## 1 System Summary

Canteen SmartCard System is a cashless payment system that used in xxx canteen

### 1.1 Functional Summary

- A SmartCard is issued to every consumer in the system.
- · Consumer recharge the credit in the Management Center
- Administrator of Management Center manage the card holders' balance and identity.

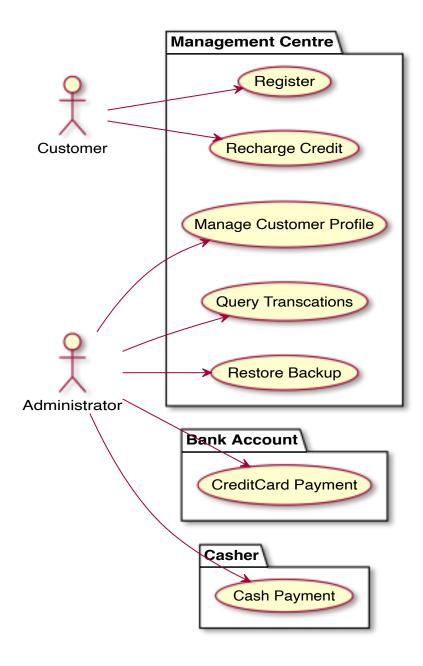
### 1.2 Non-functional Summary

• Data backup is required in case of system failure.

## 2 Use Cases

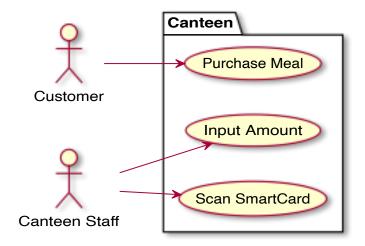
### 2.1 Management Center

- A customer can register an account in the system.
- Customer can recharge his/her balance by Credit Card or Cash
- A administrator can mange customer profile
- A administrator can query customer transactions
- A administrator can charge customer by credit card to the canteen's bank account.
- A administrator can charge customer by cash.



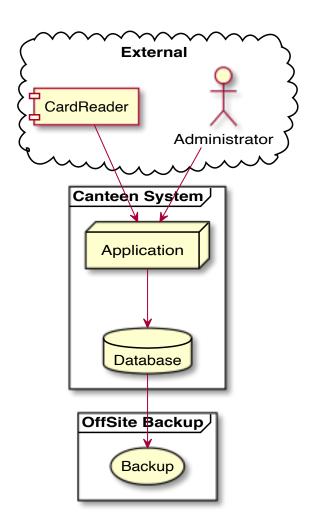
#### 2.2 Canteen

- Customer purchase the meal
- Canteen staff input the amount of the Meal
- Canteen staff scan customer's smart card



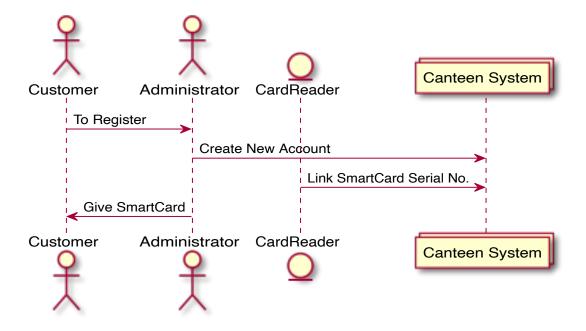
# 3 System deployment and overall design

## 3.1 Deployment Diagram

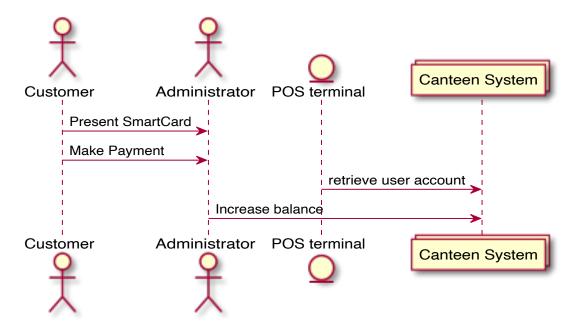


## 3.2 Management Center Sequence diagram

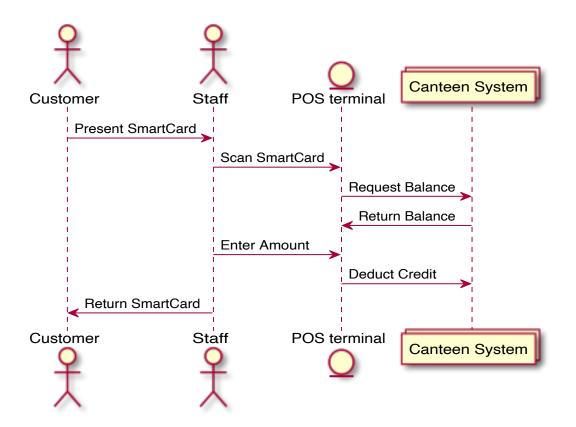
### 3.2.1 Open new account



#### 3.2.2 Customer recharge credit



3.3 Canteen Sequence diagram



# 4 Class Diagram

