

# Enterprise Application Project

Your System will be a simple e-commerce site (implemented as Web-based, n- tier enterprise application). It will offer for sale a collection of products that you choose. Your system will have the following features and business rules.

## Features:

1. Home page providing description of the business in which the enterprise is engaged. It will also provide links to various pages a **customer** can visit from the main home page.
2. Display **product** summary (as well as details for a given product upon customer request) that are offered to the customer.
3. Allow **user** to register himself/herself as a potential customer with the enterprise by providing various information such as Name, Address, User credentials, etc. Upon successful registration the customer is assigned to "Regular" status.
4. Allow user to view his/her information. (Customer information is information he/she entered during the registration process and his/her status).
5. Allow user to browse, shop, purchase products in which he/she are interested.
6. Allow user ability to view status of previous **purchase(s)** he/she made with the enterprise.
7. Allow user to view past history of purchases with the enterprise.
8. A login mechanism to allow returning / registered customers to utilize previously entered data such as username, address etc.
9. A logout mechanism to allow customer terminate his/her **session** with the application server.

## Business rules:

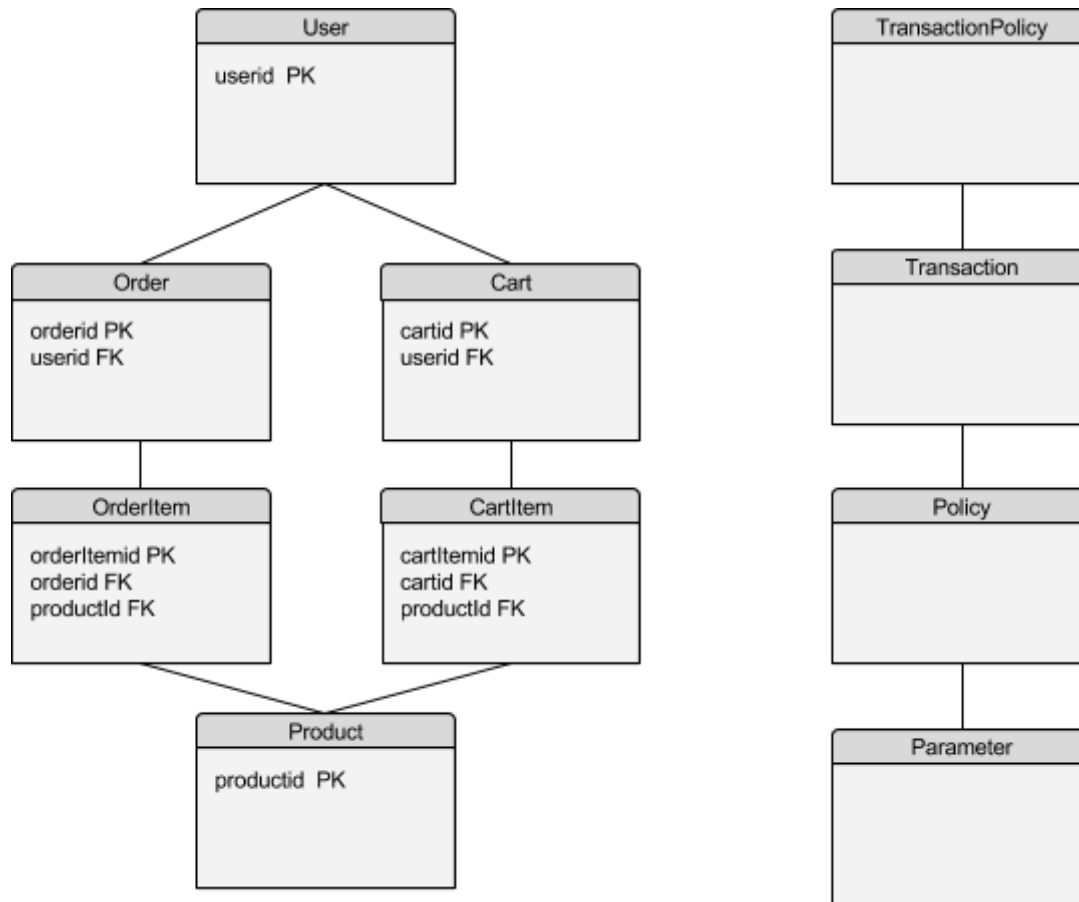
1. *A Customer cannot **order** an item unless he/she is registered and has valid login credentials. However he/she can **add product** to the **shopping cart** without registering or logging in.*
2. *A Customer can not **order** an item unless it is in stock.*
3. *A Customer can not **order** quantity for a given product more than that is available in the stock.*
4. Once a customer is registered he/she stays registered till the application container is restarted (or permanently in DB).
5. A customer is uniquely identified by his/her user name.
6. *Inventory for a product being purchased by a customer will only be adjusted upon successful **creation of a customer order**.*
7. At least 20 units of each product will be available at the start of application.
8. Application should force the user to enter a minimum amount of data to perform tasks requiring data entry such as login/register.
9. A Customer can add multiple items in a given order.
10. A Customer can place multiple orders in a given session as well as on a given day.
11. *A Customer is upgraded to "Premium" status if he/she has 5 **orders** with the enterprise.*
12. For each **order** the *customer is charged a pre-determined shipping cost* unless he/she is "Premium" customer. For "Premium" customers shipping is free.

## Design / Development Requirements

The following solution features are required:

- You should use the Stripes web framework.
- Your project needs to read a config.xml file similar to the Struts config file. You may use this file for any purpose (configuration, preload database, etc).

You need to read an xml file containing product inventory data at system startup in order to populate your application database, or you must pre-populate your inventory data in the database.



```

<TransactionPolicy>
  <Transaction id="CheckOut">
    <Policy id="IsRegistered" rule="Pre" />
    <Policy id="InStock" rule="Pre"/>
    <Policy id="PremiumStatus" rule="Post">
      <Parameter id="MinOrders" value="5"/>
    </Policy>
    <Policy id="Shipping" rule="Pre">
      <Parameter id="rate" value=".02"/>
      <Parameter id="PremiumRate" value="0.0"/>
    </Policy>
  </Transaction>
</TransactionPolicy>

```