Abstract

Expert system for Ellipse begins with company’s requirement of accumulating knowledge about its main product. To fulfill the requirement, integrated steps of building versatile expert system is needed. The Methodology used is top down classification of information engineering and expert system development life cycle. Top down classification produces entity analysis, organization vs. function, organization vs. location, business function vs. information subject, organization vs. business function, and organization vs. information subject analysis. Top down classification provides information regarding how the software will be used in organization. The expert system side begins with knowledge acquisition by interviewing an expert and reading manuals. Based on information gathering in knowledge acquisition, knowledge representation is built as a foundation for the knowledge base. The inference engine uses built-in backward chaining against knowledge base to give solutions to the problems. The goal of this thesis is to build a prototype of multi-user expert system for accumulating knowledge of main product of the company – Ellipse. The expert system will help company to build its intelligence capital, increase quality of services to clients, and equip all consultants with valuable knowledge.

Keywords: multi-user expert system, top down classification, expert, knowledge acquisition, knowledge representation, knowledge base, inference engine.