

Pimpri Chinchwad Education Trust's Pimpri Chinchwad College of Engineering

Summary

Department: Computer Engineering Academic Year: 2022-23 Semester: I

Class: T. Y.B. Tech **Div.:** A **Date:** 14-09-2022

Group No: GA12

Identified thrust Area of topic: Health & Hygiene

SIG Name: Applied Artificial Intelligence And Visual Computing

Title of the Seminar topic: Symptom checker for prediction of human diseases

Mentor Name: Dr. Gopal Upadhye Sir

Summary

Symptom checkers and search engines are used primarily to rule out serious conditions and find guidance before seeking physicians. A symptom checker provides diagnostic information based on the symptoms entered by the user. Most symptom checkers also ask the user for personal information including age, gender, and current location to provide more informed medical insights, including nearby medical facilities for treatment if possible. It can be used as a starting point to get a medical diagnosis from a doctor.

The basic design of a symptom checker currently consists of the following components:

1. Front-end

The front-end is the interactive component of the symptom checker where the user interacts with the symptom checker to obtain diagnostic information.

2. Web-Server

The web server is the core component of the system through which the different components of the symptom checker interact. The symptoms, description, and demographic information entered by the user are processed by the web server.

3. Implementation of Algorithm

Here we will identify the problem, prepare the data considering the different aspects and choose the algorithms. In a later stage, we will focus on training the algorithm and increasing the accuracy of the disease prediction.

Artificial Intelligence

All AI techniques depend on high-quality information on which to learn and classify clinical data about outcomes. To date, most AI techniques have focused on radiology, as medical imaging data have been systematically stored and collected for some time and are now readily available to train AI diagnostic systems. Based on an approach known as supervised learning, the programmer trains the system by defining a set of diagnoses for a range of images labelled by human experts.