**ARTIFICIAL INTELLIGENCE (14CS325)**

**GROUP PROJECT**

**Project title:** DOCBOT

**Team members:**

Sai Tejaswini.M.V –1PI14CS090

Sakshi Chawla – 1PI14CS091

Vidyaranjitha.H.R ---1PI14CS128

**Project description :**

An Artificial Intelligence technology, that provides apt and novel solutions for improving clinical assistance and promoting better patient outcomes. An excellent technology for medical diagnosis and providing proper medications.

In today’s world MYCIN was an early [backward chaining](https://en.wikipedia.org/wiki/Backward_chaining) [expert system](https://en.wikipedia.org/wiki/Expert_system) that used [artificial intelligence](https://en.wikipedia.org/wiki/Artificial_intelligence) to identify bacteria causing severe infections .It’s a great boon for Artificial Intelligence technologies which are still on the run to give the world a vision of intelligent computers.

Here, we have worked on the simulation of how MYCIN works on the small scale using the concepts of state space search, expert systems and to some extent, a very basic level of Natural Language Processing. The diseases, along with their symptoms and their medication are stored in a database. Given the situation of no disease as initial state, to the goal state of having some disease. The algorithm uses state space search to traverse through the diseases and their symptoms with the constant interrogation and conversation with the patient, reaches to the goal state of confirming or identifying the disease and providing proper medication .It uses expert system ,as per the past conversation and with stored database of diseases and symptoms ,expert system helps in diagnosing and rejecting some disease which does not match the symptoms of the patient.

It’s application is a boon .It has achieved a meaningful use in today’s fast growing world. It’s usage has reduced hospital readmission rates, manages Chronic condition ,and increasing health care provider productivity .

**Code execution procedure (In Linux based systems) :**

1. Open the terminal.
2. Change to directory where the program file is present.
3. **python3 docbot.py**

Type the above command to execute the code.

1. Start the conversation with the DocBot. May be start with a “Hi” or “Hello” .