

ABSTRACT

This project presents the development of the diagnostic expert system development tool, the software tool for assisting the developers, experts to build diagnostic expert system easily.

The study of this project begins by providing the basic knowledge about an expert system, defining the diagnostic expert system. The diagnostic expert system development tool is developed to help solve the problem of difficulty and complexity in developing diagnostic expert system by providing easy-to-use and easy-to-learn knowledge-based application development environment. The software tool is developed based on the software development life cycle, analysis, design, coding, testing and maintenance. The software tool uses the concept of binary tree structure as a knowledge representation structure and a searching mechanism of the inference engine of the program. This software tool is coded by using Microsoft Visual Basic, which eases use and is easy to maintain. This project also provided the concept the developer needs to know in developing diagnostic expert system and the steps in developing diagnostic expert system. Also the software manual has been provided.

At the end of this project, there is the conclusion to see one more time of the overview of this project, and there are the recommendations that suggest for the improvement of the software tool.