PES UNIVERSITY, BANGALORE

Department of Computer Science and Engineering

SRS DOCUMENT

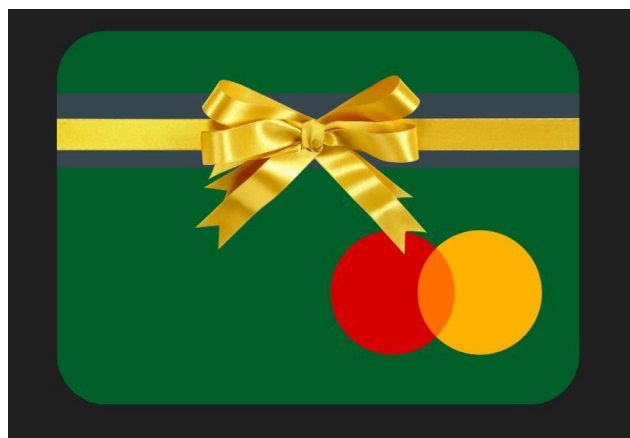## Topic: Customer Loyalty Software

Team Members:

1. Sushanth Prabhu -PES2UG20CS359

2. Tanushree Mondal- PES2UG20CS366

3. Sneha BT- PES2UG20CS340

4. Sonakshi Jamadhiar- PES2UG20CS344

Software Name: Gains

Software Logo:

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Revision History

Name	Date	Reason For Changes	Version

Introduction

- The purpose of the customer loyalty software is for the following reasons -:
- Building a loyal customer base
- Tracking user history to build better business models
- Building an interactive and responsive system to customers
- To improve the business turnover

Intended Audience

The document is primarily intended for:

- Developers of this software
- Professors who would review this document
- Stakeholders who are going to use this software

To this audience group, this SRS should convey and confirm the required functionality and represent a contractual agreement between the involved parties.

Product Scope

- It offers three types of memberships -GOLD, SILVER AND BRONZE
- It tracks the purchases made by customer and the total bill amount and gives the customer points which the customer can cash in on later
- For the member customers it gives special offers and discounts on products
- It also has a portal for customer grievances and solutions offered

References

 IEEE Recommended Practice for Software Requirements Specifications, IEEE Standard 830,1998

Overall Description

Product Perspective

The software described in this SRS is the software for a Customer Loyalty System. The system merges various hardware and software elements and further interfaces with external systems. It relies on a number of external interfaces for persistence and unhandled tasks, as well as physically interfacing with humans.

Product Functions

- User Registration and Login Module – To enter your details for the program

- Deals Module- shows latest deals

- About Module-tells about the company

- Customer feedback module – to address grievances

- Customer points module – tells about various levels of membership

User Classes and Characteristics

There are three separate user interfaces used by the Customer Loyalty software, each related to an interfaced physical hardware device. These three user interfaces are the Computer UI, Tablet UI and Smartphone UI.

Operating Environment

The Computer UI, Tablet UI and Smartphone UI interface is used by the customers so that they can order from any of their device.

Design and Implementation Constraints

The database for the ADMIN will be made using SQL and Python. The app would be made using Android Studio and SQLITE

Assumptions and Dependencies

The SRS assumes that none of the constituent system components will be implemented as embedded applications.

External Interface Requirements

User Interface

Consists of 6 different screens that are linked to each other. Starting off with the user registration and login page. After login the user is directed to the page to choose the plan which they want to sign up for. The home page contains all details about the user along with the total points earned. The rewards page displays details about the offers and discounts available to the user. The past history page shows the user details about his previous orders. The customer grievances page helps address a customer's issues.

Software Interfaces

The Customer Loyalty System will interface with a Database Management System that stores the information regarding the customer and his previous and current orders. The backend algorithm helps provide best offers and discounts for each customer individually
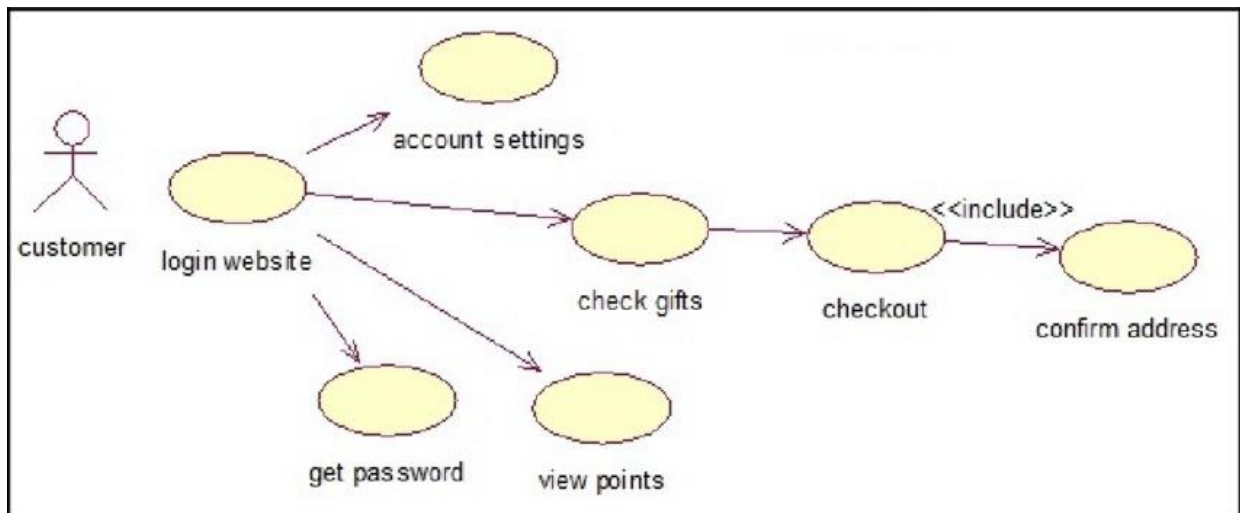
Communications Interfaces

The Customer Loyalty system will be interfaced with internet (hosted online) so that the customers can access the website from their devices. It should use a reliable type IP protocol such as TCP/IP or reliable UDP/IP for maximum compatibility and stability
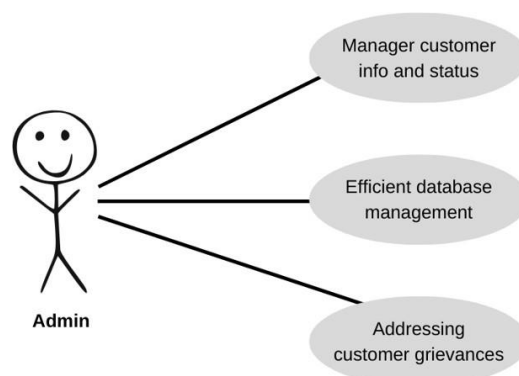
Analysis Models

User Case

Admin Case

System Features

- User Registration and Login Module – To enter your details for the program

- Deals Module- shows latest deals

- About Module-tells about the company

- Customer feedback module – to address grievances

- Customer points module – tells about various levels of membership

Software Requirements

- The system needs to store information about customer purchases and generate points earned by a user
- The system needs to provide users with discounts and offers
- The system needs to address customer grievances
- The system needs to help internal staff to keep information about the customer history

Functional Requirements

- The stakeholders of this system comprise the administrator, and the customer.

The following shows the major functions that the system must allow the administrator to perform:
- Authorization to set an account for him/herself with all privileges and another one for the cashier to access the system.
- The ability to delete customer's accounts.
- The ability to view/edit customer account information
- The ability to report to the management the average sales for month, the best and the worst seller.
- The ability to provide an easy way to manage products, add (initiate) products sale, add gifts, and map gifts to points.

Non-Functional Requirements
The most important non-functional requirements considered are as follows:
- The system should be easy to use with clearly titled buttons and menus.
- The interface should be clear enough to show the tasks that can be performed.
- The system should have a user-friendly design.

- The system must have the ability to securely backup all data and messages.
- The system must provide an easy way to manage the data

Performance Requirements

The server shall be capable of supporting an arbitrary number of users, that is, it shall provide no limit on how many devices are in the system.

Safety Requirements

The system shall be able to display the user profile and rewards offered at all times possible

Security Requirements

A customer password is used for logging into the website for using the system.

Software Quality Attributes

The software shall be capable of supporting an arbitrary number of devices from different customers, that is, shall provide no limit on how many devices are in the system.

Business Rules

Varies according to company using software

Appendix A: Glossary

DBMS – Database Management System
SRS – Software Requirements Specification
IP – Internet Protocol
TCP – Transmission Control Protocol
UDP – User Datagram Protocol

Appendix B: Field Layouts

Sample sheet with information required to register the customer

Field	Length	Data Type	Description	Is Mandatory
Name	30	String	Customer Name	Yes
Email	30	String	Customer Email	Yes
Phone No	13	Int	Customer Contact	Yes

Appendix C: Requirement Traceability Matrix

Sl. No	Requirement ID	Brief Description of Requirement	Architecture Reference	Design Reference	Code File Reference	Test Case ID	System Test Case ID