

Innovation Phase 2

E commerce application on IBM Cloud Foundry

1.0 INTRODUCTION:

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing web sites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming commonplace.

The objective of this project is to develop a general purpose e-commerce store where product like clothes can be bought from the comfort of home through the Internet. However, for implementation purposes, this paper will deal with an online shopping for clothes.

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e-mail notification is sent to the customer as soon as the order is placed.

2.0 OVERALL DESCRIPTION:

2.1Description:

- Any member can register and view available products.
- Only registered member can purchase multiple products regardless of quantity.
- ContactUs page is available to contact Admin for queries.
- There are three roles available: Visitor, User and Admin.
 - Visitor can view available products.
 - User can view and purchase products.
 - An Admin has some extra privilege including all privilege of visitor and user.
 - ✓ Admin can add products, edit product information and add/remove product.
 - ✓ Admin can add user, edit user information and can remove user.
 - ✓ Admin can ship order to user based on order placed by sending confirmation mail.

2.2 Using the code:

1. Attach the database in your "SQL Server Management Studio Express".
2. Run the application on Microsoft Visual Studio as web site.
3. Locate the database.

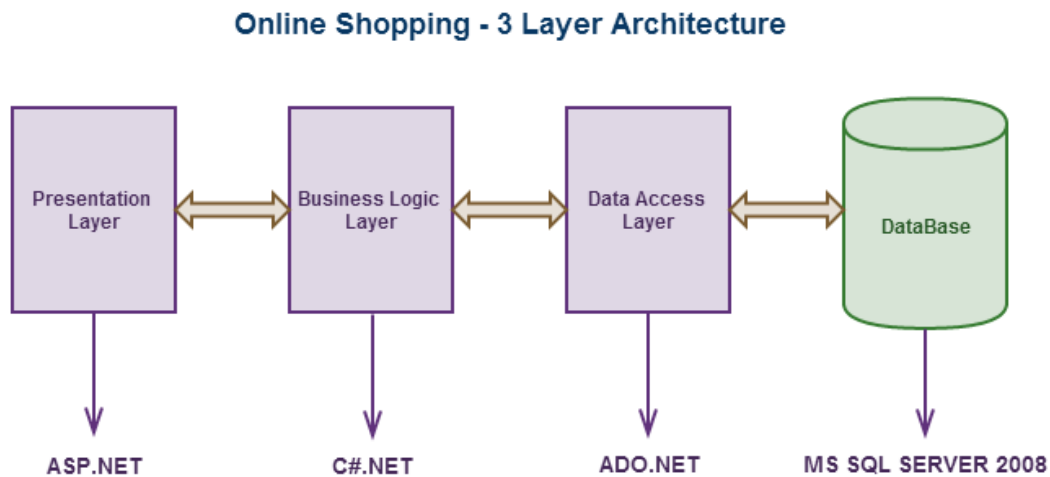
2.3 MasterPage details:

- OnlineShopping Master Page (Similar MasterPage for Visitor, User and Admin)

2.4 Web Pages details:

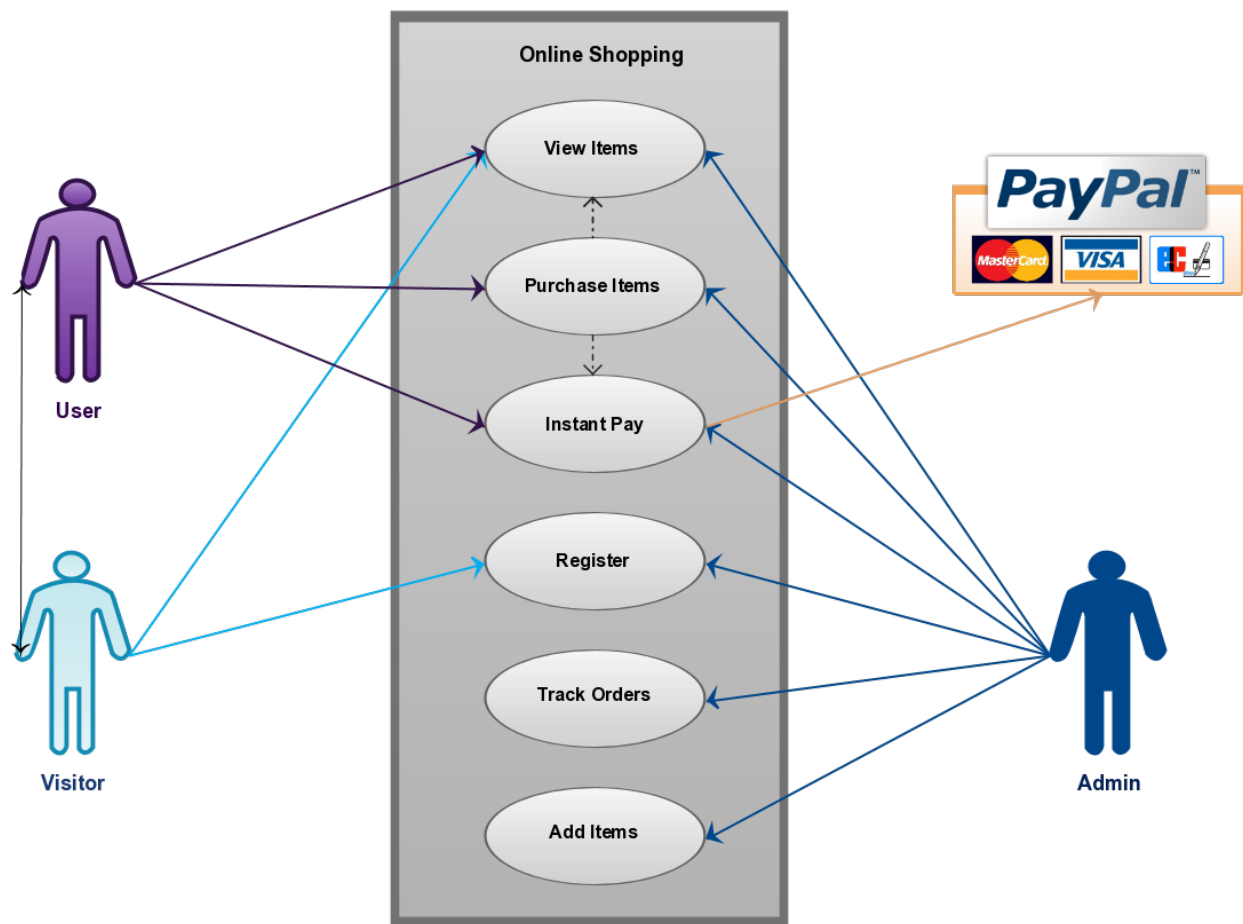
- Home Page
- AboutUs Page
- Clothing Page
- OrderUs Page
- ContactUs Page
- Admin Page
- Login Page
- Register Page
- Track

2.5 Project Detail:



3.0 SYSTEM REQUIREMENTS:

3.1 USE-CASE DIAGRAM:



4.0 ONLINE SHOPPING APPLICATION:

Anyone can view Online Shopping portal and available products, but every user must login by his/her Username and password in order to purchase or order products. Unregistered members can register by navigating to registration page. Only Admin will have access to modify roles, by default developer can only be an 'Admin'. Once user register site, his default role will be 'User'.

4.1 HOMEPAGE: The Home Screen will consist of screen were one can browse through the products which we have on our website



Figure1: Home Page

4.2. CLOTHING PAGE (PRODUCTS): This page consists of product details. This page appears same for both visitors and users.

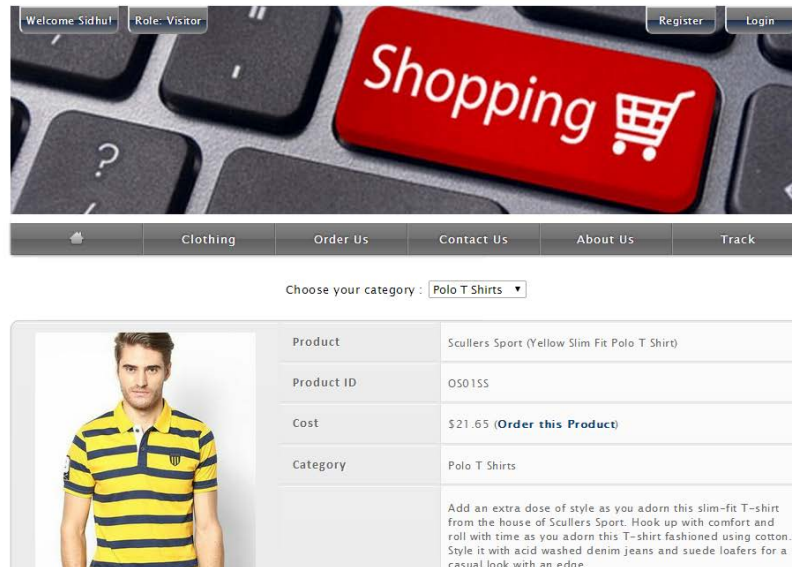


Figure 2: Clothing Page

4.3 Order Us Page: Registered users can order desired products from here.

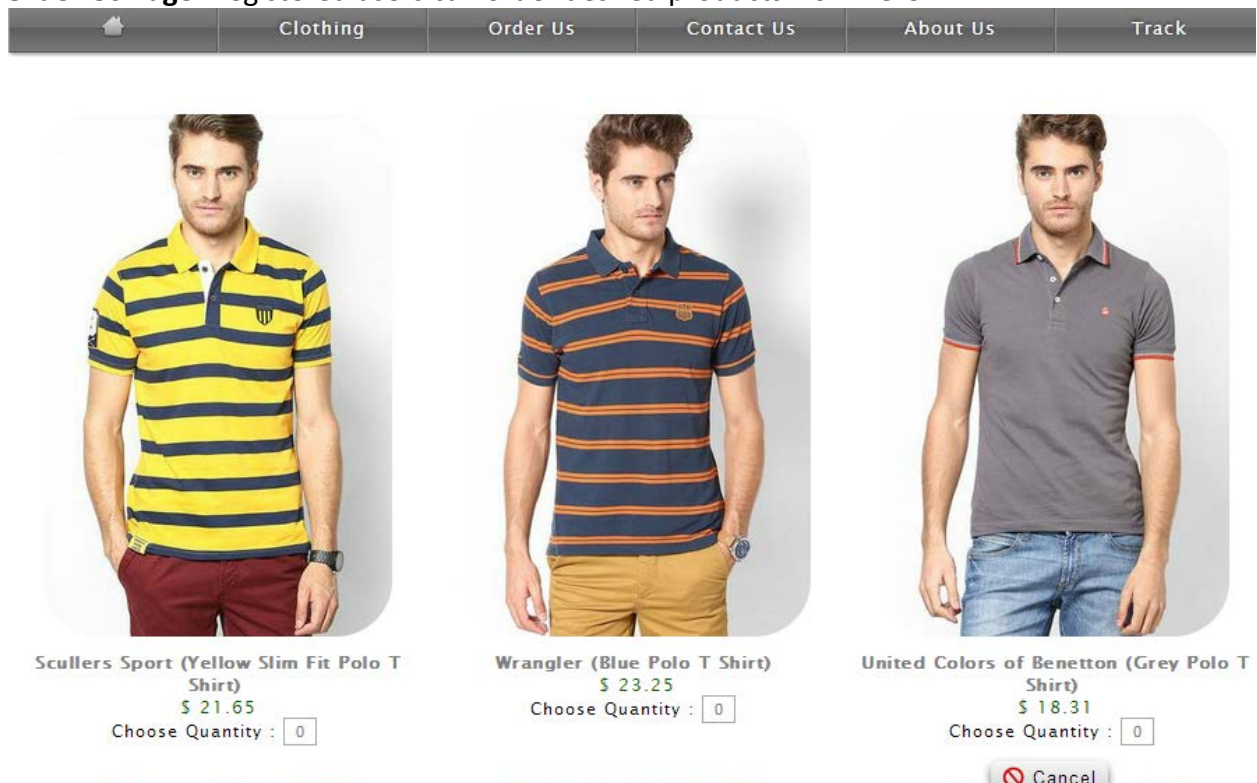



Figure 3: Order Us Page

4.4 Contact Us Page: Visitors and Registered users can contact website owners or administrators from here

	Clothing	Order Us	Contact Us	About Us	Track
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Online Shopping – Contact Form

Your Name...


Your Email...

Your Message...


Copyright © 2014 – Online Purchase (Clothes).

Figure 4: Contact Us Page

4.5 ABOUT US PAGE: This page describes about website and owners

	Clothing	Order Us	Contact Us	About Us	Track
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About Us



· Online Shopping is a lifestyle e-commerce web application, which retails various fashion and lifestyle products (Currently Men's Wear). · This project allows viewing various products available enables registered users to purchase desired products instantly using PayPal payment processor (Instant Pay) and also can place order by using Cash on Delivery (Pay Later) option. This project provides an easy access to Administrators and Managers to view orders placed using Pay Later and Instant Pay options. In this project I use C#.Net, SQL Server 2008 and various components of ASP.NET.

· Electronic commerce is generally considered to be the sales aspect of e-business. It also consists of the exchange of data to facilitate the financing and payment aspects of business transactions. This is an effective and efficient way of communicating within an organization and one of the most effective and useful ways of conducting business. It is a market entry strategy where the company may or may not have a physical presence.

· This is a visual search system specifically targeted for apparel. It aims at assisting users buying clothing and accessories. The business-to-consumer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of this e-commerce site is to sell goods online



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Figure 5: About us Page

4.6 Track For Admin Page: Website Administrators can track and ship orders here.



The screenshot shows the Admin Tracking Page. At the top, there is a header with a welcome message "Welcome Sidhartha!", a role indicator "Role: Administrator", and a "Logout" button. Below the header is a navigation bar with links: "Clothing", "Order Us", "Contact Us", "About Us", and "Track". The "Track" link is highlighted. Below the navigation bar, there are two tabs: "COD | Open Orders" (selected) and "COD | Closed Orders". Below the tabs, there is a form with the text "Open orders between :" followed by two input fields and the text "and :". At the bottom of the page, there is a footer with the text "Copyright © 2014 - Online Purchase (Clothes)."

Figure 6: Tracking Page for Admin.

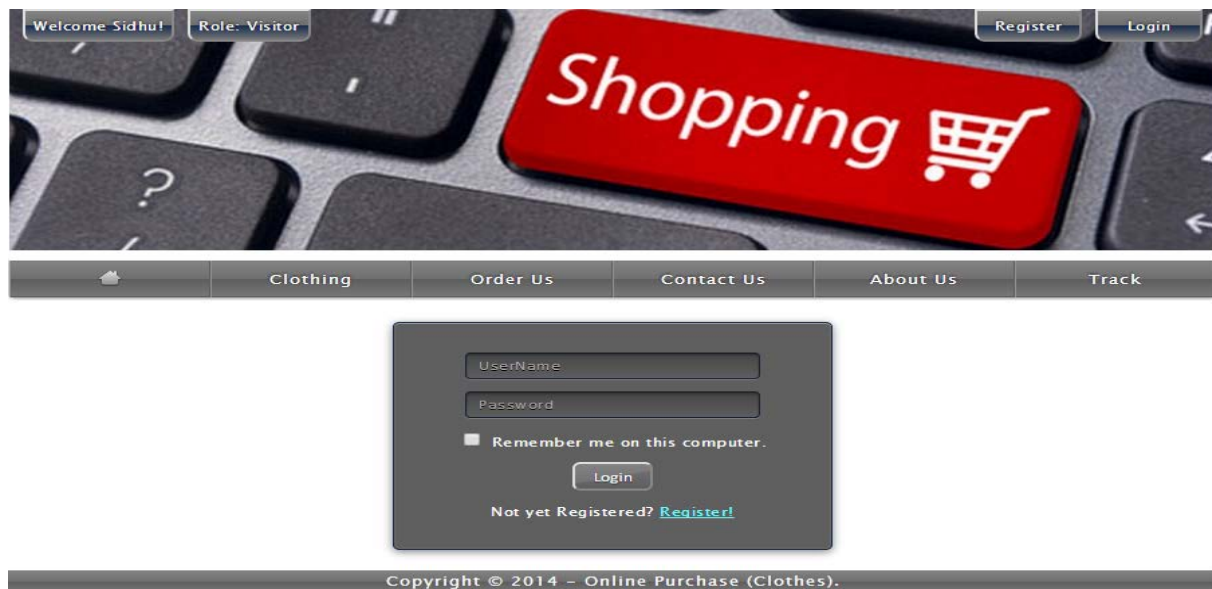
4.7 REGISTER PAGE: New users can register here



The screenshot shows the Register Page. At the top, there is a header with a "Register" button and a "Login" button. Below the header is a navigation bar with links: "Clothing", "Order Us", "Contact Us", "About Us", and "Track". The "Track" link is highlighted. Below the navigation bar, there is a registration form with the following fields: "UserName", "Password", "Confirm Password", and "Email". Below the fields, there are two buttons: "Register" and "Clear". Below the buttons, there is a link: "Already Registered? [Click Here!](#)". At the bottom of the page, there is a footer with the text "Copyright © 2014 - Online Purchase (Clothes)."

Figure 7: Register Page

4.8 LOGIN PAGE: Login page for both users and administrators.



4.9 Admin Page: Only difference you see in this page is Role: Admin. User and Admin role will be checked once the page was login and Session ["role"] will be either Admin or User. If credentials belong to Admin then role will be Admin and if credentials belong to User then role will be User.



Online Shopping (Graduate Final Project) – Governors State University

Online Shopping is a lifestyle e-commerce web application, which retails various fashion and lifestyle products.

Figure 9: Admin Page

4.10 ORDER VIEW FOR USER: Once users order item they are able to see ordered products and grand total.

[Hi Sanjana! Please review your order.](#)

Product Quantity	Product Name	Product Amount
1	Wrangler (Blue Polo T Shirt) (Each: \$ 23.25)	\$ 23.25
1	Flying Machine (Blue Slim Fit Jeans) (Each: \$ 33.31)	\$ 33.31
1	BEEVEE (Beige Elasticated Trackpant) (Each: \$ 18.31)	\$ 18.31
Total Quantity : 3		Total Amount USD : \$ 74.87 (Inclusive taxes and delivery charges)

Instant Pay (PayPal)

Cancel

Copyright © 2014 Online Purchase (Clothes)

Figure 10: Order View for User

4.11 PAYPAL FOR PAYMENT: Once users orders products they are redirected to payment page.

Online Shopping's Test Store

Your order summary

Descriptions	Amount
Online Shopping GSU Online Fabric...	\$74.87
Item price: \$74.87	
Quantity: 1	
Item total	\$74.87
Total \$74.87 USD	

Choose a way to pay

Pay with my PayPal account

Log in to your account to complete the purchase

PayPal

Pay with a debit or credit card

(Optional) Join PayPal for faster future checkout

Country: United States

Card number

Payment types: VISA, MasterCard, Discover, American Express

Expiration date: mm / yy

CSC

What is this?

Billing information

First name: Name

Last name

Figure 11: PayPal Page

Figure 4.12: Success URL

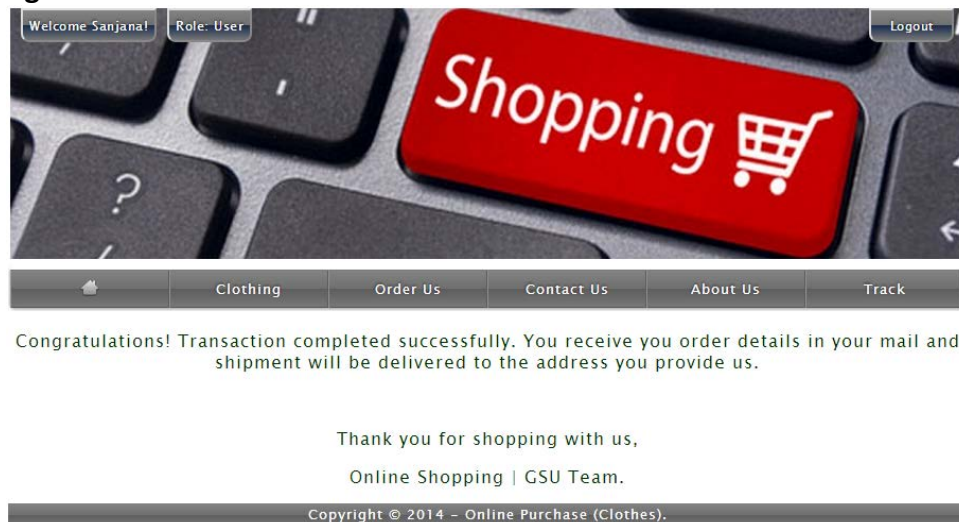


Figure 12: Success URL

FIGURE 4.12: Failed URL

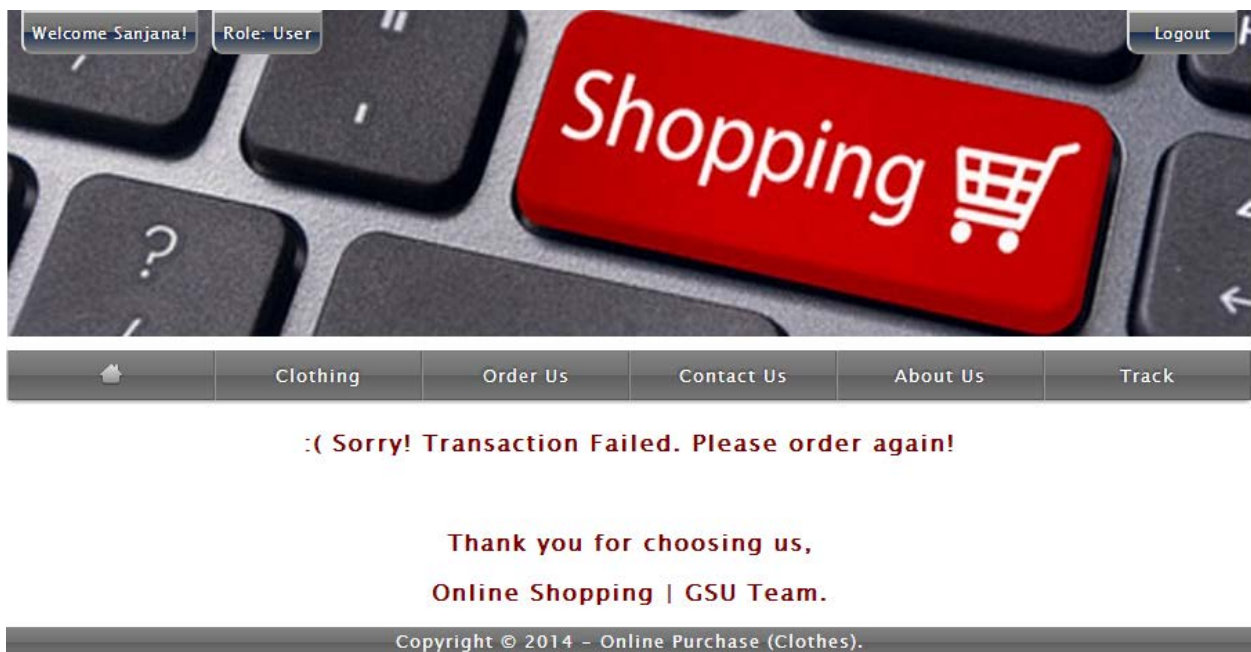


Figure 12: Failed URL

5.0 Data Management

5.1 Data Description

This database consists of

- Users: User and Admin information is added to database with Unique ID based on their roles.
- Shopping: Complete products information is stored in this table.
- Orders: Customer ordered products, status and delivery information is stored in this table.

5.2 Data Objects

- User: ID, UserName, Password, Email, Role
- Shopping: ID, Product, Product ID, Cost, Category, Image, Description
- Orders: ID, Client, Product, Quantity, Price, Date, OrderShipped

5.3 Database Table Diagram

users	
ID	
UserName	
Password	
Email	
Role	

shopping	
ID	
Product	
ProductID	
Cost	
Category	
Image	
Description	

orders	
ID	
Client	
Product	
Quantity	
Price	
Date	
OrderShipped	

5.4 Relationships:

