Abstract

Emergency medical situation are conditions in which a rapid response is required from patient itself, family, or anyone nearby. In case of Emergency everyone is deemed to have obligation to make quick decision taking the patient to hospital for medical treatment. Transporting severely injured patients in emergency case can by time consuming and resource consuming. This practical application of build sistem can be used to determining suitable hospital for patient in timely Several objective and criteria should be considered to increase the manner. patient's life expectancy. In this study, we build Expert System (ES) to obtain suitable hospital using criteria patient conditions, travel time, availability of doctor, speciality doctor, availability of operating room, and any other rooms. An Expert System built upon knowledge base model, this knowledge stored into rule and processed by inference engine using Rete Algorithm which is built from Rete network implementing Drools business rule management system. The relationship in between nodes in Rete Algorithm designed to eliminate redundancy of computer processes of Expert Sistem. Through the using of the Rete algorithm on the rulebased sistem, the result is this expert system can process the knowledge base which is rule and fact into desired emergency unit.

Keyword: *Rete algorithm, Drools, expert system, inference engine, knowledge based.*