# Oncampus Student Market

This Database Management system aims towards efficient management of the **“Student Market",** which is one of the best available resources on-campus for students, faculty, staff members and also for common people to purchase groceries, clothing, food and other basic needs. Since this is the only available resource in the nearby vicinity, it is one of the busiest places with many transactions in place. For such a store with humongous data we need an efficient database which can do basic operations and help manage the data with ease.

## Domain - RETAIL

## Constraints :

1. Any customer can make only one transaction and for him to be called a customer he needs to make one transaction i.e., no window shopping
2. We can have trainee employees who do not handle customers
3. We will get at least 5 items from a vendor
4. Customers will provide the platform -”media” that they heard about us from at the time of the transaction which are stored in customer details
5. All the employees are working and assumed to never resign from this company
6. We will serve two types of customers with discounts - students and faculty, we give discounts to them at 5% and 2% respectively provided they submit proof at the time of purchase. Meaning, there can be a transaction of student/faculty type without discount.

## Data Requirements :

### 1 : Employee Data

- Employee Name
- Employee ID as “Primary Key”
- Social Security Number(SSN)
- Gender
- DOB
- Phone no - office/personal
- DOJ - Joining date

This part contains details about the employees working at Student Market

### 2 : Customer Data

- Customer ID as “Primary Key”
- Customer Name
- DOJ - Joining date

- Gender
- Customer Type (Student/ Faculty/ Support staff/Other)
- Phone No
- DOB
- Rating
- Media

This part contains the details of customers. Here we will capture the customer data after they have done their first transaction. Same date is taken as Date of joining.

3 : Vendor Data

- Vendor ID as “Primary Key”
- Product
- Quantity supplied
- Date of purchase

This part contains the details of the vendors from whom we are purchasing the products.

4 : Transaction

- Transaction ID as “Primary Key”
- Transaction Date/Time
- Employee ID
- Customer Details - Customer ID, Customer name, Customer type, rating
- Product Details - Product Id, Product Name, Product quantity, Product type(reg/discounted)

This part contains the details of the orders/transactions that occurred.

5 : Payment Details

- Payment Id as “Primary Key”
- Payment mode - cash/card
- Total amount

This part also contains the details of the transactions.

6 : Products

- Product ID as “Primary Key”
- Product Name
- Price
- Product Category
- Product type - regular or discounted

This part contains the details of the products that are in our inventory

## Business Goals

- Get the Employees, Students, Faculty/staff data. Data includes Name, ID, DOB, phone number, SSN(only for employees).
- In what day of the week and hour are the most and least transactions done - to get to know the maximum and least sales hours and give discounts so as to
    - increase sales in those hours. Also we will be increasing labor at the peak hours to address the huge crowd.
- Determine what percent of students and faculty are availing the student and faculty discounts so that we can give more offers/discounts to attract more customers. Check the total percentage of students in student customers who have purchased commodities with and without discount(on a scale of 100) and vice-versa. We will also determine if we need to increase or decrease the discount percentage based on this information.
- Check the “Media” that has promoted our business. Find out the Media that has the highest number of occurrences in the “Media” Column.
- Determine the average rating of the store using the “rating” column in Customer Details. This can be used to advertise or attract customers in future.
- Quarterly revenue model
    1. Most sold item - has highest/more transactions of all the items purchased in the quarter
    2. Least sold - has lowest transactions of all the items purchased in the quarter
    3. Item count (sold) per month and quarter
- Check whether discounted product sales have increased in the offer period
- Check if new customers have joined for every end of the quarter to measure the business performance
- Check for the payment method(Cash/Card) customers are more preferring to use so as to increase the self-checkout or cash counters at the store.
- Check products from which vendors are being most sold and increase/decrease the inventory