ZAGGLE provides cards to corporate employees as a means for employees to save tax on (Eg. food, fuel, medical, travel, mobile, books) expenses as part of the corporate's policies and lets corporate calculate the tax exemption from employee salaries. These cards help employees avoid recording all the physical bills for submission at the end of the financial year.

ZAGGLE has 2 variety of cards 1) ZEAL 2) ZINGER

ZEAL card is used on meal expenses for 1) FOOD & GROCERIES (FDG) only.

ZINGER card can be used across 1) FOOD & GROCERIES (FDG), 2)FUEL (FUL), 3)PHARMACY & MEDICAL (MED), 4)TRAVEL (TRA), 5)INTERNET & MOBILE (MOB), 6)BOOKS (BOK) merchants.

The three letter code against the category is the Merchant Category Code (MCC) of the merchant issued by governing authority.

Both ZEAL & ZINGER cards can be used at merchants against their MCC. The card transaction goes to a VISA/MASTER card issuer and processor (Eg. ZAG Pay Ltd.) for transaction approval. The transaction would fail if the card is used against a merchant whose MCC code doesn't match the card approved categories.

Eg. A ZEAL card transaction would fail if used at a merchant with Eg. **FUL** MCC merchant.

Problem Statement:
A company called ABZ Software Pvt. Ltd with 10 employees wants to issue 6 ZEAL Cards and 4 ZINGER cards to its employees. Each card can be identified by a 16 digit unique number.

The tax exemption for each of the expenses categories for a financial year are as follows per month which can be modified by the company.

1) FOOD & GROCERIES (FDG) - Rs. 2200
2) FUEL (FUL) - Rs. 1600
3) PHARMACY & MEDICAL (MED) - Rs. 1250
4) TRAVEL (TRA)- Rs. 2000
5) INTERNET & MOBILE (MOB)- Rs. 1500
6) BOOKS (BOK)- Rs. 1000

The above category allowances are per month and balance cannot be carried forward to the next month.

Implement a dashboard system for company and employees where
1) The company can issue cards to its employees
2) The company can see all the detailed transactions of the employees.
3) The company can see the month wise breakdown of tax exemption against expenses of all employees in a given year.
3) The employee can see all his detailed transactions & tax exempted month wise.
4) The corporate and employee can export a month wise transactions report up to a year.

Note:

1) Build the system in Object Oriented way by following best coding practices

2) Generate transactions data having (Employee id, Mobile No, Card No, Transaction Time, Merchant Name, Transaction Amount, Transaction Status) which is supposed to be provided by card processor.

Eg. ABZ2718 8452323520 5098876554322123 27 Jan 2018 21:00:19 Sat Swiggy 187.00 Success

Eg. ABZ3118 7353534043 5098876554322100 31 Jan 2018 10:00:23 Wed Apollo 105.00 Denied

3) A minimal UI dashboard is sufficient and APIs to be implemented completely.

4) A simple authentication and authorisation system would be nice to have.

5) No need to implement a payment solution but an API to return a transaction status would suffice.