DB Data Model Explanation

Entities

* **Medicine**: As for the medicines, we need to store the code, color, shape and name for the searching function; moreover, a little description of the information pamphlet, which we would like to isolate the side effects since we believe that they are extremely important to take to account. Besides, for data management we would need the Pill\_ID for each pill (medicine) as the primary key.
* **User**: Regarding the user authentication and management, we would need to store for each user, their email as primary key because the user can’t create more than one account with the same email; the provider, of who has accessed the application.
* **Alarm**: In respect of generating the alarms, we need to store time\_taking\_pill which show the time in which the user has to take the pill, also we are going to store total\_daily\_amount which shows the number of days for treating the particular ailment which the user is diagnosed with; a name to title the alarm so the user could have a basic idea of the reason of the alarm. Additionally, for data management we would need the User\_ID for each user who sets the alarm as a foreign key, the Hour\_per\_dosage to have knowledge of the duration between every pill daily, the total\_daily\_amount of medicines for how many days the use is going to take this pill and the Pill\_ID as foreign key. Finally the Alarm\_ID as the primary key.   
  In addition, the treatment\_length, to know how many times the user is going to take the pill per day. Furthermore, for data management we would need the Pill\_ID for matching a medicine with its pertinent dosage as a foreign key, and the Last\_day\_of\_taking\_pill that would specify when would be the last day of taking the particular medicine for each user.
* **Notification:** A particular user can have multiple notifications that would be displayed with the notification\_id along with a caution message, the notification time.
* **Survey:** The survey entity is provided in order to have more information about the users to use it with building notification scenarios, so a new survey would be for every user with survey\_id and a user\_id. Whenever a new user signs up in our application, the user should fill the survey to have more information about our users. There would be a list of options for the users to fill in that would be in the survey entity.  
  The survey would ask the users if he/she smokes or drinks and if the user usually has breakfast and lunch and all these entities would be in the string category. The survey would also ask the user if he/she has any kind of allergies or if the user is taking any prescribed medicines or cold medicines .

Relations

* **Search the pill** ( User -- Medicine ): A user might search at least one medicine along their session, whereas a medicine might be searched by many users or none.
* **Set the alarm** ( User -- Alarm ): A user might set many alarms or could be the possibility of none, whereas an alarm might be set only by one user.
* **Assign pill for the alarm** ( Alarm -- Medicine ): An alarm only needs one medicine to assign, so a medicine also goes with one alarm.
* **Fill Survey** ( User -- Survey ):A user would fill a survey form when he/she registers.
* **Building Scenarios** ( Survey -- Notification ): Once the user fills the survey he would receive the notification based on the survey to which a survey can have a notification.
* **Notification** ( User -- Notification ): A user can have multiple notifications from the application.