

Loyalty and Reward Program

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Abstract – Nowadays we mostly shop in shopping mall where we get rewards when we buy things using credit card and as we shop in various shops the reward that we had received from 'x' and 'y' shops may not be properly utilized due to various the reasons so idea of the project is to collect various reward points from different shops into the Loyalty and reward program and it allows the user to use those reward points at widely accepted merchant outlets. This will help in proper utilization of credit or reward points and it will also improve the satisfaction level of the customer.

Keyword: Loyalty and reward program, reward program, loyalty reward.

1. Introduction

Loyalty and reward program is a software developed for collecting reward points from various merchants and as well as the issuer. This will help in building stronger relationship between the card-holder and the service provider by providing better rewards and loyalty program and hence enhancing the customer experience. It will also enable better utilization of reward and loyalty point awarded by the merchant as well as the issuer. The customer can have a check of his/her credit point and can use them accordingly.

Functional Aspects:

Customer:

In this module the customer enrolls itself into the loyalty and reward program. After enrolling into the program, whenever the customer will perform a transaction the customer will receive reward points according to the rate of reward points given by the various merchants. In this module the customer can transfer their points to other cardholders who have enrolled themselves into loyalty and reward program they can even view their reward point available in their wallet.

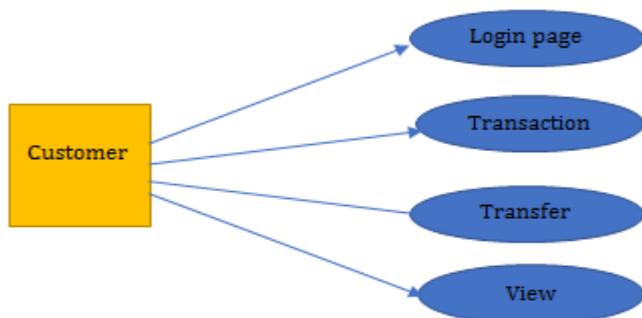
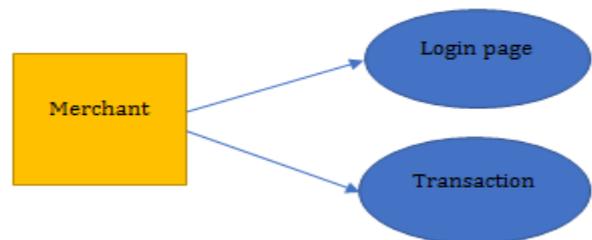


Fig no.1-customer module

1. Merchant:

In this module the merchant enrolls himself into the program. The merchant decides the rate or how much percentage of reward point that should be rewarded to the customer after every successful transaction. The merchant can even check its log where he can see all the logs



Statistics Corner:

In this module there are different analytic work done. The customer can check cardholder log where they will get to know all the activities they have done along with the time stamp. The merchant can also check the peak hours of their shop. The cardholder can also see the months in which they have utilised the most number of reward points. The merchant can even check the log. It even contains a log which has all the unsuccessful transactions

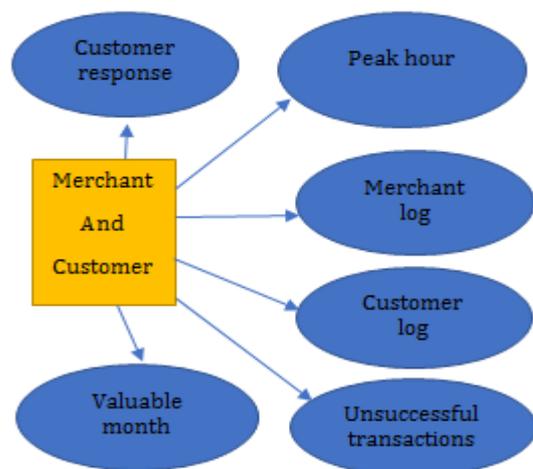
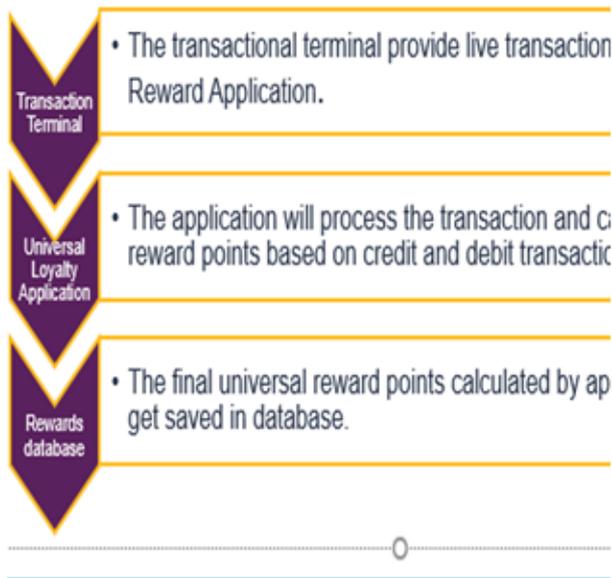


Fig no.3 – statistic view

Technical Aspects:

- Minimum viable product created by us is based Java Spring boot and below are the detail about the prototype. The technical architecture is



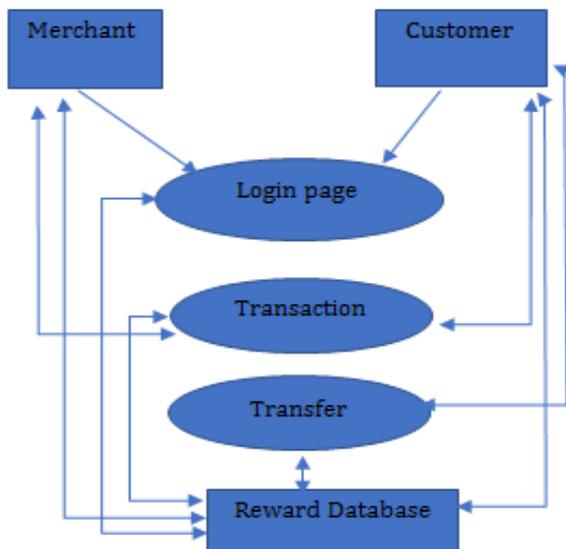
Conclusion:

Loyalty and reward program helps people in keeping check of their reward points. The cardholders can transfer their credit points to their friends and relatives. By enrolling under this project people will no longer be worried about their reward point been expired. They can even check their reward point. This project will lead to improve the quality of relationship between the cardholder and the card issuer as well as the merchant.

Reference:

1. Finaccord List of Global Loyalty Programs. Retrieved 2016-03-01
2. <https://www.thebalance.com>
3. https://en.wikipedia.org/wiki/Loyalty_program
4. <https://www.colloquy.com/>
5. <https://www.forbes.com/sites/kpmg/2017/09/13/why-customer-loyalty-programs-are-so-important/>

DFD:



Technology used:

Front End: Thymeleaf(Template rendering engine),HTML, CSS , Angular JS, Bootstrap

Back End: MySQL

Controller: Spring Boot, Hibernate with maven as build tool.

Data Analytics: Apache Spark

Voice Processing: IBM Watson API (For output messages)

Deployment Server: Apache Tomcat

Future Proposals

Replication of back end with Block chain. Inclusion of API's for processing of voice as input such as Google or Microsoft's API. Replication of deployment server with Google cloud.