CS 514 Project 1 Author: Wolf

Mood disorders

Idea:

The program is designed to identify which mood disorders does patient have according to their responses to the questions. The application of the software is seen clearly – to simplify or replace some of the doctor's position. Since there are a lot of parameters that identify the type of the disorder, it will be unmaintainable to have procedure system without knowledge based system. Why? The reason is that there are a lot of disorders that are subspace of each other or a little exclusive from each other. For, this project has been used a small simplification such as agent is not going to record the past records of the patient when in fact, they have the role to identify the disorder more precisely. The reason it was taken away is that current agent already has more than 20 independent questions. And if it would also ask about patient records, the person who is going to grade the agent might feel a little bit tired of filling the form. However, the implementation would have some extra argument.

Files:

mood_disorders.clp - complete Jess code for the project.
Agent.java - java code to integrate the input and output with Jess-file code.
example_1_BipolarII.txt - example of the patient that potentially might have Bipolar II.
example_2_Manic.txt - example of the patient that potentially might have Manic.
example_3_some_person.txt - example of the real person that have been asked at CS Lounge.

patient_form.txt – form for the patient, you may fill it if you would like to test your input.
questions – database of all the question that agent requires to ask before compute the conclusion.

How to run:

You may add the java file with database to a new project at your IDE with pre-included jess libraries in dependences. Also, alternatively you can compile from console by running the line:

```
javac -classpath jess_jar_path\jess.jar Agent.java
```

Also, if you are willing to use your pre-filled form (that might be found at patient_form.txt) then you may run the program with your file by running the line:

```
java Agent your from.txt
```

The program takes has one parameter -- the name of the file where it is going to read the patient form, if the form hasn't been specified, it is going to prompt all question to System.out and take the input from System.in.

Note, the program does not have a lot of user input check like spelling, the order of inputs. So, try to follow the format that is asked. Alternatively, the program will tell you what have you typed wrong and will exit.

Source:

All the information about disorders and their symptoms have been taken from DSM-IV: Diagnostic and statistical manual of mental disorders: DSM-IV. (2000). Washington, DC: American Psychiatric Association.