

Bag-of-Materials:

Suggesting similar products is an important and frequently used functionality of ecommerce portals. A product can be similar in a lot of ways, two products can be semantically similar or similar in the way of user interaction.

This module implements various functionalities such as finding out similarities between two given products, spell checking input and correcting them to match results would be a start. BOM implemented here is a Data Structure. The representation of the data structure is similar to the concept of Snowflake schema which is one of the multi-dimensional Data Warehouse technique.

The module is organised as a two-tier system. Given an input the top layer acts as an index to the products that are similar to the input. The top layer is named as the fact table, which serves as a route to one of four quadrants that make the second layer. These quadrants house similar products in their vicinity. Keeping the similar products closer will make for faster suggestions. Access time is an important parameter here, as this is much like a query engine to other modules.