**ABSTRACT**

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 an e-commerce site is to sell goods and services online. This project deals with developing an e-commerce website for Online Book Sale. It provides the user with a catalog of different books available for purchase in the store. In order to facilitate online purchase a shopping cart is provided to the user. The system is implemented using a 3-tier approach, with a backend database, a middle tier ofMicrosoft Internet Information Services (IIS) and ASP.NET, and a web browser as the front end client.In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client sidescripting techniques, implementation technologies such as ASP.NET, programminglanguage (such as C#, VB.NET), relational databases (such as MySQL, Access).This is a project with the objective to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application.This document will discuss each of the underlying technologies to create and implement an e-commerce website.

**INTRODUCTION**

eCommerce (Electronic Commerce) is process of doing business through computer networks. The primary goal of an e-commerce site is to sell goods and services online. Online shopping is a form of electronic shopping store where the buyer is directly online to the seller’s computer usually via the internet. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products. Online Shopping System helps in buying of goods, products and services online by choosing the listed products from website(E-Commerce site). The Shopping cart is mainly useful for who haven’t time to go to shopping. Shopping cart is a very important feature used in e-commerce to assist people making purchases online. The sale and purchase transaction is completed electronically and interactively in real-time. User can login into eCommerce website, once he logged in then automatically one shopping cart will be created, once user select an item it will add to cart. In case user thinks the selected item is not useful for him, then he can delete that item form the cart.Report generation feature is provided using Crystal Reports to generate different kinds of reports like bar graphs, pie charts and table type charts etc.

The proposed system helps in building a website to buy, sell products or goods online using internet connection. Unlike traditional commerce that is carried out physically with effort of a person to go and get products, eCommerce has made it easier for human to reduce physical work and to save time. The basic concept of the application is to allow the customer to shop virtually using the Internet and allow customers to buy the items and articles of their desire from the store.E-commerce is fast gaining ground as an accepted and used business paradigm.

More and more business houses are implementing web site providing functionality for performing commercial transactions over the web. eCommerce websites provides consumers with less expensive products and services by allowing them to shop in many places and conduct quick comparisons. E-Commerce which was started in early 1990’s has taken a great leap in the world of computers, but the fact that has hindered the growth of e-commerce is security. Customer selected some items, but in his credit or debit cart haven’t that much balance, then he was logout from the website, the selected items are stored at cart with specific users with his allotted carts, after some days he bought those items then automatically deleted from the cart.

Shopping Cart System is the Simple shopping Solution. In day to day life, we will need to buy lots of goods or products from a shop. Customer can login and get various information about product and can purchase the suitable product.It may be food items, electronic items, house hold items etc etc. Customer can pay online, so security is must therefore eCommercewebsite provide secure transactions. Now a days, it is really hard to get some time to go out and get them by ourselves due to busy life style or lots of works. In order to solve this, B2C E-Commerce websites have been started. Using these websites, we can buy goods or products online just by visiting the website and ordering the item online by making payments online.After sale eCommercewebsite also provide after sales service in which customer problem is solved.

**OBJECTIVE OF THE PROJECT**

Before understanding what are the basic objectives of the project we need to emphasize on how the project works. In what direction is it required by the developer to take the project to. What all is needed and how could the goals be achieved?  
  
The project has the e-commerce services that has summarized the descriptions of ecommerce business models in a way which is easy to understand and can help business owners clarify their own ecommerce objectives. The following questions are geared to guide you through ecommerce planning steps:-

* Do you plan to offer "content" (information) online?
* Is your aim to be the dominant player in your field? Will you be the first in your field to seriously invest in Ecommerce?
* Are there existing Ecommerce sites in your category? Do your customers expect you to have an Ecommerce site? Do you need to figure out how to compete?
* Is the purpose of Ecommerce site attract new customers - or supplement or replace an existing way of reaching new or existing customers?
* Will your Ecommerce site be speeding up or improving traditional business services by offering more convenient or money-saving e-business capabilities?
* Will you be simplifying major events (such as buying a home or car) for consumers by offering one-stop shopping for all related services?
* Will you be segmenting your customer base - and tailoring customized services to each segment?
* Will you be using the Internet to improve communication and collaboration between all parties in your supply chain?
* Will you be using Ecommerce to make your internal or external processes more efficient?
* Do you want to improve your overall marketing efforts by getting to know your customers and prospects better?
* Can your product be delivered more profitably online?

Contemporary electronic commerce involves everything from ordering "digital" content for immediate online consumption, to ordering conventional goods and services, to "meta" services to facilitate other types of electronic commerce.

On the institutional level, big corporations and financial institutions use the internet to exchange financial data to facilitate domestic and international business. Data integrity and security are very hot and pressing issues for electronic commerce.

**FUNCTIONAL & NON FUNCTIONAL REQUIREMENT**

**Functional requirements:**

* 1. Secure registration and profile management facilities for Customers
  2. Secured mechanism for Payment
  3. Account management

**Non-functional requirements:**

1. Performance
2. Quality
3. Secure access of confidential data (user’s details).
4. 24 X 7 availability

**Technical Requirements:**

* 1. Browser
  2. SQL Server
  3. ASP.NET(C#)
  4. Javascript
  5. HTML & CSS

**TECHNOLOGY USED**

**Front End:**

**.NET Framework :-**

The language used in developing the website is .NET. The Microsoft .NET Framework is the predominant implementation of .NET technologies. Other implementations for parts of the framework exist. Although the runtime engine is described by an ECMA/ISO specification, other implementations of it may be encumbered by patent issues; ISO standards may include the disclaimer, "Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights."[[25]](http://en.wikipedia.org/wiki/.NET_Framework#cite_note-24) It is more difficult to develop alternatives to the base class library (BCL), which is not described by an open standard and may be subject to copyright restrictions. Additionally, parts of the BCL have Windows-specific functionality and behavior, so implementation on non-Windows platforms can be problematic.

Some alternative implementations of parts of the framework are listed here.

* [Microsoft's .NET Micro Framework](http://en.wikipedia.org/wiki/.NET_Micro_Framework) is a .NET platform for extremely resource-constrained devices. Suman includes a small version of the .NET [CLR](http://en.wikipedia.org/wiki/Common_language_runtime) and supports development in [C#](http://en.wikipedia.org/wiki/C_Sharp_(programming_language)) (though some developers were able to use [VB.NET](http://en.wikipedia.org/wiki/VB.NET), albeit with an amount of hacking, and with limited functionalities) and debugging (in an emulator or on hardware), both using [Microsoft Visual Studio](http://en.wikipedia.org/wiki/Microsoft_Visual_Studio). It also features a subset of the .NET base class libraries (about 70 classes with about 420 methods), a [GUI](http://en.wikipedia.org/wiki/GUI) framework loosely based on [Windows Presentation Foundation](http://en.wikipedia.org/wiki/Windows_Presentation_Foundation), and additional libraries specific to embedded applications.
* [Mono](http://en.wikipedia.org/wiki/Mono_(software)) is an implementation of the CLI and the .NET Base Class Library (BCL), and provides additional functionality. It is [dual-licensed](http://en.wikipedia.org/wiki/Dual-license) under [free software](http://en.wikipedia.org/wiki/Free_software) and [proprietary software](http://en.wikipedia.org/wiki/Proprietary_software) licenses. It includes support for ASP.NET, ADO.NET, and [Windows Forms](http://en.wikipedia.org/wiki/Windows_Forms) libraries for a wide range of architectures and operating systems. It also includes C# and VB.NET compilers.
* [Portable.NET](http://en.wikipedia.org/wiki/Portable.NET) (part of [DotGNU](http://en.wikipedia.org/wiki/DotGNU" \o "DotGNU)) provides an implementation of the Common Language Infrastructure (CLI), portions of the .NET Base Class Library (BCL), and a C# compiler. It supports a variety of CPUs and operating systems.
* Microsoft's [Shared Source Common Language Infrastructure](http://en.wikipedia.org/wiki/Shared_Source_Common_Language_Infrastructure) is a [non-free](http://en.wikipedia.org/wiki/Shared_source#Microsoft_Shared_Source_Common_Language_Infrastructure) implementation of the CLR component of the .NET Framework. However, the last version only runs on Microsoft Windows XP SP2, and was not updated since 2006, therefore it does not contain all features of version 2.0 of the .NET Framework.
* CrossNet is an implementation of the CLI and portions of the .NET Base Class Library (BCL). It is [free software](http://en.wikipedia.org/wiki/Free_software) using the open source [MIT License](http://en.wikipedia.org/wiki/MIT_License).

In [computer programming](http://en.wikipedia.org/wiki/Computer_programming), a **software framework** is an [abstraction](http://en.wikipedia.org/wiki/Abstraction_(computer_science)) in which software providing generic functionality can be selectively changed by user code, thus providing application specific software. It is a collection of [software libraries](http://en.wikipedia.org/wiki/Software_library) providing a defined [application programming interface](http://en.wikipedia.org/wiki/Application_programming_interface) (API).

A software framework is a universal, reusable software platform used to develop applications, products and solutions. Software Frameworks include support programs, compilers, code libraries, an application programming interface (API) and tool sets that bring together all the different components to enable development of a project or solution.

Frameworks contain key distinguishing features that separate them from normal libraries:

1. [**Inversion of control**](http://en.wikipedia.org/wiki/Inversion_of_control) - In a framework, unlike in libraries or normal user applications, the overall program's [flow of control](http://en.wikipedia.org/wiki/Control_flow) is not dictated by the caller, but by the framework.
2. **Default behavior** - A framework has a default behavior. This default behavior must actually be some useful behavior and not a series of [no-ops](http://en.wikipedia.org/wiki/NOP).
3. [**Extensibility**](http://en.wikipedia.org/wiki/Extensibility) - A framework can be extended by the user usually by selective overriding or specialized by user code providing specific functionality.
4. **Non-modifiable framework code** - The framework code, in general, is not allowed to be modified. Users can extend the framework, but not modify its code.

**Back End:**

**SQL Server**

Referred to as  StructuredQuery Language is a [programming language](http://en.wikipedia.org/wiki/Programming_language) designed for managing data in [relational database management systems](http://en.wikipedia.org/wiki/Relational_database_management_system) (RDBMS).

Originally based upon [relational algebra](http://en.wikipedia.org/wiki/Relational_algebra) and [tuple relational calculus](http://en.wikipedia.org/wiki/Tuple_relational_calculus" \o "Tuple relational calculus), its scope includes data insert, query, [update and delete](http://en.wikipedia.org/wiki/Data_Manipulation_Language), [schema](http://en.wikipedia.org/wiki/Database_schema) creation and modification, and data access control.

**HARDWARE & SOFTWARE REQUIREMENT**

## System requirements

* Windows Vista, Windows XP or Windows 2003 Server
* 1GB memory minimum, 2GB recommended
* 1GHz or faster processor

**Software requirements**

* Visual Studio 2005 or Visual Studio .NET 2003 and above.

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