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Panel C, Batch C1

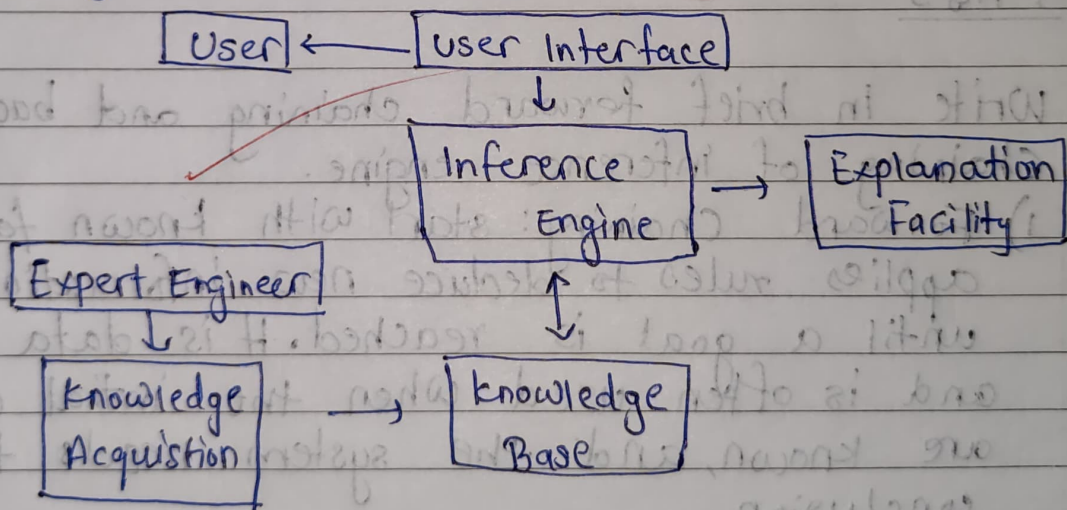
AIES Lab Assignment 7

Aim: Implementation of Expert System

Requirements: SWI Prolog, Turbo Prolog

Objective: To study concepts of expert system and inference engine.

Theory:



Expert System Architecture

Knowledge Base:- Contains facts, rules and heuristics

Inference Engine:- Processes information from KB to draw conclusions.

User Interface:- Facilitates interaction between the user and system.

Explanation Facility:- Provides reasoning behind system conclusion.

Knowledge Acquisition System:- Gathers and incorporates new knowledge into the system.

Main Players of Expert system:

1) Knowledge Engineer

2) Domain Expert

3) End User

Input - Run the program on SWI Prolog.

Output - Give decisions based on the rules provided in program.

FAQ's

- 1) Write in brief forward chaining and backward chaining of inference engine.
- 1) Forward Chaining: start with known facts and applies rules to deduce new information until a goal is reached. It is data-driven and is often used when the initial conditions are known, and the system needs to find a conclusion.
- 2) Backward Chaining:- Begins with a goal works backward to find data or rules that support the goal. It is the goal-driven and is effective when theres specific conclusion or diagnosis to be reached.

2) List down application of Expert System.

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- 1) Medical Diagnosis
 - 2) Financial Planning
 - 3) Troubleshooting
 - 4) Quality Control.

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