**Java Fresher Program**

**Project Assignment**

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**Prepared by DXC Technology Vietnam**

# Project 1: Loyalty program

## Description

We would like to build a customer loyalty program for an audio store. The program is based on point system. Points will be accumulated through buying products. There will be 2 levels of card, standard card and gold card.

* Customer will be upgraded to gold card if his points reach to 1000
* Gold card benefit: 5% discount when purchasing.
* Accumulated point rule: 100,000VND = 1 point.
* Customer can exchange points to get products.

## Functional Specification

* Customer management:
  + Register account
  + Customer information includes:
    - name, ID, address
    - card level, standard card is default.
    - Email
    - phone
* Product management:
  + Add new product
  + Product information:
    - name, ID
    - price
* Purchase functions:
  + Customer create a new order form:
    - Invoice number
    - Order date
    - Discount (for gold card)
    - Total amount
    - Point information: current points, purchasing points
    - Order details:
      * List of products and price for each
* System function:
  + When an invoice is submitted.
    - Purchasing points will be accumulated for next purchase.
    - Upgrade to gold card if total points is 1000 and notify to customer via email or phone
* Exchange point to get products function:
  + Accumulated points exchanged (1p=100,000 VND) should be lower or equal the value of products exchanged.
  + After the exchange successfully, the points will be reduced accordingly and notify to user via email or phone.
  + All transactions should be recorded for history review.

# Technical Requirements

* Framework: Spring MVC, Hibernate. (Bonus if: Spring Security, Applying Spring boot)
* Client side: AngularJS, Boostrap, HTML5/CSS3
* Database system: MySQL or MongoDB
* All CRUD operation should have JUnit tests.
* Sample data should be prepared before presentation
* Pagination on returned result in search function.
* Source control: GitHub