

MEDICAL CHATBOT FOR WOMEN HEALTH

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Abstract –Normally pregnant ladies aren't aware of all the treatment or symptoms regarding the actual disease. For little problem pregnant ladies need to go personally to the hospital for check up which is longer consuming. Also handling the telephonic involves the complaints is sort of hectic. Such a drag are often solved by using medical chatbot by giving proper guidance regarding healthy living. The medical chatbots functioning depends on tongue processing that helps pregnant ladies to submit their problem about their health. The pregnant ladies to submit their problem about health care through the chat-bot without physically available to the hospital. By using Google API for Voice text and text voice conversation. Query is shipped to talk bot and gets related answer and displays answer on web application. The System's major concern behind developing this web based platform is analysing customers's sentiments.

Key Words: Google API, Medical Chatbot, Query

1. INTRODUCTION

The main purpose of the project is to make the language gap between the user and health providers by giving immediate replies to the Questions asked by the user. Establishing question answer forums is becoming a simple thanks to answer those queries rather than browsing through the list of probably relevant document from the web. This system allows computer to communication between human to computer by using tongue processing (NLP). There are three analyses which understand tongue i.e. identification of main linguistic relations is completed to parse subject into object of the sentences. Then description of the texts is completed. The semantic interpretation uses knowledge of word meaning. Chatbot is an Entity which imitate human discussion in its particular accepted set-up in conjunction with a text or vocal language with techniques like tongue Processing (NLP). The aim of this system is to duplicate a person's discussion. The event of chatbot application are often through with making a interface to send input and receive response. It is a system that interact with user by keeping the track of the state of interaction and recollecting the preceding commands to supply functionality. The medical chat-bots are often developed by using artificial algorithms that scrutinize user's queries and recognize it and provides reply to related query. The system give response by use of an efficient Graphical interface such if actual person is chatting with the user. Chatterbot which can be utilized in various fields like education, healthcare, and route assistance. The central neighborhood of the chat-bots includes MySQL. It's an interactive system solve users query regarding medicine. So as that they are getting to get correct instructions for treatment through web app by using Google API.

2. SURVEY PAPER 1

Title: Virtual Classroom: An ADHD Assessment and Diagnosis System supported computer game.

Author: YunchuanTan ; Daqian Zhu ; Hongyun Gao ; Ting-Wei Lin ; Hsiao-Kuang Wu ; Shih-Ching Yeh ; Tzu- Yu Hsu

Publications: 2019 IEEE International Conference on Industrial Cyber Physical Systems (ICPS)

Abstract:

Attention deficit hyperactivity disorder (ADHD), i.e., children's hyperactivity, may be a common neurodevelopmental disorder in childhood. ADHD is especially characterized

by having difficulty in staying focused, behavioral impulsivity and hyperactivity, and is usually amid conduct disorders, learning disabilities or learning difficulties. Traditional therapies generally believe doctors and foyes who can observe and assess patients' behavior through behavioral scales; however, these therapies are time consuming and ineffective in quantifying behavior. Basing on computer game technology, this study integrated multiple sensor technologies, like eye movement sensors and EEG sensors, and developed an assessment and diagnosis system for ADHD.

2.1 SURVEY PAPER 2

Title: A System Design for video game Visualization of Medical Image

Author: Kai Chen ;Zaiqing Chen ;Yonghan Tai ; Jun Peng ; Junsheng Shi ; Chenqi Xia

Publications:2018 26th International Conference on Geoinformatics

Abstract:

Based on medical image data, VR technology can create a visualized three-dimensional environment of human organs in accordance with human operating habits, so as that doctors can accurately determine spatial location, size, geometry, and spatial relationship with the encircling tissue structure. This new approach will overcome the uncertainties in traditional medical visualization methods, and let doctors easily make preoperative planning and virtual surgery. This paper designed and implemented a VR visualization system for medical images, and allowing doctors to conduct disease analysis, surgical training or surgical education during a virtual environment

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3. SCOPE OF THE PROJECT

The chatbot can be specified key patterns which are data preprocessed The attributes that are more relevant to disease diagnosis can be observed. the automated chatbot will diagnosed the disease based on the symptoms of the patient and prescribes medicine based on the user details it will stimuli to particular medicine for specific disease based on the women health .the chatbot helps for women in every time in absence of doctor facilities in everywhere it will ask user symptoms of

health and replies the according the symptoms of the user related disease from which the user is suffering and it will be predicted and analysis by using support vector machine algorithm (svm)by using web application.

4. STATEMENT OF PROBLEM

To design and develop a tool for medical chatbot for women health using machine learning algorithms.

5. OBJECTIVES

The main aim of this project is to provide chatbot service for pregnant by using Natural Language Processing(NLP).

6. METHODOLOGYS OF MEDICAL CHATBOT FOR WOMEN HEALTH

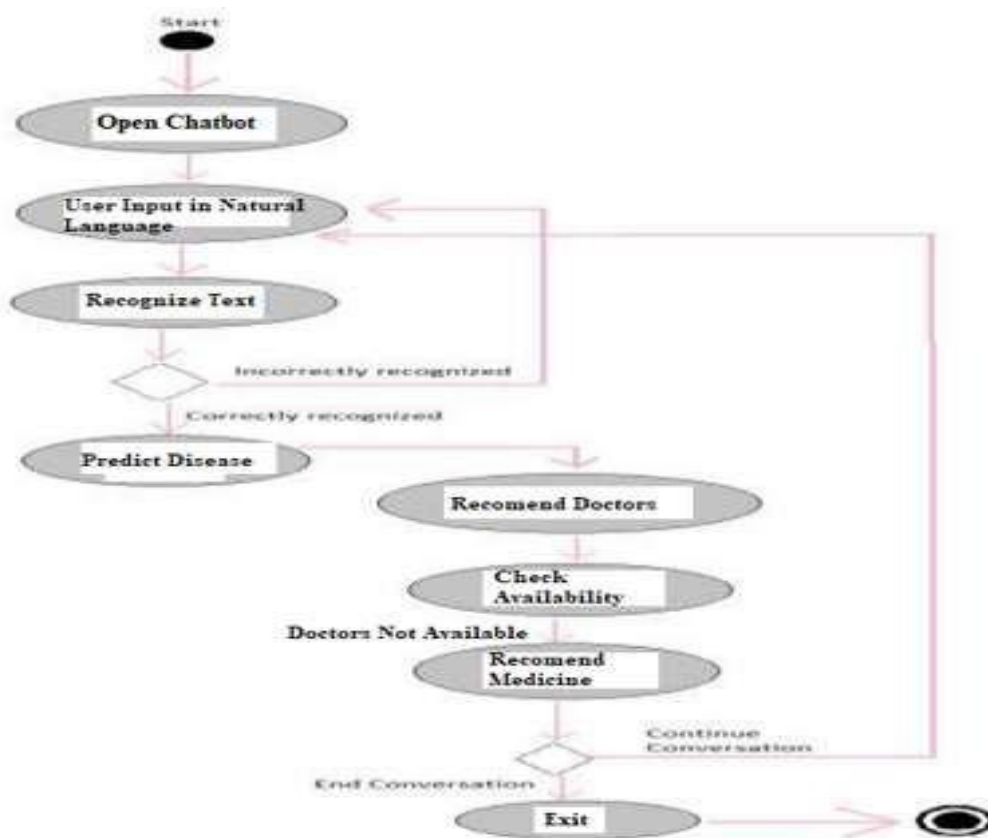


FIG 1:ACTIVITY DIAGRAM OF MEDICAL CHATBOT FOR WOMEN HEALTH

Registration Module :

The registration module in which user should be registered ,and doctor can be login is done whenever the doctor is available in online and book an appointment for doctor

Question Query Module:

The patient or user can ask the questions regarding their symptoms and disease in the automated chatbot and the chatbot will respond accordingly the disease and gives reply to the user.

Disease Prediction Module:

Whenever the patient tells about Symptoms it recognize the symptoms and analysis by machine learning logic like svm algorithm and predicts the disease and give response to the user in the efficiently manner by prescribing accurate medicines to user according to the patient condition.

7.ARCHITECTURE OF DESIGN

In the diagram the utilizationr ask questions within the chatbot because the front consists of interface of the use input requests of queries of the patient and therefore the chatbot request queries are sent rear during which the chatbot sever in bot controller logic it controls what happens with message automatically to the user has to the requested queries from the chatbot client and according it checks data preprocessing model where the data took and ready according user model and provides accurate responses to the chatbot client and in sqllite

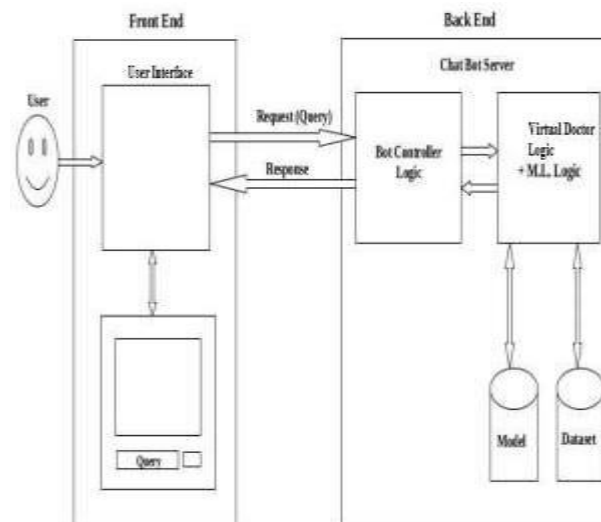


FIG2:ARCHITECTURE DESIGN OF MEDICAL CHATBOT FOR WOMEN HEALTH

the dataset one row of knowledge of instance of and collection of instance of knowledge which ever we trained to the datasets consistent with request within the chatbot server where train data and test data is stored within the sqlite sever which feed supported the small print of the user and just in case absence key patterns the virtual doctor prescribe the drugss supported the symptoms and using machine learning logic means support vector machine(svm) algorithm which identified the disease supported the symptoms given by the user within the chatbot and predicts the diseases and analysis the disease and prescribe the medicine supported the age of particular women age details the target is to predict the diagnosis of disease with number of attributes and provides solution to patient through chatbot. this work is to spot the key patterns or features from the medical data using the classifier model. Classification are wont to predict the diagnosis of disease after the reduction of number of attributes of the user.

8. USE CASE DIAGRAM

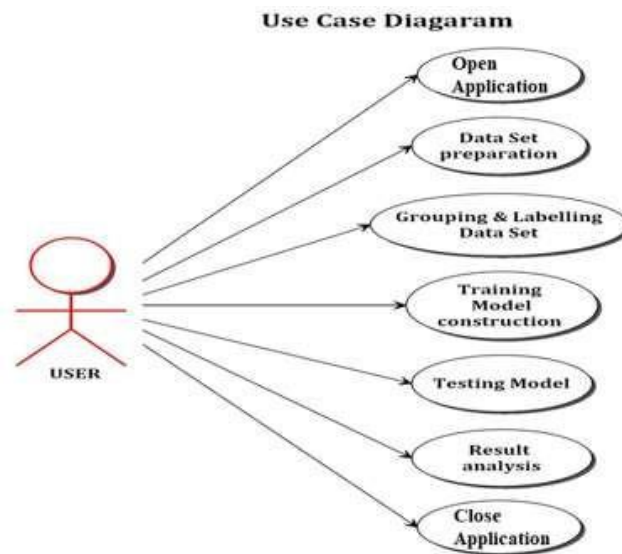


FIG 3:USE CASE OF DIAGRAM

A use case diagram can identify the numerous sorts of users of a system and thus the varied use cases and should often be amid other forms of diagrams also . While a use case itself might drill into many detail about every possibility, a use case diagram can help provide a higher-level view of the system. it has been said before that Use case diagrams are the blueprints for your system supply the simplified and graphical representation of what the system must actually do. to the user has to the requested queries from the chatbot client and according it checks data preprocessing model where the data took and ready according user model and provides accurate responses to the chatbot client and in sqllite the target is to predict the diagnosis of disease with number of attributes and provides solution to patient through chatbot. this work is to spot the key patterns or features from the medical data using the classifier model. Classification are wont to predict the diagnosis of disease after the reduction of number of attributes of the user.

9. RESULTSAND DISCUSSION

This web application the implementation of medical chatbot for women health where the user can login into the web application at any time and ask question about the user symptoms and gets disease prediction of the user and if user symptoms are unpredicted and emergency the chatbot books an appointment with doctor and also doctor can login to web application with user with live chat can be done and doctor will predict the disease of patient and suggest to medicine in the automated chat.



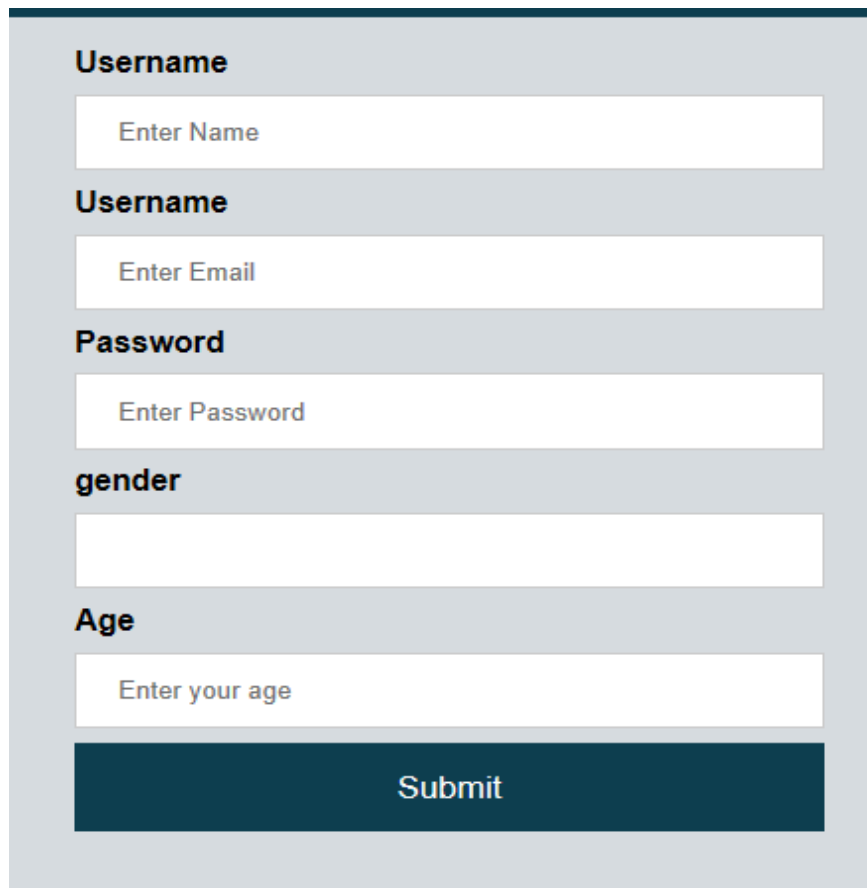
User name

Password

Login

New user [register](#)

FIG2:LOGIN OF THE USER



Username

Username

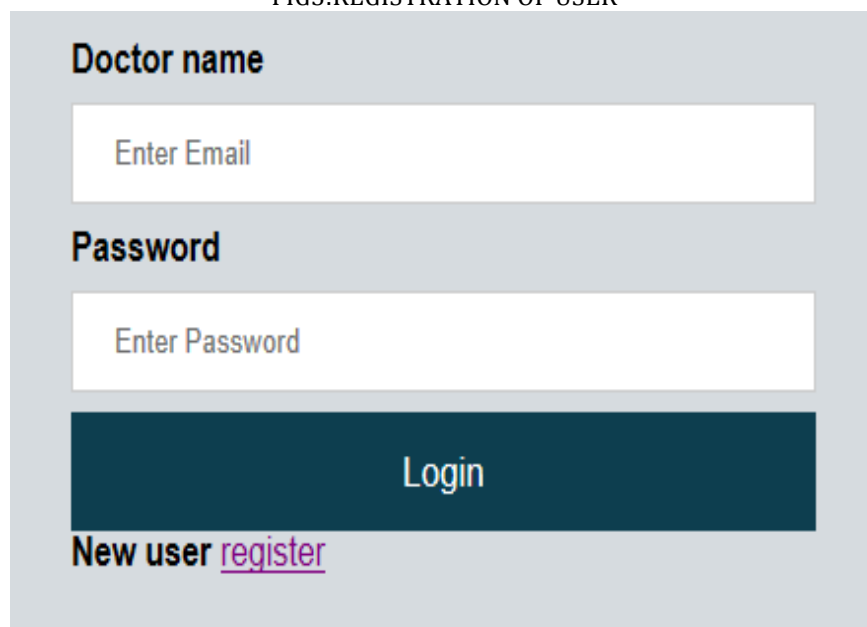
Password

gender

Age

Submit

FIG3:REGISTRATION OF USER



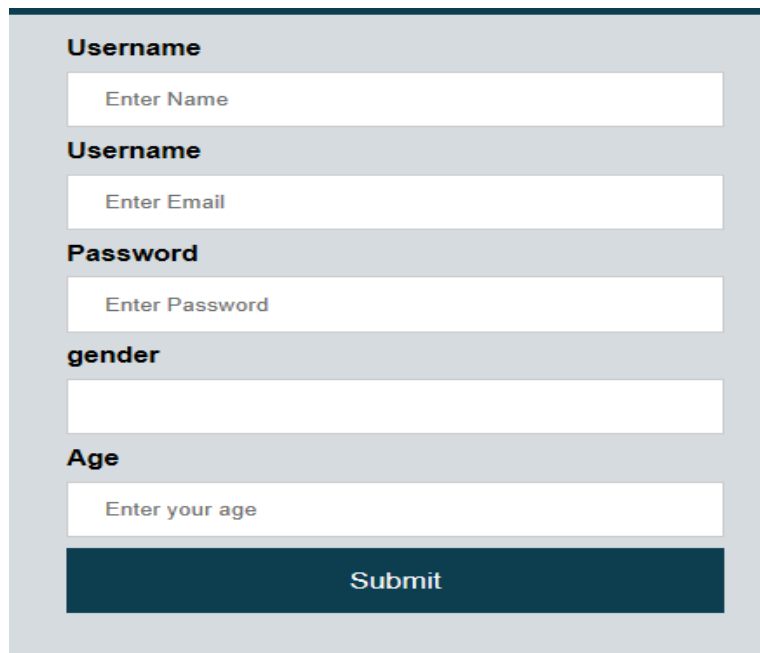
Doctor name

Password

Login

New user [register](#)

FIG 4:LOGIN OF THE DOCTOR



The registration form consists of several input fields and a submit button. The fields are labeled as follows:

- Username**: Enter Name
- Username**: Enter Email
- Password**: Enter Password
- gender**: (empty field)
- Age**: Enter your age

A dark blue **Submit** button is located at the bottom of the form.

FIG 5:REGISTRATION OF DOCTOR

Automated Healthcare Chatbot



FIG6:THE AUTOMATED HEALTH CARE CHATBOT 10.CONCLUSION

Our medical chatbot will have a great impact on the life of its user .this will be a most useful tool for people with busy schedule has they won't consult any doctor for minor health issues.

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