Pool of questions can be added from SCID-5-CV, PHQ-8, BDI, DASS-21(different kind of question?), Hamilton DRS.

**Levels of Flexibility**

**Level 0 - Results**

Example

0 - not depressed

1 - depressed due to amc

2 - Substance induced depression

3 - MDD

Create an array of size 10, where each index from 0 to x (where x lies between 1 to 10) corresponds to an output category defined by the user (psychiatrist).

**Level 1 - Nodes corresponding to sleep, appetite, pleasure/interest, etc.**

Each node has several question nodes corresponding to each type of question (determining duration, positivity, etc.).

**Level 2 - Nodes corresponding to question type**

Each node has several questions corresponding to the same type and same parent node. (E.g. determining duration of sleep deprivation, or duration of loss of appetite or determining if loss of appetite exists, etc.) Predefined order and output of each questionnaire node exists but can be generated by user too.

**Create graph dynamically**

A default node graph and a default questionnaire graph inside the node exist. New node or new questionnaire node can be created. New questions can be added in each questionnaire node. But to give complete flexibility to user they can create/include/re-order nodes as per their choice in the following way.

Define that node A corresponds to sleep, B corresponds to appetite, etc.

Now first (step x) let user chose from set of nodes. Let user chose A. Next chose either 1 or 0 for yes or no. If 1 repeat step x.

If 0 (step y), then either chose step x or chose 0 again. If 0 again then backtrack to last node and repeat step y. If no more node exists, exit. Graph is created.

**Intent**

Questions can be classified into sleep/appetite/etc intent. In that questions can be classified into types (duration based/identification based).

Again, textual responses can be classified into “yes” or “no” as well as the intent for the type of question to be asked next. So for each question we get a textual response whose yes or no or intent gives the next question in order.

**Problems**

Each question type is defined as a new node. For a large pool of questions this method is highly inefficient. We can intent classify and then generate response on the fly like chatbots work, but then validating the model would be hard without a predefined rule.