

API Project

Business requirements

Background

Company ABC would like to run an anniversary celebration campaign to give away 1000 pieces of cash vouchers to its loyal customers. When the campaign starts, all customers who are eligible and submit a qualified photo within 10 minutes will receive a string of cash voucher code immediately. The vouchers are first come first serve basis by clicked through the campaign link and eligible to participate.

Gamification

1. All customers will see the campaign entry link when the campaign starts.
2. Campaign links will disappear/denied access if fully redeemed or locked down.
3. Customers who are eligible will proceed to the page to upload their photo.
4. Customers who uploaded a qualified photo will receive the voucher code.

Customer who eligible to participate

- Complete 3 purchase transactions within the last 30 days.
- Total transactions equal or more than \$100.
- Each customer is allowed to redeem 1 cash voucher only.

Photo to submit

- Selfie with ABC product

Note: Please faking the image recognition API return true for now while AI engineer WIP.

Other: Voucher

1000 of cash vouchers with unique randomise code are pre-generated by the client, we have to insert them into the application database before the campaign starts.

Development scope

Build 2 APIs to support frontend development:

1. Customer eligible check
 - a. Check the customer eligibility requirement.
 - b. If qualified, lockdown a voucher for 10 minutes to this customer.
2. Validate photo submission
 - a. Call the image recognition API to validate the photo submission qualification. (Please faking this process for now, you do not need to create the image recognition API)
 - b. If the image recognition result return is true and the submission within 10 minutes, allocate the locked voucher to the customer and return the voucher code.
 - c. If the result return is false or submission exceeds 10 minutes, remove the lock down and this voucher will become available to the next customer to grab.

Note: Look at the appendix for the existing application database design.

Appendix 1:

company_hij users	
id	: bigint(20) unsigned
name	: varchar(255)
email	: varchar(255)
email_verified_at	: timestamp
password	: varchar(255)
remember_token	: varchar(100)
created_at	: timestamp
updated_at	: timestamp

company_hij purchase_transactions	
id	: bigint(20) unsigned
customer_id	: bigint(20) unsigned
total_spent	: decimal(10,2)
total_saving	: decimal(10,2)
transaction_at	: timestamp

company_hij vouchers	
id	: bigint(20) unsigned
code	: varchar(7)
customer_id	: bigint(20) unsigned
status	: enum('available','locked','redeemed')
locked_down_expired_at	: timestamp