

DBMS ASSIGNMENT 1: ER DIAGRAM

Working and Assumptions:

The objective is to design the 01Helix chatbot system to record a patient's headache and medication taken for it.

The user can create a profile (assumed to be equivalent of sign-up) and login (after creating a profile) to access the chatbot system. We assume that the user's phone number is going to be the primary key. The user can update his/her profile at any moment of time. The user can then interact with the chatbot. Details such as when the user logs in/updates his profile, when the user starts and ends his interaction with the chatbot are all captured by the Activities entity set. The System designer has the ability to modify the different decision trees. The chatbot has access to the questions entity set and it uses the Tree Versions entity set which consists of the different versions of decision trees. All interactions with the chatbot are recorded in the Diary entity set.

All primary keys are denoted by the attribute names in dashed lines.

Different types of relationships used:

1:1 (eg - 1 user can only create 1 profile)

1:N (eg - 1 system designer can modify many decision trees)

N:1 (eg - many users can log into 1 chatbot system)

Different types of attributes used:

Composite attribute - The attribute name made up of first name and last name in the entity set USER

Derived attribute - The attribute age derived from the attribute birthday in the entity set PROFILE

Different types of entities used:

Weak Entity - For eg., PROFILE entity set can exist only if the USER entity set exists. PROFILE here is the weak entity set.