**EXPERIMENT-1**

**Problem Statement:**

A substantial group of vendors have decided to invest money into the development of an online shopping system. The aim of this investment is to expand their customer base. The wares they sell are quite varied (everyday groceries, books, stationary, utensils, clothes, etc.).

They have hired a developer who has listed the following features for the website:

1. List of customers registered with the website.

2. List of sellers selling on the website.

3. List of items in the customer ‘s cart.

4. Details of the customers.

5. Customer ID for every buyer.

6. List of frequent purchases.

In order to cater the demands of customers, the developer has conducted a survey with residents in nearby areas, they have also decided to include the following features for the website:

* Implement a filtering and sorting system to aid the customers in finding their desired products.
* Provide a review section where customers can view real time reviews on the products and ratings.
* Allows customers to view seller information.
* Implements a seller verification process to ensure credibility.
* Provides a comprehensive FAQ section to address common queries.
* Provides a personalized recommendation system based on a customer’s purchase history.

**EXPERIMENT-2**

**USE CASE DIAGRAM FOR THE PROBLEM STATEMENT:**

