Abstract

A brain tumor is an abnormal growth of normal cells in the brain. There are three possible treatments suggested by the oncologist are Chemotherapy, Radiotherapy and Operation. These treatments have an adverse affect on patients' body and symptoms experienced are similar to the symptoms of brain tumor so the patients' panic. The proposed system provides a support for such patients. In the proposed system, Decision Tree (a supervised learning algorithm) is used to create a decision models to predict patient's health condition based on symptoms. Severity of symptoms, provided as input by the patient, is compared with the training model and it is predicted if patients' condition has altered. The current geographical location of the patient is obtained and nearest oncologists is suggested to the patient. Later, the patient can decide to send appointment request to any of the suggested oncologist. The oncologist can see patient's request and view patient's condition as predicted by system. The location and volume of the tumor based on previous Magnetic Resonance Imaging (MRI) record is entered by oncologist and condition of patient is again determined by system. Graphical view of comparison between
Developing a Web based Support System to Monitor Symptoms of Brain Cancer Patients

volume and location of tumor of that patient over time can be viewed by doctor. Patient receives appointment via mail. Dietary tips are also provided to patient to improve his/her Quality Of Life (QOL) during the course of treatment.

References


Index Terms

Computer Science Biomedical
Keywords

Brain Tumor, Geolocation API, Decision Tree, Symptom Monitoring