Pattern Recognition at Home

This is a very simple system. This system tracks the uses of household items and tells user that they should refill the items. For example I bought 20 liter water 3 days ago and according to my patterns it tells me beforehand that I am running out of drinking water and I should refill it. This can be helpful in case of Gas Cylinders when we don’t know when it is going to be Empty.

# Problem

The main aim of this system is to let know busy people what are the stock items in house and what needs to be refilled. Like when we cook dinner at night we run out of oil. Nepal isn’t a night country so we can’t get any oil and that is the problem I faced everytime. So this system helps by telling beforehand you are going out of oil please refill it.

# Knowledge

To solve this problem, the system must be provided the knowledge about the stocks of items in kitchen and how are we using it. For this we can give inputs the quantity of every items in kitchen and when did it end or a specific time period how long did it last. After acquiring a certain amount of data prediction engine can be implemented to find the pattern of our uses and give us some probability when it is going to end.

# Production Rules

The production rules for the system are –

* Data of every item when it was refilled and how long did it last must be stored
* On the basis of the stored data and obtained result system can be rated for more efficient result like that of back propagation.
* When something is near out of stock i.e. less than threshold we put system must notify the user.

# Conclusion

Pattern Recognition and prediction algorithm must be implemented for the system.