## Detailed Problem Statement:-

**Developing Contextual Search for an FMCG Catalogue  
  
Description:**You have to develop a contextual NLP based search algorithm which understands the intent behind search and points to the correct item(s) in our master catalogue. It should have the following capabilities:-

* Should work with as little as 3 characters
* Training can be onetime (time-consuming) but the response layer should return the result in <1 s
* Should be multivariate ex: Beverages with Price less than 100 Rs
* Should provide feature to boost (or give unequal) weightage to certain products/items or fields

**What data will we have:**

* 8k SKUs(Stock keeping unit) with
* Product Descriptions
* Brand Names
* MRP
* Promotions
* Category Mapping

**Success KPI:**

The model should be able to handle queries of type

* where is and/or is ….
* There would be standard 50 such search queries and each algorithm would be measured on following
* False Positives (Lower the better)
* Missed Items (Lower the better)
* Average Boosting Rank

**Quantifiable indices for**

* Precision=relevant results/(relevant results+ non-relevant results)
* Recall=relevant results/(relevant results + relevant documents not found)
* Boosting Score = Boosted Items in top 10 results/total relevant boosted items  
  Overall = a\*b\*sqrt(c)