Project#1

~ WRITING A GUESSING GAME ON PROLOG ~

A GUESSING GAME IS A GAME IN WHICH THE OBJECT IS TO USE GUESSING TO DISCOVER SOME KIND OF INFORMATION, SUCH AS A WORD, A PHRASE, A TITLE, OR THE IDENTITY OR LOCATION OF AN OBJECT. A GUESSING GAME HAS AS ITS CORE A PIECE OF INFORMATION THAT ONE PLAYER KNOWS, AND THE OBJECT IS TO COERCE OTHERS INTO GUESSING THAT PIECE OF INFORMATION WITHOUT ACTUALLY DIVULGING IT IN TEXT OR SPOKEN WORD.

Reference: https://en.wikipedia.org/wiki/Guessing#Guessing_games

Write a "Guess what?" Prolog game with the following instructions.

A. Set at least 7 object predicates which holds at least two classification and at least two unique/verification* properties. Unique properties are existing to distinguish one object from another.

B. Set at least 7 classification rules. (Classification rules can be common.)

C. Your program should start with the command "?- run."

D. Do this project without any copy/paste action. If you put any copied code you will get zero. I will grade you anyway,even If you do not complete the project. Just be honest!

E. There is an extra part after this page which contains useful links for methods you need. You can use them.

```prolog
/* An example to guide you to find the solution */
guess_what(pencil)   :- pencil, !.


/* Object identifier rules */
pencil :- wooden,
          long,
          verify(has_many_color).


water :- liquid,
         verify(has_many_color).


/* Classification rules */
wooden    :- verify(object), !.
wooden    :- verify(brown_color).
liquid    :- verify(density), !.
liquid    :- verify(fluid).


ask(Question) :-
     /* Some codes here...*/


:- dynamic yes/1,no/1.


verify(Q) :-
   (yes(Q) -> true ;
    (no(Q) -> fail ;
     ask(Q))).


/*
You can use this part directly.
 undo all yes/no assertions
*/
undo :- retract(yes(_)),fail.
undo :- retract(no(_)),fail.
undo.
```
--------USEFUL LINKS--------

http://www.swi-prolog.org/pldoc/man?predicate=fail/0
http://www.swi-prolog.org/pldoc/man?predicate=write/1
http://www.swi-prolog.org/pldoc/man?predicate=dynamic/1
http://www.swi-prolog.org/pldoc/man?predicate=assert/1
http://www.swi-prolog.org/pldoc/man?predicate=retract/1
http://stackoverflow.com/questions/12127794/save-answer-in-prolog-using-tell-function