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AI Practical 6

AIM : **Create a study material recommender system for AI subjects.**

Create a reading material recommendation system. Ask the user what he/she would like to learn and based on that recommended material.

Prolog File :

```prolog
recommend_material :-
   ask_subject(Subject),
   ask_level(Level),
   ask_type(Type),
   suggest_material(Subject, Level, Type, Material),
   nl, write('Based on your preferences, we recommend: '), nl,
   write(Material), nl.

ask_subject(Subject) :-
   write('What AI-related subject would you like to learn about? '), nl,
   write('1. Predicate Logic'), nl,
   write('2. Prepositional Logic'), nl,
   write('3. Intelligent Agent'), nl,
   write('4. Informed Search'), nl,
   write('5. Uninformed Search'), nl,
   nl,
   read(Option),
   subject_option(Option, Subject),
   nl.

subject_option(1, 'Predicate Logic').
subject_option(2, 'Prepositional Logic').
subject_option(3, 'Intelligent Agent').
subject_option(4, 'Informed Search').
subject_option(5, 'Uninformed Search').
```

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```prolog
ask_level(Level) :-
    write('What is your proficiency level (1 for beginner, 2 for
intermediate, 3 for advanced)? '),
    read(Level),nl.

ask_type(Type) :-
    write('Do you prefer reading, or watching? '),
    read(Type),nl.

suggest_material(Subject, Level, Type, Material) :-
    material(Subject, Material, Level, Type).

material('Predicate Logic',
'https://drive.google.com/file/d/1X-dEOinigBWf0CDhtB4VqMY8bGke1d4E/view',
1, 'reading').
material('Predicate Logic', 'https://www.youtube.com/watch?v=FpGeg27Ffk8',
1, 'watching').

material('Prepositional Logic',
'https://drive.google.com/file/d/1X-dEOinigBWf0CDhtB4VqMY8bGke1d4E/view',
1, 'reading').
material('Prepositional Logic',
'https://www.youtube.com/watch?v=6490tKrGEic', 1, 'watching').

material('Intelligent Agent',
'https://drive.google.com/file/d/1c89-gv1cY9Os5K6m2TvKq95_J6igLl1b/view',
1, 'reading').
material('Intelligent Agent',
'https://www.youtube.com/watch?v=BkedAnQfJ_U', 1, 'watching').

material('Informed Search', 'https://www.youtube.com/watch?v=gZpUcsB9TFc',
1, 'watching').
material('Informed Search',
```

```prolog
'https://drive.google.com/file/d/1lF8hEuBhWLsNZwffBeAO9pYorJiAqUQ1/view',
1, 'reading').

material('Uninformed Search',
'https://drive.google.com/file/d/1Ju8Ffdo7ubLi4syHEq4vXKe4t2Xvd8K2/view',
1, 'reading').
material('Uninformed Search',
'https://www.youtube.com/watch?v=gZpUcsB9TFc', 1, 'watching').

study :-
    nl,
    write('Welcome to the Reading Material Recommendation System!'), nl,
    recommend_material,
    nl, write('Would you like to save the recommended materials of all
subjects to a file? (yes/no) '),
    read(Choice),
    (Choice = 'yes' ->
        tell('ysl-material.txt'),
        forall(material(Subject, Source, Level, Type), (
            write('Subject: '), write(Subject), nl,
            write('Material Source: '), write(Source), nl,
            write('Level: '), write(Level), nl,
            write('Type: '), write(Type), nl,
            nl
        )),
        told;
        true
    ),
    nl,
    (Choice = 'no' -> write('The recommended materials are not saved to a
file.'); true),
    nl,
    write('Thank you for using the system!'), nl.
```

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Output :


```prolog
1   recommend_material :-
2       ask_subject(Subject),
3       ask_level(Level),
4       ask_type(Type),
5       suggest_material(Subject, Level, Type, Material),
6       nl, write('Based on your preferences, we recommend: '), nl,
7       write(Material), nl.
8
9   ask_subject(Subject) :-
10      write('What AI-related subject would you like to learn about? '), nl,
11      write('1. Predicate Logic'), nl,
12      write('2. Prepositional Logic'), nl,
13      write('3. Intelligent Agent'), nl,
14      write('4. Informed Search'), nl,
15      write('5. Uninformed Search'), nl,
16      nl,
17      read(Option),
18      subject_option(Option, Subject).
```

ysl-material.txt

```
1   Subject: Predicate Logic
2   Material Source: https://drive.google.com/file/d/1X-dEOinigBWf0CDhtB4Vq...8bGke
3   Level: 1
4   Type: reading
5
6   Subject: Predicate Logic
7   Material Source: https://www.youtube.com/watch?v=FpGeg27Ffk8
8   Level: 1
9   Type: watching
10
11  Subject: Prepositional Logic
12  Material Source: https://drive.google.com/file/d/1X-dEOinigBWf0CDhtB4VqMY8bGke
13  Level: 1
14  Type: reading
15
16  Subject: Prepositional Logic
17  Material Source: https://www.youtube.com/watch?v=6490tKrGEic
18  Level: 1
```

```
yash  …/Practical_6  main ?  11:26  runpl.sh p6.pl
% Disabled autoloading (loaded 35 files)
% Disabled autoloading (loaded 0 files)
Welcome to SWI-Prolog (threaded, 64 bits, version 9.0.4)
SWI-Prolog comes with ABSOLUTELY NO WARRANTY. This is free software.
Please run ?- license. for legal details.

For online help and background, visit https://www.swi-prolog.org
For built-in help, use ?- help(Topic). or ?- apropos(Word).

?- study.

Welcome to the Reading Material Recommendation System!
What AI-related subject would you like to learn about?
1. Predicate Logic
2. Prepositional Logic
3. Intelligent Agent
4. Informed Search
5. Uninformed Search

|: 3.

What is your proficiency level (1 for beginner, 2 for intermediate, 3 for advanced)?
|: 1.

Do you prefer reading, or watching? |: reading.


Based on your preferences, we recommend:
https://drive.google.com/file/d/1c89-gv1cY90s5K6m2TvKq95_J6igLl1b/view

Would you like to save the recommended materials of all subjects to a file? (yes/no)
|: yes.


Thank you for using the system!
true .
```