**Disease Diagnosis using Chatbot**

**Abstract**

Hospitals are the most widely used means by which a sick person gets medical check-ups, disease diagnosis and treatment recommendation. This has been a practice by almost all the people over the world. People consider it as the most reliable means to check their health status. The proposed system is to create an alternative to this conventional method of visiting a hospital and making an appointment with a doctor to get diagnosis. This research intends to apply the concepts of natural language processing and machine learning to create a chatbot application. People can interact with the chatbot just like they do with another human and through a series of queries, chatbot will identify the symptoms of the user and thereby, predicts the disease and recommends treatment. This system can be of great use to people in conducting daily check-ups, makes people aware of their health status and encourages people to make proper measures to remain healthy. According to this research, such a system is not widely used and people are less aware of it. Executing this proposed framework can help people avoid the time-consuming method of visiting hospitals by using this free of cost application, wherever they are.

**Existing system**

In existing system, A rule-based medical chatbot uses predefined rules and a set of programmed responses to interact with users. These chatbots do not leverage machine learning but instead rely on a decision tree or a flowchart approach to provide information based on user inputs

**Disadvantages:**

1. Less Accuracy
2. More time taking process

**Proposed System:**

In this project we are developing Chatbot which can analyse input symptoms and then predict disease and then display diet and doctor appointment booking. It’s not real time application to make booking with the doctor but we will display predicted disease, diet information along with doctor and hospital details.

To identify disease we need to train Chatbot with machine learning so it can take symptoms as input and then predict disease and to train Chatbot we have use CNN algorithm and this algorithm get trained on dataset.

**Advantages:**

1. High Accuracy
2. Takes less time

**Modules Information:**

To implement this project, we have designed following modules

1. Register: using this module users can sign up with the application along with email ID and contact no so email can be sent along with predicted disease and diet details
2. User: using this module user can login to application
3. Chatbot: using this module user can enter symptoms and then Chatbot will predict disease, diet, doctor details and then display output as well as send email to registered email ID
4. Lifestyle & Disease Information: using this module use can select disease name and then system will suggest foods to take, avoid along with doctor details.

**HARDWARE & SOFTWARE REQUIREMENTS:**

**HARDWARE REQUIRMENTS:**

* processor :   intel i3(min)
* Hard Disk  :   500 GB.
* Ram : 4GB (min).

**SOFTWARE REQUIRMENTS:**

* Operating system : Windows 10 (min)
* Coding Language  : python (3.7.0)