Ice Cream Cart Rewards Management System

*These are the requirements for an app that the manager of an ice cream cart can use*

*to keep track of and reward frequent customers.*

**Requirements:**

1. The ice cream cart manager uses this system to manage and keep track of

purchases from selected VIP customers.

2. The VIP status of customers is tracked through a unique VIP ID, which is added

to the system.

3. For each VIP customer, the system needs to know name, address, birth date,

and assigned VIP ID number of the customer.

4. VIP customers are given a loyalty card that shows their name and VIP ID.

5. The ice cream cart sells ice cream and frozen yogurt. VIP customers that show

their VIP ID card when purchasing an item earn VIP points: they are awarded 1

VIP point for each full dollar spent (i.e., fractions of a dollar are discarded).

6. At any particular point in time, the ice cream cart system should be able to

calculate, for each VIP customer, the items that the customer has purchased and

the VIP points earned by them in the current month and in total (i.e., since they

became members).

7. VIP customers can also pre-order ice creams, but not frozen yogurts, as early as

a week in advance unless the pre-order slots for the pick-up day are filled.

8. A VIP customer who earns more than 50 VIP points in a given month can have

one free ice cream or frozen yogurt (at any point in the future).

9. A customer who earns a total of 1000 VIP points is upgraded to GOLD status for

life.

10. A VIP customer with GOLD status (1) gets one free ice cream or frozen yogurt

per month (2) can buy items with a 10% discount, and (3) accrues double points

for each purchase.

11. The ice cream cart owner can generate a daily report of purchased and preordered

items for the current day. A pre-ordered item is counted on the day it is

ordered, and not the day on which it is picked up.