

Abstract

Expert System has been developed to assist people in resolving their problem. One of the problem is about medical problem such as provision of medicines as first aid.

The objective of this final project is to build an expert system by combining Rule Based Reasoning and Case Based Reasoning method. Case Based Reasoning solve a problems by utilizing previous case from knowledge base. There are 4 important stages of Case Based : retrieve, reuse, revise and retain. Solution is searched on retrieve and reuse. Retrieve search for stages of similiarity from input case to find best matching case. Only best matching case that will be processed in the reuse to serach for solution. Revise and retain are stages where the solution which has been given before, is repaired decided to become a new knowledge or not.

In fact, there is the possibility of the solution are not only on the best matching case, but also on cases that have low similiarity level. To cover these issue, Rule Based method is used in this final project.by using Rule Based on the stage of reuse,solution not only searched on best matching case, but also on the other case. Incorporation of Case Based Reasoning and Rule Based Reasoning method in this final project is far from ideal. It is because only one rule that has been found on the reuse stage. So this final project is using hardcode method to merge Case Base and Rule Based

This final project is using .Net language for the interface and the inference mechanism. Knowledge base is stored in data base by using MySQL database.

Keyword : *Expert system, Case Base, Rule Base, retrieve, reuse, revise, retain, hardcode*