

# Estimation of Reward points for online products using infobar approach

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**Abstract** - This project aims at building a Reward Points Management System for the customer support team of the company which allows users to view useful links from different sites on topics of his/her interest

To encourage the usage of the Infobar, the company has a reward point scheme. 10 points are rewarded on usage of Inforbar for 1 hr. When a user accumulates over 100 points, he can redeem them for a gift of his choice.

## 1. INTRODUCTION

### Problem Definition

Here the customer support team of the company advertise the useful links through different sites .With this user can get access to his desired things on click. With this the company will gain much revenue.

### About Existing System

In existing system, the rewards points are not given to the customers. With this, the revenue will be very less.

### Problem of the Current System

As the current System is not offering any type of offers their benefits are also low. In this current System the customers might not be happy because they don't get all things at one location.

### About Proposed System

Web Based Reward Points Management System allows the users use different links which are useful to them. This new system encourages the usage of info bar by giving rewards points to

customers depends upon their usage.

This new system provide several links to user those are

Education: To get the education details to know the process of online tests.

Weather Report: To get the weather details of required place.

Currency Converter: This currency convertor is useful to know the money amount if it is converted form one type to other type for example us dollars to Indian rupees.

Medical represents: This will give the medical represents details in the given area.

Sms: By using this Users can send free sms.

This site provide commutation also by making mails available.

## 2. OVERVIEW OF THE SYSTEM

### Functional Requirements

1. A data store for user information
2. Web site supporting functionalities like - Search/sort/add/delete/view/modify etc on user information
3. Modules for bonus point allocation
4. Facility to add bonus points
5. Facility to detect fraud/duplicate users
6. Generate report on number of users using the Infobar in a month, their responses to various schemes etc
7. Communicate user via email to notify him about various incentives and

bonus point schemes, get his feedback  
etc

### Non-Functional Requirements

- i. Secure access of confidential data (user's details). SSL can be used.
- ii. 24 X 7 availability
- iii. Better component design to get better performance at peak time

Flexible service based architecture will be highly desirable for future extension

### No. of Users

- **Administrator or Customer Relation Ship manager**
- **Customer**

### No. of Modules:

- **Administrator or Customer Relation Ship manager**
- **Customer**
- **Reports**
- **Search**
- **Communication**
- **Authentication**
- **Registration**

### Modules Description

#### Administrator or Customer Relation Ship manager:

He is the owner of the web site. He should have rights to accept the registration of the Customers based on their profile (unless the Customers should not able to login to the site). He should also have rights to add or delete customers from the site. He can view all the customers and Infobar Usage History on clicking on customer name/Email-id. He can search for Customers Based on customer name, city and Country etc.

Administrator can send a mail to the customers regarding the Reward point schemes, usage tips for Infobar, points gained etc. He can manage the Gift Articles details like add new articles, update the available stock etc.

Administrator is responsible to provide the bonus points to the customers based on usage time of Infobar and the schemes available. He is only responsible for managing customer orders for redemption of their bonus points. He has rights to accept or reject the order.

Administrator can change the status of customer profile into active or Inactive. If customers Last login date is more than one month then automatically set status into Inactive and once the customer is login then change the status into active.

Administrator will receive complaints or queries or feedback regarding the Infobar services, schemes available for bonus points etc. After seeing all these he can have the option called give reply to those, if he clicks on that reply page and he will type the solutions to those and send mail.

#### Customer:

These users are authenticated to the website by providing the credentials which they got at the time of registration and they can login into the site whenever the Administrator accepts his profile. The User authentication process is done through the Role Based Authentication.

After login into the system he has options like, Infobar, edit profile, view reward points, place order for redemption on bonus points by viewing of available Gift Articles etc. To get bonus points customers need to click on Infobar (here Infobar is a internet based product, which allows users to view useful links from different sites on topics of his/her interest), If user gives click on this once again it is going to ask your password and date of birth for cross checking of customers.

After entering into the Infobar Internet based product we are provide some use web services based links to the user (like Online test, Currency converter service, Finding weather report in US, Sending SMS in India, Information regarding the Medical Represents in the world etc). Internally the time will be calculates and automatically assign bonus points to the respective customers.

After log out from the Infobar internet based product, Customer can view his usage history or bonus points. Suppose he got more than 100 points then he has a chance to redeem those points based on available Gift Articles and also has a facility to view his order status. Based on the status, the bonus points of a particular customer will automatically adjust.

Customers can view mails form the administrator or customers relationship manager regarding his bonus points, queries or complaints he posted, regarding reward points schemes etc. Customers can post any queries or complaints to the administrators.

### **Reports:**

Administrator will generate different types of reports such as, Usage of Infobar in a month over a year in graphical format, User base for a year, and in a year etc.

### **Search:**

Administrator or customer relationship manager will search for the customers based on user name, City, Country etc. and info bar usage history on click on customer name/email-id.

### **Communication:**

Communication is done for customers and customer relationship managers through mails.

### **Authentication:**

Authentication is nothing but providing security to the system. Here every must enter into the system through login page. The login page will restrict the UN authorized users. A user must provide his credential like user Id and password for log into the system. For that the system maintains data for all users. Whenever a user enters his user id and password, it checks in the database for user existence. If the user is exists he can be treated as a valid user. Otherwise the request will throw back.

### **Registration:**

The system has a process of registration. Every user need to submit their complete details including user name and password in the form of registration. Whenever a user registration completed then only a user can get log in into the system by using his user id and password.

### **Input & Output**

The major inputs and outputs and major functions of the system are follows:

#### **Inputs:**

- Administrator enter his user id and password for login to authenticate in this system
- Administrator allows Customers in to the system.
- Administrator can update the status of customers based on login dates.
- Administrator will bock the duplicate users (By cross checking password and date of birth etc).
- Administrator will manage the Gift Articles like add delete and update.
- Administrator will manage the bonus points and schemes.
- Administrator will receive orders from customers and he will update the order status of the customers.

- Administrator will adjust the bonus points of customers based on the order status.
- Administrator will get mails form other users and have a facility to give reply to those mails.
- Customers will get bonus points based on the time spent on InfoBar.
- Customers will use useful links in the Internet based product called infoBar.
- Customers will place orders to Administrator about Gift Articles for bonus points redeem.
- Customers will view their order status.
- Customers will view mails from the administrator regarding reward schemes, bonus points etc.
- Customers will post complaint or any queries to the Administrators.
- Registered Customers need to submit their log in information for change their password.
- For generating Reports need to choose the Year, month over a year, Customers etc.
- For sending orders for Gift Articles the Customers must login to the site.
- For recover and change password settings Customers need to submit their log information.

**Outputs:**

- Administrator can have his own home page. Customers also can have their own home page after completion of the authentication process.
- Admin get all Customer Information details and InfoBar usage history by clicking on names.
- The registered user’s data can be stored in centralized database through the system user interface.
- Various types of information can be displayed to the users like Customers Information, Gift Articles Details, InfoBar Usage history and Order status of the customers etc. on the system user interface.

- After successful submission of log in information users can get their new password.
- Profile can be update by the users individually.

**3.SYSTEMDESIGN**

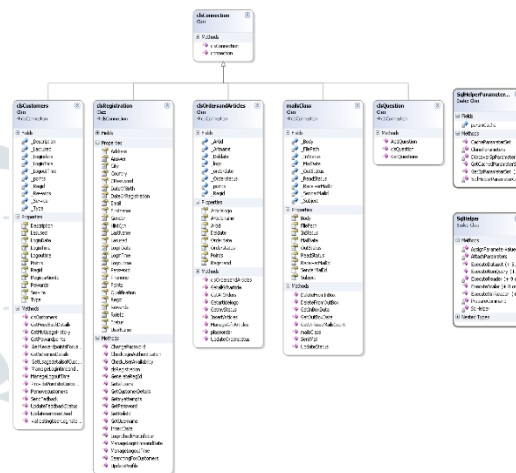
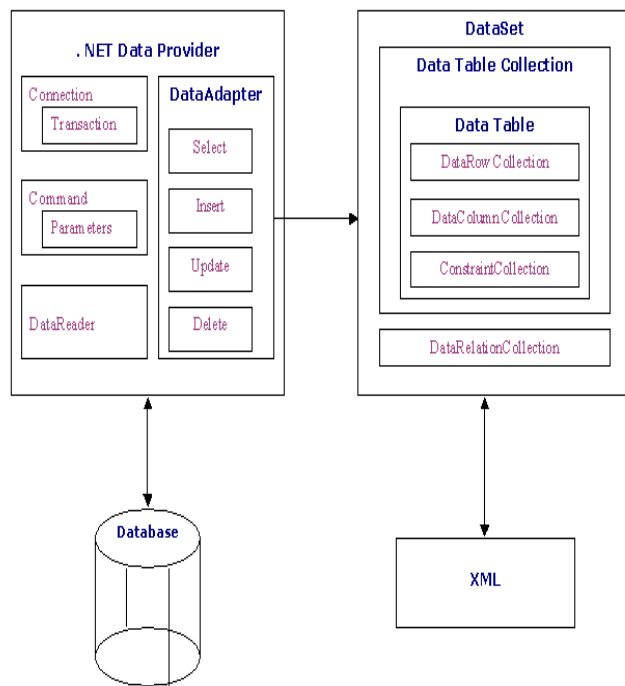


Fig 3.1: Class Diagram



ADO .NET Data Architecture





Fig 3.2: Overall Usecase Diagram

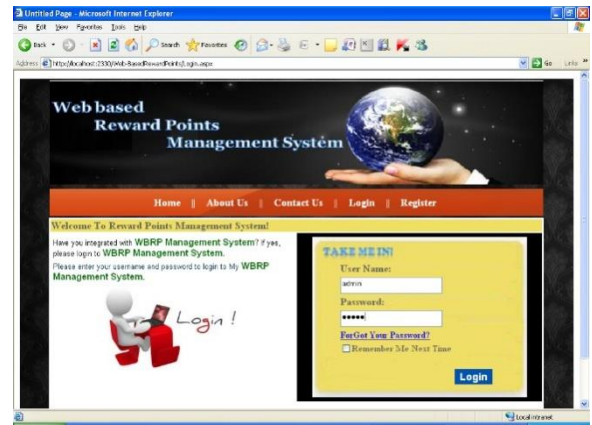


Fig4.2: Login Page

## 5. CONCLUSION AND FUTURE ENHANCEMENT

It has been a great pleasure for me to work on this exciting and challenging Online application for the **Reward Points Management System** project. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future in developing projects independently.

### BENEFITS:

The project is identified by the merits of the system offered to the user. The merits of this project are as follows

- It's a web-enabled project.
- This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updating so that the user cannot enter the invalid data, which can create problems at later date.
- Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the

## 4. OUTPUT SCREEN SHOTS

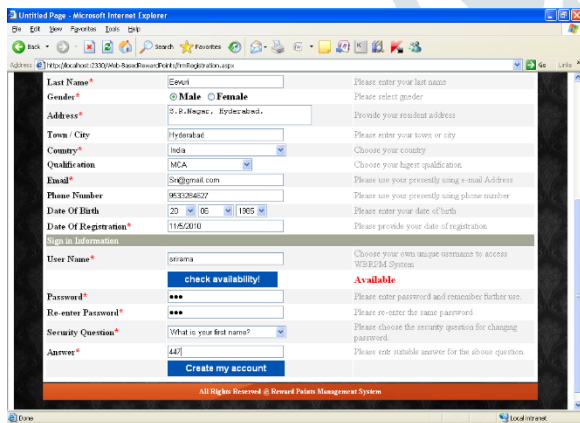


Fig 4.1: Registration Page

records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.

- User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user is concerned. That is, we can say that the project is user friendly which is one of the primary concerns of any good project.
- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time than manual system.
- Allocating of sample results becomes much faster because at a time the user can see the records of last years.
- Easier and faster data transfer through latest technology associated with the computer and communication.
- Through these features it will increase the efficiency, accuracy and transparency,

### LIMITATIONS:

The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.

Training for simple computer operations is necessary for the users working on the system.

### 6. REFERENCES

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