient details



In above screen if doctor not given any prescription to any patient then it will display 'Pending' otherwise display the

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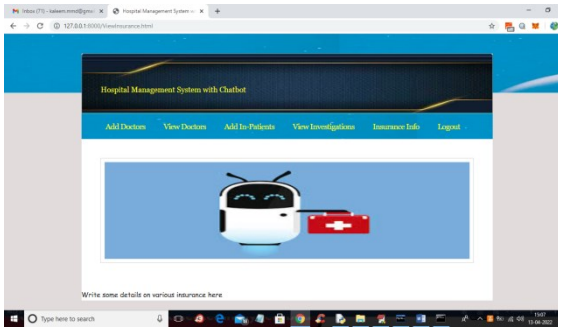
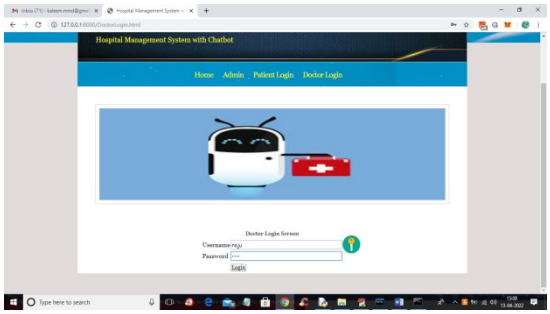
Vol 8, Issue 3, 2020

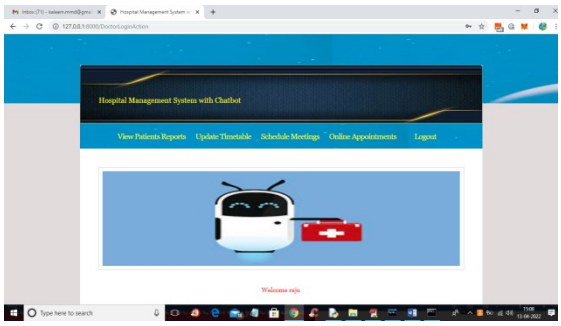
given prescription. Now click on "Insurance Info" link to view insurance details like below screen



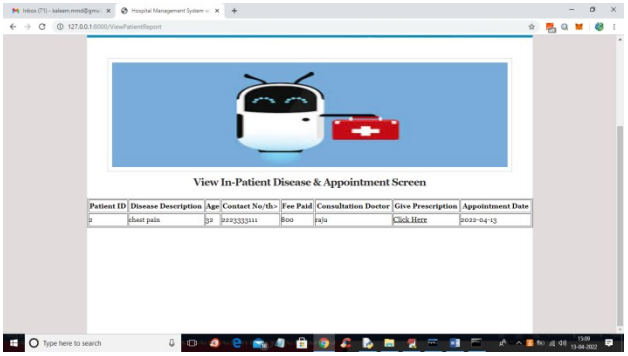
In above screen you need to write some insurance description so admin can explain to patients and now logout and login as patients



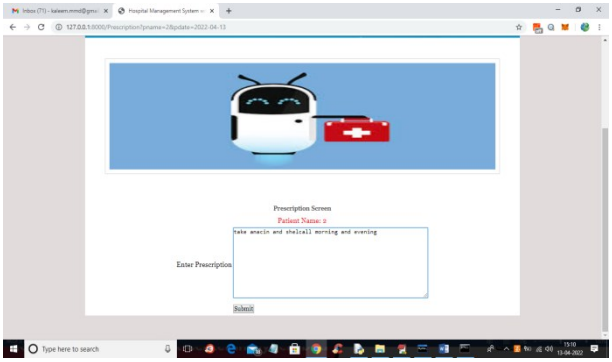
In above screen doctor is login and after login will get below screen



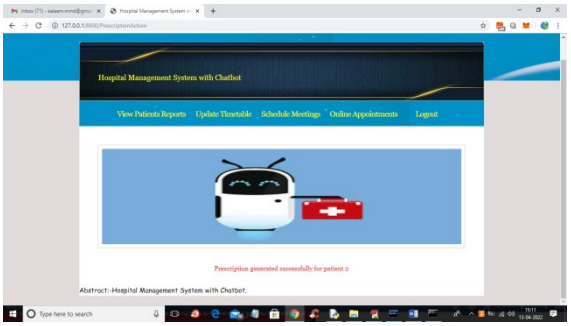
In above screen doctor can click on 'View Patients Reports' link to view In-Patient details and then generate prescription



In above screen doctor can view all patient details and then click on 'Click Here' link to give prescription to patient



In above screen doctor is giving prescription to patient and press button to generate prescription like below screen



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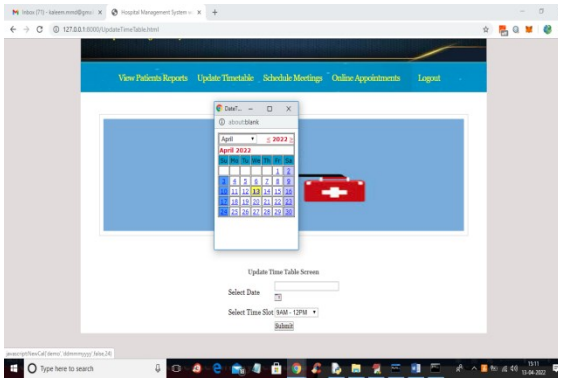
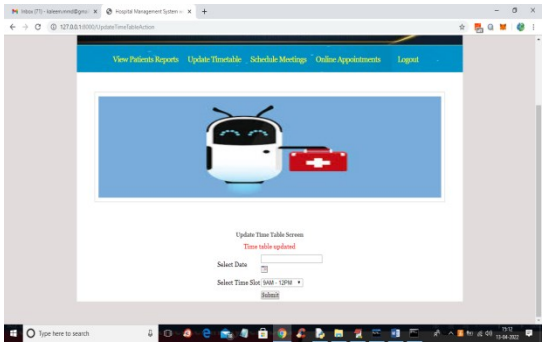
Vol 8, Issue 3, 2020

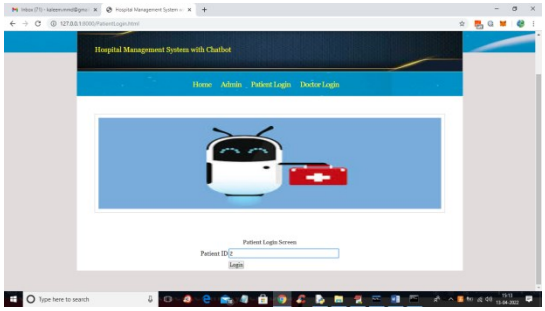
In above screen prescription generated and now click on 'Update Time Table' link to add time details



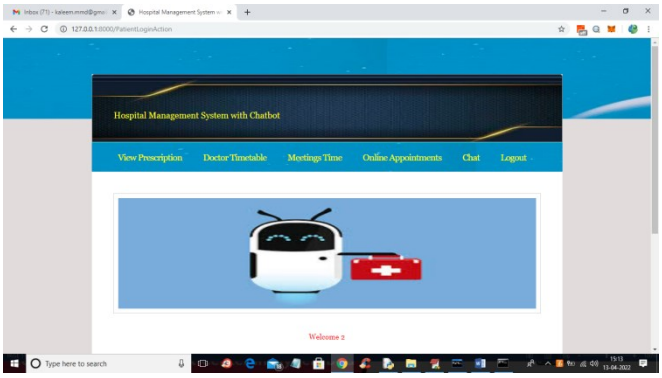
In above screen doctor will select date and then select time slot for time table and press button to update timing



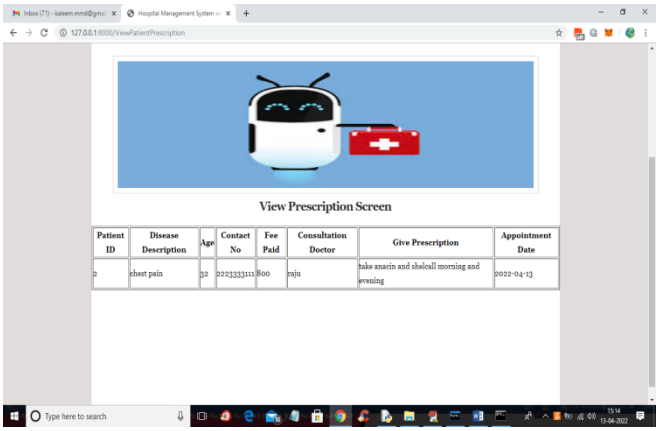
In above screen time table updated and similarly doctor can update meeting and online appointment timings and now logout and login as patient like below screen



In above screen patient is login by entering his ID and press button to get below screen

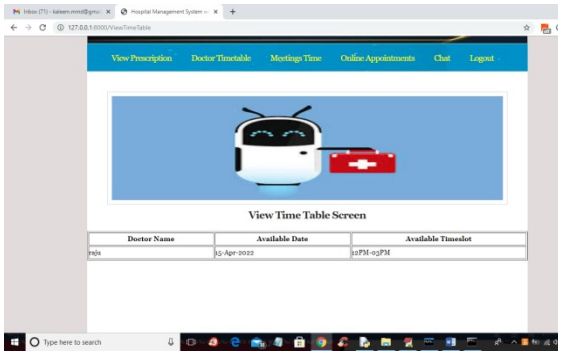


In above screen patient can click on 'View Prescription' link to view prescription given by doctor



In above screen in prescription column patient can view the doctor's prescription and now click on 'View Time Table' link to view all doctors available timing

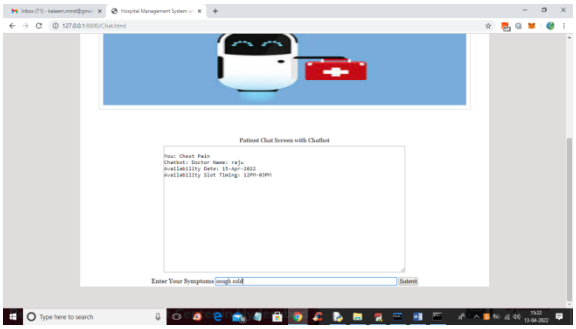
ISSN2321-2152
www.ijmece .com
Vol 8, Issue 3, 2020



In above screen patient can view the doctor availability details and similarly patient can view meetings and online appointment timing and now click on 'Chat' link to get below screen

In above screen patient entered some symptoms and press button to get response from chatbot like below screen

In above screen for given symptoms chatbot suggested doctor raju with date and time and now try another symptoms



In above screen entered symptoms as cough and cold and below is the response

In above screen we got response from chatbot and if u give unrelated query then it will reply 'Not Available'

V.CONCLUSION

With our hospital management system chatbot, we want to automate mundane but necessary tasks so that staff can concentrate on more strategic endeavours. At the same time, we want to make it so that customers never have to wait for an employee to respond to their questions—they can simply chat with the bot whenever they need to. Our chatbot's ability to recognise voice input allows for faster and easier

communication with clients. Improved site navigation is a result of the user-friendly UI. We have tried out a number of different profiles to see how our software performs. The outcomes met expectations.

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