PROJECT REPORT

‘iGifts’
(An Interactive Gifting and Shopping Website)

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ABSTRACT

Problem statement -

To develop a website where people can send Gifts to their loved once in terms of virtual money or credits, users can buy credits according to their preference and even exchange credits with others.

Exact Problem Faced by people:

Usually on the occasions of birthdays, anniversaries, people gets some unexpected gift from their loved ones that is the gift which they really don't require.

Also the question always arises in everyone's mind "What exactly the gift should be given?" and this issue is concerned with the age of the person for whom we are searching the gift.

Right now there is no solution for it problem, so our aim is to provide the people with better solution to this problem and help the people to send the gifts to their loved ones.

The website containing features of social networking site like orkut and a shopping portal like eBay, Paypal etc.

Solution to the problem:

1. People can send gifts in terms of credits (virtual money).
2. These credits will be accounted in respective person's account.
3. User can directly buy any gift using credits in account through shopping cart or user can save these credits for purchasing higher credit (value) product.
4. User can purchase credits using Master Card, Visa, Net Banking or Paypal.
5. User can list his/her Gift Preferences, rank wise in Wish List.
6. Friends of user can access the other user's profile from his friends like orkut and can see his/her wishlist.
7. The user can redeem his/her credits in terms of actual money if we wish.
8. People can send gifts to anyone in this world and can even send e-cards or courier the gift using the affiliated courier service through website.
9. Incentives may be given to the users for sending the gifts.

Use of Cloud Computing:

Why Microsoft Azure:

- **Scalability:**
  - As the no. of users would increase, so would the amount of storage required.
  - A key advantage of the cloud computing model is the ease with which we can scale our solution. Using Windows Azure, we can create solutions that meet our scalability requirements.
  - A *pay-as-you-grow* pricing model allows us to quickly provision new databases as needed or scale down the services without the financial costs associated with unused capacity.
- **Flexibility**:
  - Because Windows Azure platform supports both Web-facing services and background processes, the application can provide an interactive user interface as well as executing work for users asynchronously. Our company can also start small, incurring low costs while its application has only a few users. If our application catches on and usage increases, Windows Azure can scale the application as needed.
  - Windows Azure supports the real time scenarios like – shopping cart, transactions, friend requests, event updates, online status, etc. in our application.
- **Compute**:
  - Automated management of web and worker roles enables scale-out and scale-down capabilities.
  - Worker role in our application would provide users functionality of tagging, thumbnail generation, updates, online users status, etc. which would be continuously running in the background.
- **Storage**:
  - Blob Storage: Images uploaded by the users would be stored in blobs.
  - Structured Storage: To maintain our web application's state – i.e. storing user data, transaction details, User events, gift items and connections.

- **Cost Estimation**: (Duration: 30 Days and 100 Users)

Tables	Size (KB)
Users	100 X 1.56 KB = 156 KB.
Connections	10000 X 33 B = 322.26 KB.
Transactions (for 50 transactions/user)	5000 X 32 B = 156.25 KB.
ShoppingItems (for 50 items)	50 X 1.13 KB = 56.5 KB.
Wishlists (5 Wishes/user)	500 X 0.5 KB = 250 KB.
Events (5 events/user)	500 X 0.5 KB = 250 KB.
Total	1191 KB = **1.16 MB** for 100 Users

  - **Compute cost**: $ 0.12 X 30 X 24 = $ 86.4
  - **Storage Cost**: $ 0.15 per GB
  - **Storage Transactions Cost** (approx. 1 Million): $ 0.01 X 10 = $ 0.1

Platform:

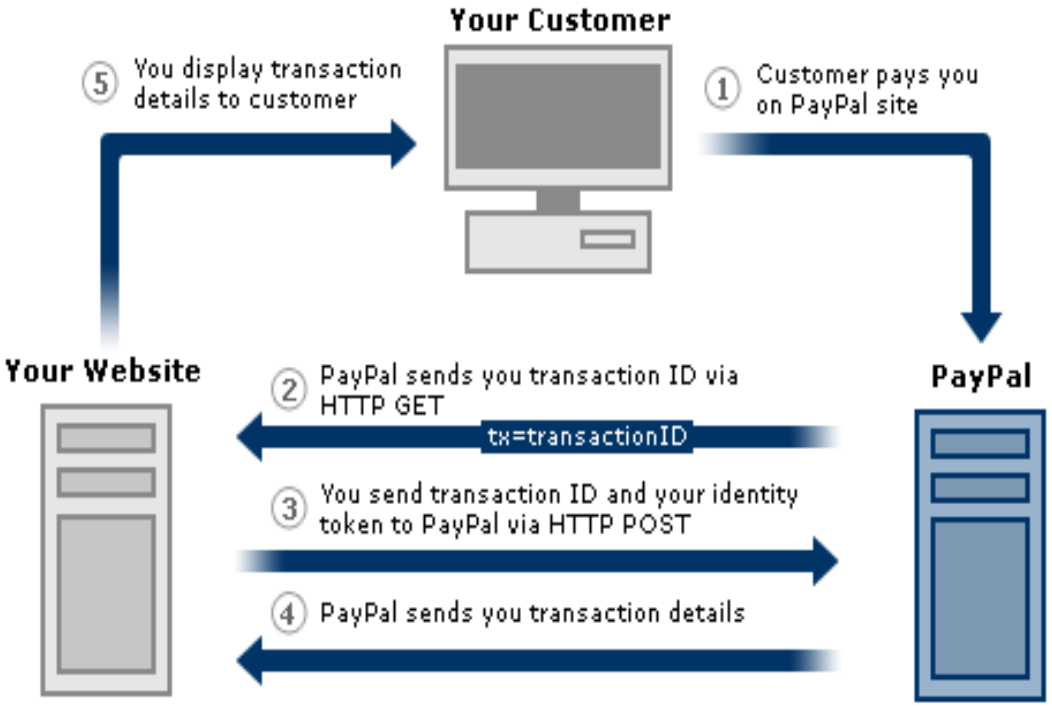
Windows Azure Platform.

Technology:

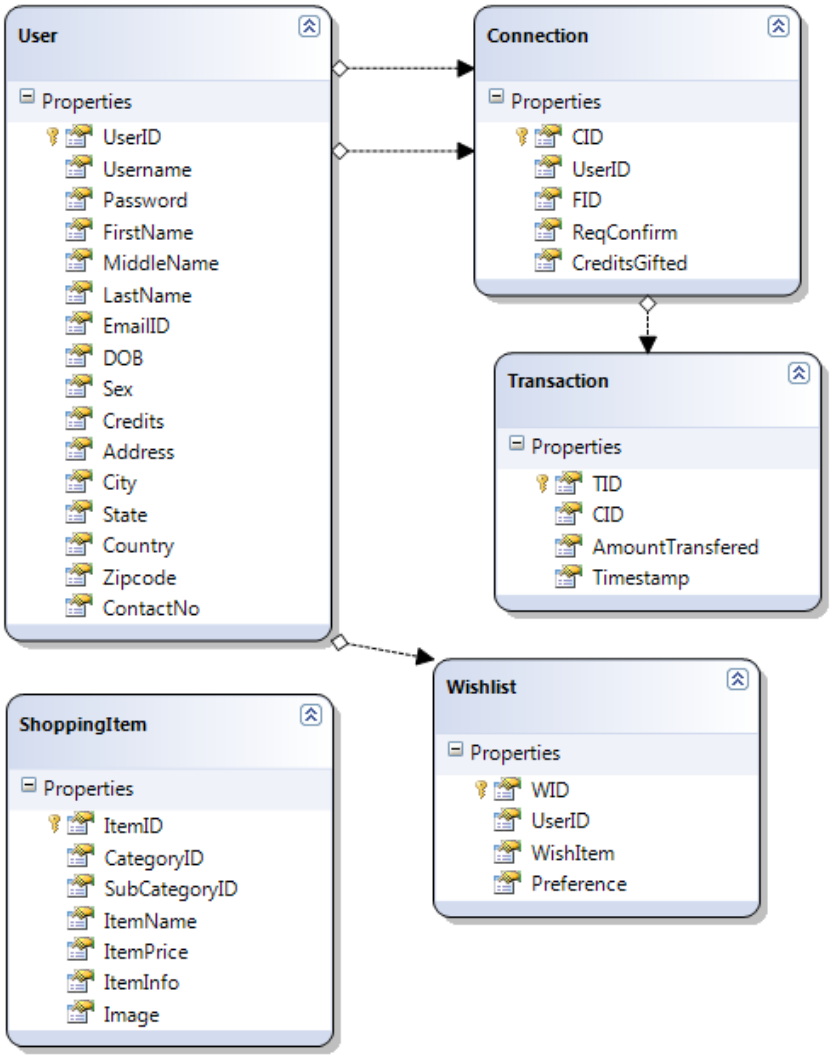
ASP.NET, MVC 1.1, Ajax

PROJECT DESIGN DIAGRAMS:

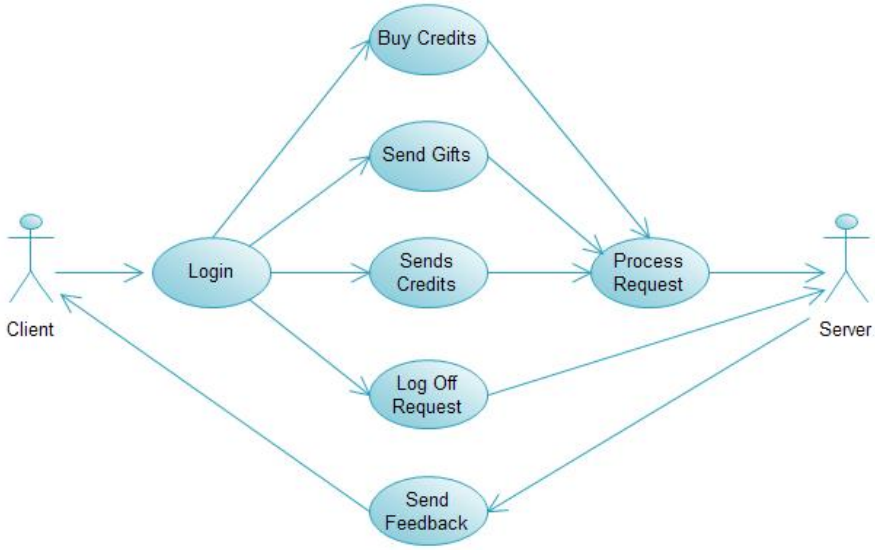
Basic Architectural Diagram



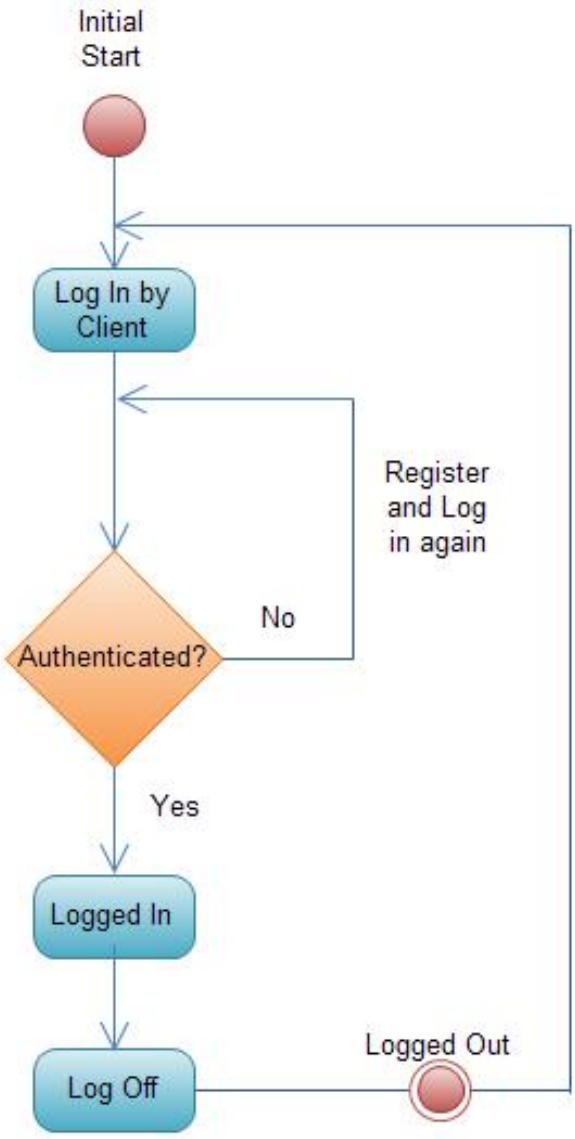
Database Schema:



Use Case Diagram:



State Chart Diagram:



Sequence Diagram: