Expert System for Class Schedule Management

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Outline

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Introduction

Prolog is a declarative language, which means that a program consists of data based on the facts and rules (Logical relationship) rather than computing how to find a solution. A logical relationship describes the relationships which hold for the given application. To obtain the solution, the user asks a question rather than running a program. When a user asks a question, then to determine the answer, the run time system searches through the database of facts and rules. In this system also we tried to implement this idea of logic programming. We developed an expert system that will inform the students about there respective daily class routine based on which semester they are currently studying in.

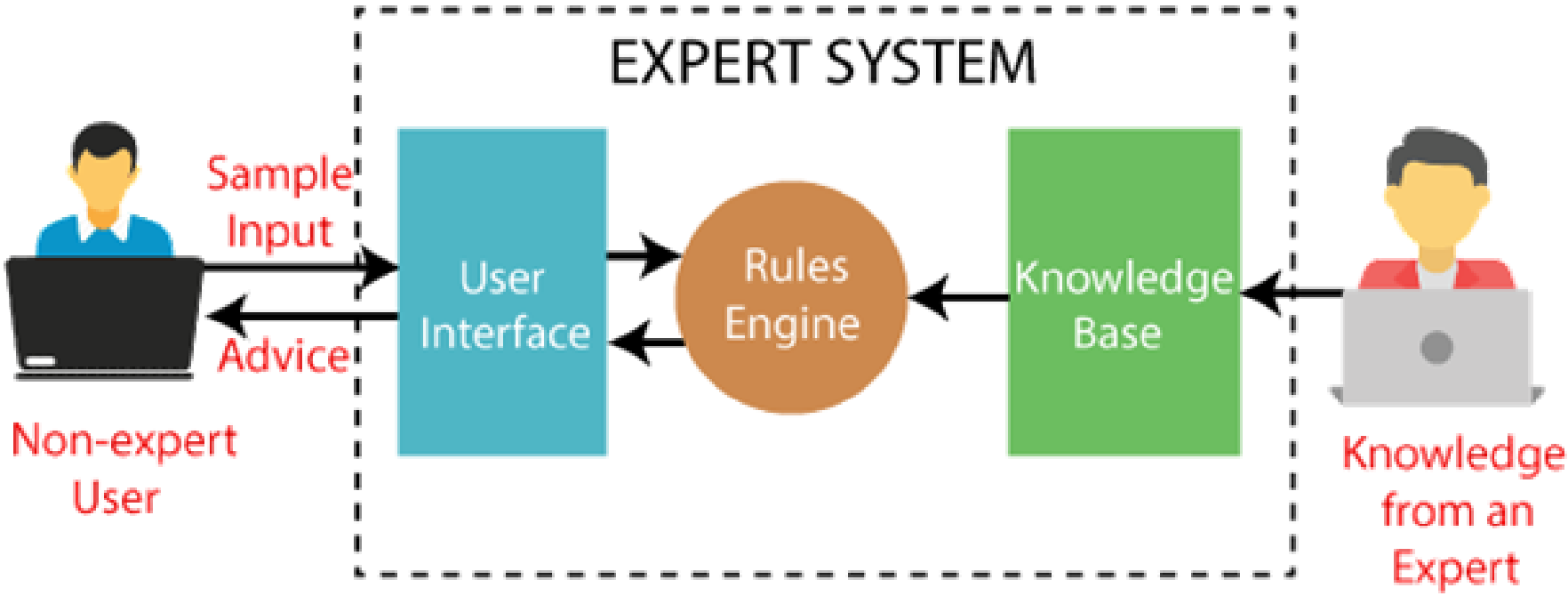
Expert System

An expert system is a computer program that is designed to solve complex problems and to provide decision-making ability like a human expert. It performs this by extracting knowledge from its knowledge base using the reasoning and inference rules according to the user queries. It solves the most complex issue as an expert by extracting the knowledge stored in its knowledge base. The performance of an expert system is based on the expert's knowledge stored in its knowledge base. The more knowledge stored in the KB, the more that system improves its performance.

Objectives of Class Schedule Management System

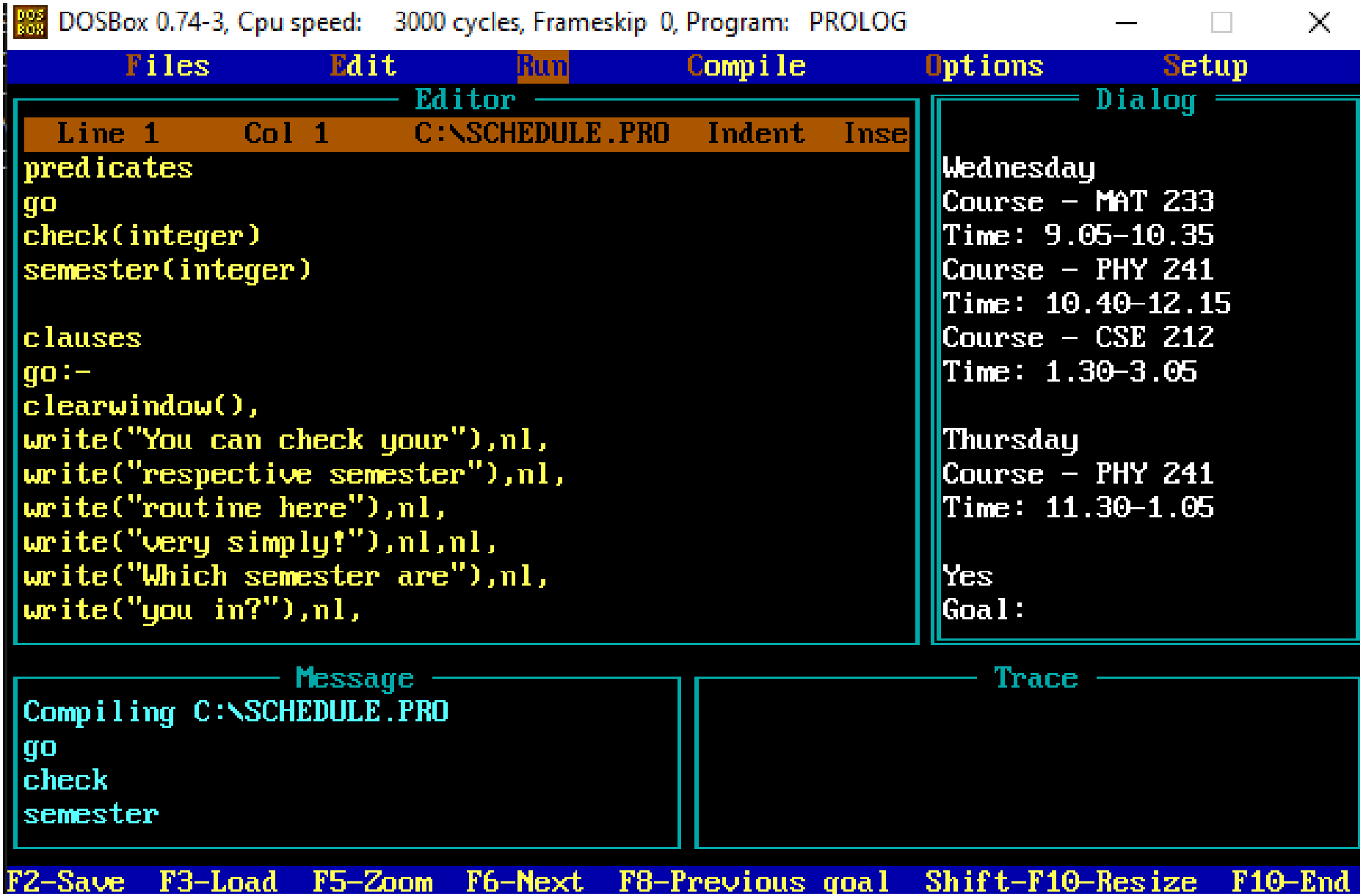
- Show the students their respective class schedule
- High Performance
- Understandable to any kind of user
- Reliable
- Highly responsive to user query

Working process of System



Working process of expert system

System Test


DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: PROLOG
Files Edit Run Compile Options Setup
Editor
Line 1 Col 1 C:\SCHEDULE.PRO Indent Inse
predicates
go
check(integer)
semester(integer)
clauses
go:-
clearwindow(),
write("You can check your"),nl,
write("respective semester"),nl,
write("routine here"),nl,
write("very simply!"),nl,nl,
write("Which semester are"),nl,
write("you in?"),nl,
Dialog
Wednesday
Course - MAT 233
Time: 9.05-10.35
Course - PHY 241
Time: 10.40-12.15
Course - CSE 212
Time: 1.30-3.05
Thursday
Course - PHY 241
Time: 11.30-1.05
Yes
Goal:
Message
Compiling C:\SCHEDULE.PRO
go
check
semester
Trace
F2-Save F3-Load F5-Zoom F6-Next F8-Previous goal Shift-F10-Resize F10-End

Conclusion

The desired expert system shows a successful result and can answer the queries asked by the users. The system will ask the user to just enter their respective semester and then it will instantly show them the daily class schedule that they are assigned to attend. This system can further be utilized to let the students know about their exam routines also. So by using this system in a useful way we can get an expert system that will give us many features.