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KNOWLEDGE DESIGN IN RULE-BASED SYSTEM ARCHITECTURE FOR C TUTORIAL

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Abstract

CTutorial4u is a standalone system developed in Visual Basic 6.0 which is able to provide guidance to the students who are pursuing C programming subject in their higher learning institutes. It is designed based on rule-based system architecture in order to provide a flexible knowledge base foundation within C programming. The knowledge base structure is essential to the successful execution of rules underlying the basic modules or processes involved in the system.

CTutorial4u's functionalities divided into two categories that are 'User Module' and 'Admin Module'. User Module has 'Lecture notes', 'Tutorial session' and 'Quiz session'. The Admin Module has 'User management' and 'Question management'. Lecture notes contains lecture notes in power point format, tutorial session contains knowledge based tutorials to teach main topics in C programming interactively and the quiz session provide interactive quiz to the students.

The knowledge design in rule based system architecture actually run based on some standard rules set in the working memory. The rules will remain the same for different runs. CTutorial4u is not only an exercise to the students but actually improves basic understanding in C programming and as a tool to test their knowledge in that field. At the same time, it will judge student's ability and efficiency of answering different set of quizzes with various concepts in programming language. The system is intended to be used by Faculty of Science Computer and Information Technology (FCSIT), University Malaya students where it will be installed FCSIT's laboratories.

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