CERTIFICATION OF APPROVAL

Integrate Ajax with Online Store System

by

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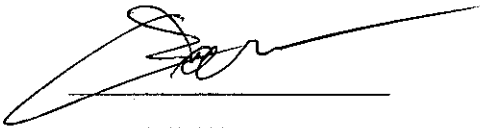31750 Tronoh
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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

YIM TITHYA

ABSTRACT

[2] **Electronic commerce,** commonly known as **e-commerce** or **eCommerce,** consists of the buying and selling of products or services over electronic systems such as the Internet and other computer networks. The amount of trade conducted electronically has grown dramatically since the wide introduction of the Internet. A wide variety of commerce is conducted in this way, including things such as electronic funds transfer, supply chain management, e-marketing, online marketing, online transaction processing, electronic data interchange (EDI), automated inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web at least at some point in the transaction's lifecycle, although it can encompass a wider range of technologies such as e-mail as well.

Online Store system is one of the electronic commerce or (e-commerce) system, but it is integrated with Ajax (Asynchronous JavaScript and XML). The system is built to fulfill the requirement of market demands today in order to provide the fascinate way of doing shopping. Everyone can use this system to for their businesses or it can be integrated with the current system. When a small business expands to large one and need to use the internet to do shopping, then the system is needed. It provides user with customization of the products to place order of the items they like to buy and it will generate the shipping document for future use. As it is the web-based system, so it can be used everywhere by just set it up on the server.

ACKNOWLEDGEMENT

I would to like to thanks God for the blessing that I am able to complete these research and project. Thanks to my respectful supervisor who helped, guided, gave me encouragement, and motivated me in doing the research as well as developing the system. Without her, the system would not be existed. Thanks to the all the UTP lecturers, who advised, taught, guided me from the foundation year until the final year. Last but not least, I would to thank to my beloved family and friends who always be there for me to share my problem, happiness, and sadness.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1: INTRODUCTION

The paper describes how the system is built by using appropriate methodology and the architecture. In the result and discussion part, it is discussed about the architecture of the system. The advantages and disadvantages are pointed out. Further more, the research and testing were conducted and are now put in this paper.

1. 1. Background of Study

1.1.1. History of E-Commerce

[2] The meaning of the term "electronic commerce" has changed over the last 30 years. Originally, "electronic commerce" meant the facilitation of commercial transactions electronically, usually using technology like Electronic Data Interchange (EDI) and Electronic Funds Transfer (EFT), where both were introduced in the late 1970s, for example, to send commercial documents like purchase orders or invoices electronically.

The 'electronic' or 'e' in e-commerce refers to the technology/systems; the 'commerce' refers to traditional business models. E-commerce is the complete set of processes that support commercial business activities on a network. In the 1970s and 1980s, this would also have involved information analysis. The growth and acceptance of credit cards, automated teller machines (ATM) and telephone banking in the 1980s were also forms of e-commerce. However, from the 1990s onwards, this would include enterprise resource planning systems (ERP), data mining and data warehousing. Perhaps the earliest example of many-to-many electronic commerce in physical goods was the Boston Computer Exchange, a marketplace for used computers, launched in 1982. The first online information marketplace, including online consulting, was likely the American Information Exchange, another pre-Internet online system, introduced in 1991.

In the dot com era, it came to include activities more precisely termed "Web commerce" -- the purchase of goods and services over the World Wide Web, usually with secure connections (HTTPS, a special server protocol that encrypts confidential ordering

data for customer protection) with e-shopping carts and with electronic payment services, like credit card payment authorizations.

Today, it encompasses a very wide range of business activities and processes, from e-banking to offshore manufacturing to e-logistics. The ever growing dependence of modern industries on electronically enabled business processes gave impetus to the growth and development of supporting systems, including backend systems, applications and middleware. Examples are broadband and fibre-optic networks, supply-chain management software, customer relationship management software, inventory control systems and financial accounting software.

When the Web first became well-known among the general public in 1994, many journalists and pundits forecast that e-commerce would soon become a major economic sector. However, it took about four years for security protocols (like HTTPS) to become sufficiently developed and widely deployed. Subsequently, between 1998 and 2000, a substantial number of businesses in the United States and Western Europe developed rudimentary web sites.

Although a large number of "pure e-commerce" companies disappeared during the dot-com collapse in 2000 and 2001, many "brick-and-mortar" retailers recognized that such companies had identified valuable niche markets and began to add e-commerce capabilities to their Web sites. For example, after the collapse of online grocer Webvan, two traditional supermarket chains, Albertsons and Safeway, both started e-commerce subsidiaries through which consumers could order groceries online.

The emergence of e-commerce also significantly lowered barriers to entry in the selling of many types of goods; accordingly many small home-based proprietors are able to use the internet to sell goods. Often, small sellers use online auction sites such as eBay, or sell via large corporate websites like Amazon.com, in order to take advantage of the exposure and setup convenience of such sites.

1.1.2. Product Suitability

Certain products or services appear more suitable for online sales; others remain more suitable for offline sales. While credit cards are currently the most popular means of paying for online goods and services, alternative online payments will account for 26% of e-commerce volume by 2009 according to Celent.

Many successful purely virtual companies deal with digital products, (including information storage, retrieval, and modification), music, movies, office supplies, education, communication, software, photography, and financial transactions. Examples of this type of company include: Google, eBay and Paypal. Other successful marketers such as use Drop shipping or Affiliate marketing techniques to facilitate transactions of tangible goods without maintaining real inventory. Examples include numerous sellers on eBay.

Virtual marketers can sell some non-digital products and services successfully. Such products generally have a high value-to-weight ratio, they may involve embarrassing purchases, they may typically go to people in remote locations, and they may have shut-ins as their typical purchasers. Items which can fit through a standard letterbox — such as music CDs, DVDs and books — are particularly suitable for a virtual marketer, and indeed Amazon.com, one of the few enduring dot-com companies, has historically concentrated on this field.

Products such as spare parts, both for consumer items like washing machines and for industrial equipment like centrifugal pumps, also seem good candidates for selling online. Retailers often need to order spare parts specially, since they typically do not stock them at consumer outlets -- in such cases, e-commerce solutions in spares do not compete with retail stores, only with other ordering systems. A factor for success in this niche can consist of providing customers with exact, reliable information about which part number their particular version of a product needs, for example by providing parts lists keyed by serial number.

Purchases of pornography and of other sex-related products and services fulfill the requirements of both virtuality (or if non-virtual, generally high-value) and potential embarrassment; unsurprisingly, provision of such services has become the most profitable segment of e-commerce.

There are also many disadvantages of e-commerce, one of the main ones is fraud. This is where your details (name, bank card number, age, national insurance number) are entered into what look to be a safe site but really it is not. These details can then be used to steal money from you and can be used to buy things on line that you are completely unaware of until it is too late. If this information is leaked into the wrong hands. People are able to steal your identity, and commit more fraud crimes under your name. Finally there are many problems with e commerce some of which are:

Failure to understand customers, why they buy and how they buy. Even a product with a sound value proposition can fail if producers and retailers do not understand customer habits, expectations, and motivations. E-commerce could potentially mitigate this potential problem with proactive and focused marketing research, just as traditional retailers may do. Failure to consider the competitive situation. One may have the will to construct a viable book e-tailing business model, but lack the capability to compete with Amazon. Inability to predict environmental reaction. What will competitors do? Will they introduce competitive brands or competitive web sites? Will they supplement their service offerings? Will they try to sabotage a competitor's site? Will price wars break out? What will the government do? Research into competitors, industries and markets may mitigate some consequences here, just as in non-electronic commerce. Over-estimation of resource competence. Can staff, hardware, software, and processes handle the proposed strategy? Have e-tailer's failed to develop employee and management skills? These issues may call for thorough resource planning and employee training.
Products less suitable for e-commerce include products that have a low value-to-weight ratio, products that have a smell, taste, or touch component, products that need trial fittings — most notably clothing — and products where colour integrity appears

important. Nonetheless, Tesco.com has had success delivering groceries in the UK, albeit that many of its goods are of a generic quality, and clothing sold through the internet is big business in the U.S. Also, the recycling program <u>Cheapcycle</u> sells goods over the internet, but avoids the low value-to-weight ratio problem by creating different groups for various regions, so that shipping costs remain low.

1.2. Problem Statement, Objectives and Scope of Study
1.2.1. Problem Statement

Even if a provider of E-commerce goods and services rigorously follows these "key factors" to devise an exemplary e-commerce strategy, problems can still arise. Sources of such problems include:

1. Failure to understand customers, why they buy and how they buy. Even a product with a sound value proposition can fail if producers and retailers do not understand customer habits, expectations, and motivations. E-commerce could potentially mitigate this potential problem with proactive and focused marketing research, just as traditional retailers may do.

2. Failure to consider the competitive situation. One may have the will to construct a viable book e-tailing business model, but lack the capability to compete with Amazon.com.

3. Inability to predict environmental reaction. What will competitors do? Will they introduce competitive brands or competitive web sites? Will they supplement their service offerings? Will they try to sabotage a competitor's site? Will price wars break out? What will the government do? Research into competitors, industries and markets may mitigate some consequences here, just as in non-electronic commerce.

4. Over-estimation of resource competence. Can staff, hardware, software, and processes handle the proposed strategy? Have e-tailers failed to develop employee

and management skills? These issues may call for thorough resource planning and employee training.

5. Failure to coordinate. If existing reporting and control relationships do not suffice, one can move towards a flat, accountable, and flexible organizational structure, which may or may not aid coordination.

6. Failure to obtain senior management commitment. This often results in a failure to gain sufficient corporate resources to accomplish a task. It may help to get top management involved right from the start.

7. Failure to obtain employee commitment. If planners do not explain their strategy well to employees, or fail to give employees the whole picture, then training and setting up incentives for workers to embrace the strategy may assist.

8. Under-estimation of time requirements. Setting up an e-commerce venture can take considerable time and money, and failure to understand the timing and sequencing of tasks can lead to significant cost overruns. Basic project planning, critical path, critical chain, or PERT analysis may mitigate such failings. Profitability may have to wait for the achievement of market share.

9. Failure to follow a plan. Poor follow-through after the initial planning, and insufficient tracking of progress against a plan can result in problems. One may mitigate such problems with standard tools: benchmarking, milestones, variance tracking, and penalties and rewards for variances.

10. Becoming the victim of organized crime. Many syndicates have caught on to the potential of the Internet as a new revenue stream. Two main methods are as follows: (1) Using identity theft techniques like phishing to order expensive goods and bill them to some innocent person, then liquidating the goods for quick cash; (2) Extortion by using a network of compromised "zombie" computers to engage

in distributed denial of service attacks against the target Web site until it starts paying protection money.

11. Failure to expect the unexpected. Too often new businesses do not take into account the amount of time, money or resources needed to complete a project and often find themselves without the necessary components to become successful.

1.2.2. Objectives

The system is developed to cope with the following objectives:
- To integrate Ajax with the system
- To build e-commerce website
- To enhance the time consuming of using normal e-commerce system without Ajax

1.2.3. Scope of Study

The scope of study done in this project includes the research study of Ajax and the implementation of Ajax in this system.

It is also required to conduct a survey for the system on the popularity and the usage.

The system similar systems like Amazone.com and E-bay.com are good examples to study about based on the interfacing, functionality, and work flow of the system.

1.2.4. Relevancy of the Project

As describe above, the system is easy to integrate with other system so, it adds more benefit to the current system as a whole. Further more, the new feature, Ajax, is added to the system to make it more ease and efficiency.

1.2.5. Feasibility of Project within the Scope and Time Frame

According to the time constraint and limitation of the scope, the project was developed just in time the deadline and time provided. Not too many objectives to be obtained, but awareness has to be taken because problem might occur during the development and testing.

CHAPTER 2: LITERATURE REVIEW

2.1. The Growing of E-Commerce

[5] Electronic commerce over the Internet is growing at an increasing pace worldwide. Maintenance of electronic commerce systems is thus becoming an increasingly important IT activity. In this paper the legal issues concerned with the maintenance of electronic commerce systems are examined based oil detailed case studies in two U.K.-based organizations, a marketing organization and a retail organization. Even seemingly trivial maintenance activities of electronic commerce systems such as changing Web site text can have legal implications due to the variety of advertising, consumer protection, data protection and other legislation and regulation that potentially applies to electronic commerce activities. In addition, the potentially global nature of electronic commerce activities implies that maintenance activities of electronic commerce systems need to comply not only with the legislation and regulation within the country of the seller, but also potentially with the legislation and regulation within the country of the consumer as well.

2.2. Effects of B2C E-Commerce

[6] ...the mobility and accessibility effects of business-to-consumer (b2c) e-commerce by means of a literature review. The main questions are how b2c e-commerce affects (a) individual activity patterns and travel behaviour, (b) the freight transport and logistic decisions of firms, and (c) the location decisions of households and firms. The review shows that the direct (short-term) mobility effects of b2c e-commerce are relatively clear, and that an overall increase in both individual travel and freight transport can be expected. The indirect (long-term) changes for physical accessibility and mobility, however, are less clear and harder to deal with, due to the complex relationships, time lags, data problems and methodological (attribution) problems. Still, it appears that processes of decentralisation and sub-urbanisation of distribution systems for b2c e-commerce may gradually extend and shift, respectively, towards more remote and less

densely populated areas in the Netherlands. This would reinforce the ongoing process of retail store closures in these areas, i.e., the spatial redistribution in retailing facilities, thus limiting physical accessibility. As a result, average trip lengths and car use for shopping trips may on the whole increase. With freight transport also increasing due to b2c e-commerce, its overall long-term effect may be an increase in motorised mobility, with urban consumers saving trips for shopping purposes and consumers elsewhere adding to their travel burden. Only certain products are feasible for e-commerce, however. Hence, the impact of b2c e-commerce on mobility and accessibility varies between product categories.

CHAPTER 3: METHODOLOGY

3.1. Methodology

To develop the system, Evolutionary development is used. The reason is evolutionary development is based on the idea of developing an initial implementation, exposing this to user comment and refining it through many versions until an adequate system has been developed (Figure 1: Evolutionary development). Specification, development and validation activities are interleaved rather than separate, with rapid feedback across activities and it is suitable for the small and medium-size systems. [1]
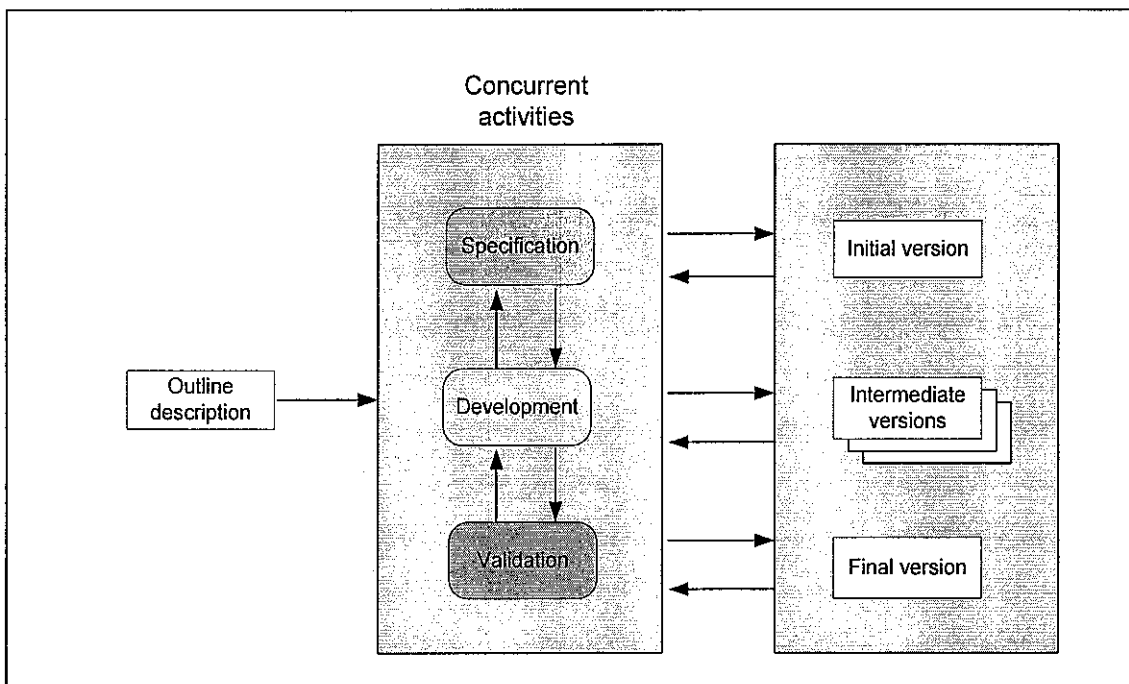
Figure 1: Evolutionary Development

3.2. System Architecture

Traditional Web Application Model
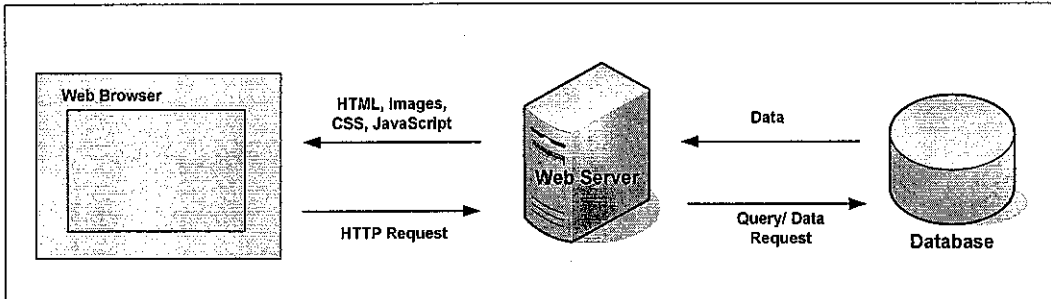
Ajax Web Application Model
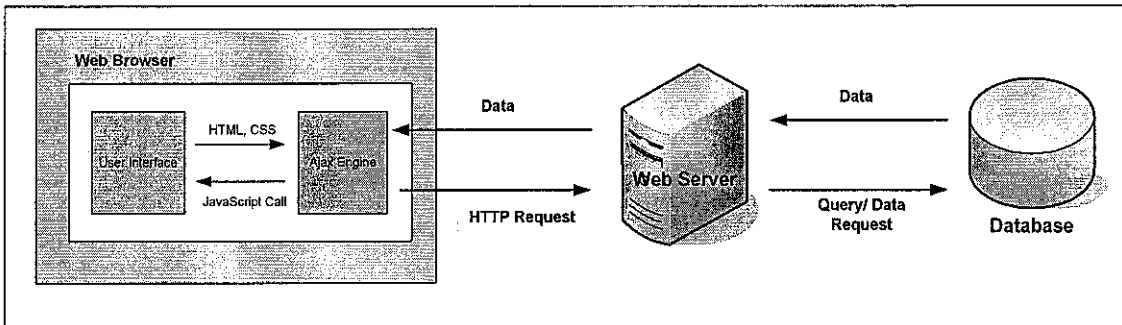
Figure 2: System Architecture

3.3. Use-Case Diagram
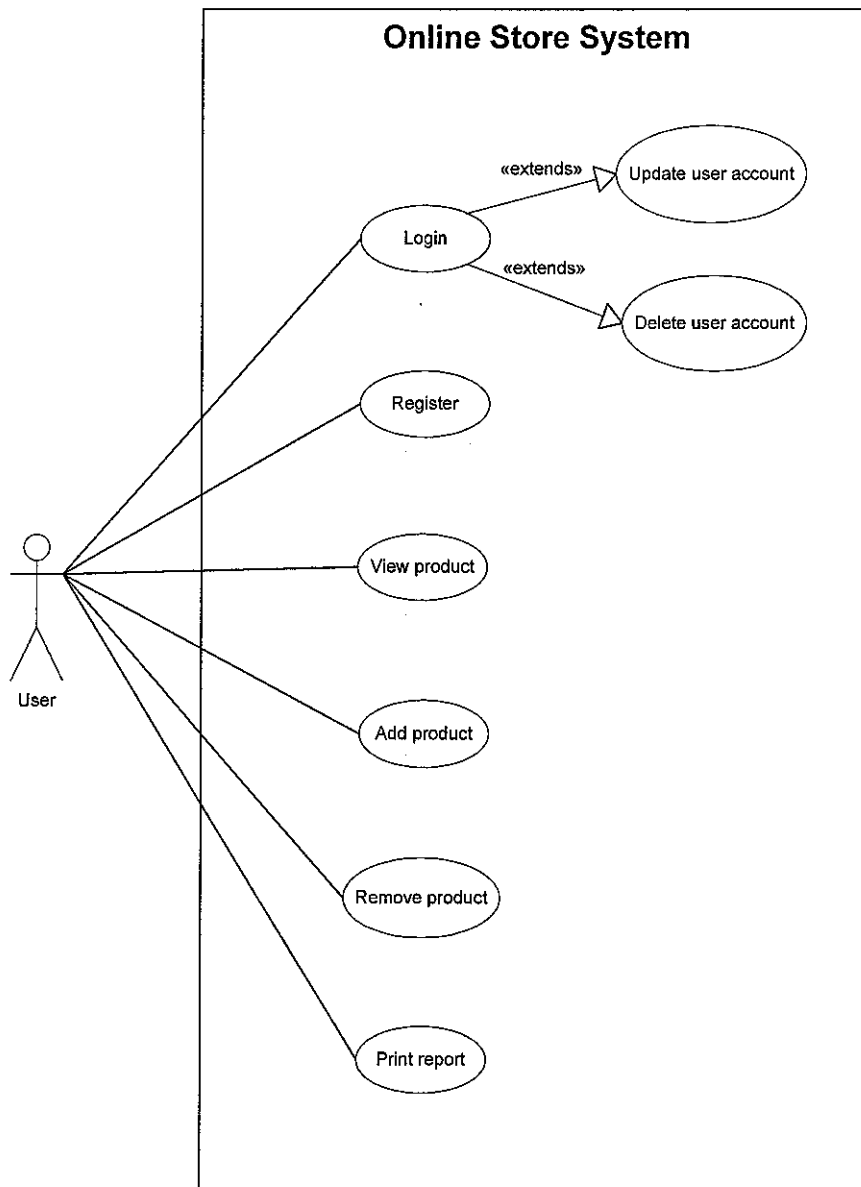
Figure 3: Use-Case Diagram

3.4. Class Diagram

Class Diagram
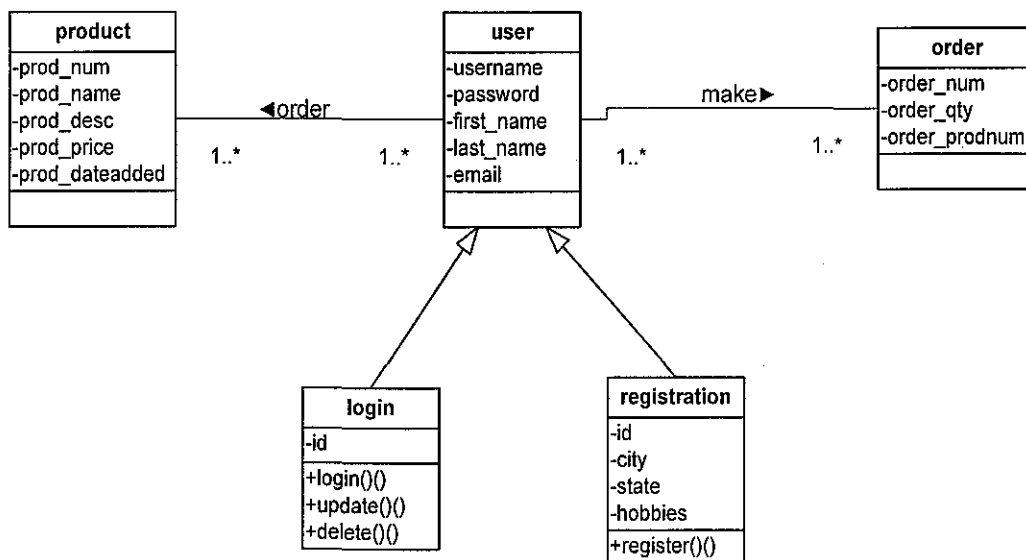
Figure 4: Class Diagram

14

3.5. Entity Relational Diagram

Table in The Database (ecommerce)

customers
- custmers_custnum (PK)
- customers_firstname
- customers_lastname
- customers_add1
- customers_add2
- customers_city
- customers_state
- customers_zip
- customers_phone
- customers_fax
- customers_email

admin
- username
- password
- first_name
- last_name
- email
- admin_level
- id (PK)

user_info
- email
- username
- password
- first_name
- last_name
- city
- state
- hobbies
- id (PK)

carttemp
- carttemp_hidden (PK)
- carttemp_sess
- carttemp_prodnum
- carttemp_quan

orderdet
- orderdet_ordernum (PK)
- orderdet_qty
- orderdet_prodnum

products
- products_prodnum (PK)
- products_name
- products_proddesc
- products_price
- products_dateadded

ordermain
- ordermain_ordernum (PK)
- ordermain_orderdate
- ordermain_ordercustnum
- ordermain_subtotal
- ordermain_shipping
- ordermain_tax
- ordermain_total
- ordermain_shipfirst
- ordermain_shiplast
- ordermain_shipcompany
- ordermain_shipadd1
- ordermain_shipadd2
- ordermain_shipcity
- ordermain_shipstate
- ordermain_shipzip
- ordermain_shipphone
- ordermain_shipemail

Figure 5: Entity Relational Diagram

15

3.6. Web Page Flow

Navigation Diagram
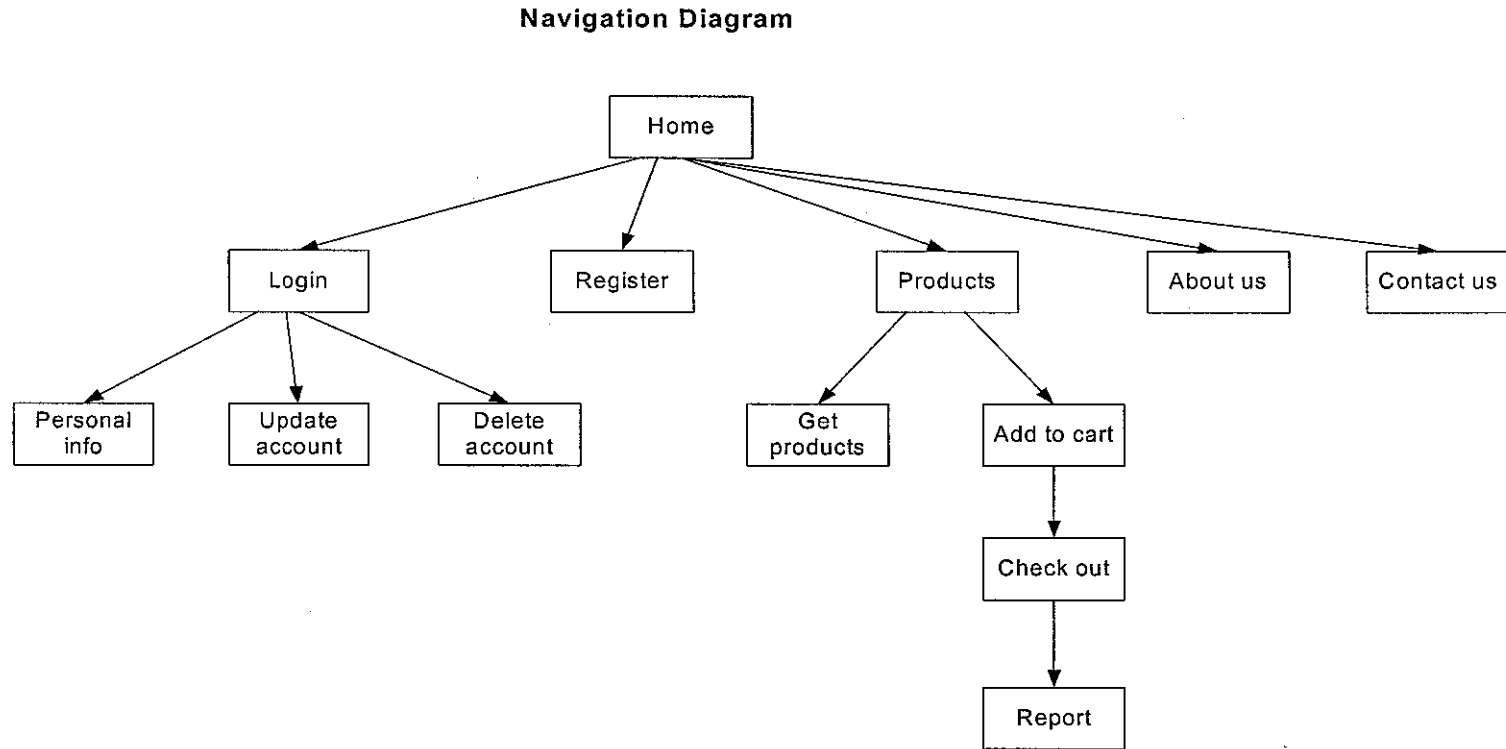
Figure 6: Navigation Diagram

3.7. Project Activities

First Semester (Jan 2007-June 2007)

    1. User & System requirement specification study

    2. Development

- Database design
- GUI design
- Core system

    3. Validation

Second Semester (July 2007-Dec 2007)

    1. System testing

    2. User Acceptance Test

    3. Documentation

3.8. Key Milestones

Suggested Milestone for the First Semester of 2-Semester Final Year Project

No.	Detail/ Week	1	2	3	4	5	6	7	Mid-semester break	8	9	10	11	12	13	14
1	Selection of Project Topic	▓	▓													
2	Preliminary Research Work		▓	▓	▓											
3	Submission of Preliminary Report				●											
4	Seminar 1 (optional)					▓	▓	▓								
5	Project Work					▓	▓	▓								
6	Submission of Progress Report								●							
7	Seminar 2 (compulsory)										▓	▓	▓	▓		
8	Project work continues									▓	▓	▓	▓	▓		
9	Submission of Interim Report Final Draft														●	
10	Oral Presentation															●

● Suggested milestone
▓ Process

Figure 7: Milestone for the First Semester

18

Suggested Milestone for the Second Semester of 2-Semester Final Year Project

No.	Detail/ Week	1	2	3	4	5	6	7		8	9	10	11	12	13	14
1	Project Work Continue	■	■	■												
2	Submission of Progress Report 1				●											
3	Project Work Continue				■	■	■	■								
4	Submission of Progress Report 2									●						
5	Seminar (compulsory)										■	■	■			
5	Project work continue									■	■	■	■			
6	Poster Exhibition										●					
7	Submission of Dissertation (soft bound)												●			
8	Oral Presentation														●	
9	Submission of Project Dissertation (Hard Bound)															●

(The column between week 7 and week 8 is labeled "Mid-Semester Break")

●   Suggested milestone

■   Process

Figure 8: Milestone for the Second Semester

3.9. Gantt Chart

Gantt chart for the first semester

ID	Task Name	Duration	Start	Finish
1	Selection of Project Topic	10 days	Mon 1/22/07	Fri 2/2/07
2	Preliminary Research Work	11 days	Fri 2/2/07	Fri 2/16/07
3	Submission of Peliminary Report	1 day	Fri 2/16/07	Fri 2/16/07
4	Seminar 1 (optional)	5 days	Mon 2/26/07	Fri 3/2/07
5	Project Work	20 days	Fri 2/16/07	Thu 3/15/07
6	User & system requirement specification study	7 days	Fri 2/16/07	Mon 2/26/07
7	Development	14 days	Mon 2/26/07	Thu 3/15/07
8	Database & GUI Design	14 days	Mon 2/26/07	Thu 3/15/07
9	Submission of Progress Report	1 day	Wed 3/21/07	Wed 3/21/07
10	Seminar 2 (compulsory)	5 days	Mon 4/2/07	Fri 4/6/07
11	Project work continues	15 days	Mon 3/19/07	Fri 4/6/07
12	Development	15 days	Mon 3/19/07	Fri 4/6/07
13	Core system	12 days	Mon 3/19/07	Tue 4/3/07
14	Validation	4 days	Tue 4/3/07	Fri 4/6/07
15	Submission of Interim Report Final Draft	1 day	Wed 4/18/07	Wed 4/18/07
16	Oral Presentation	5 days	Mon 4/30/07	Fri 5/4/07

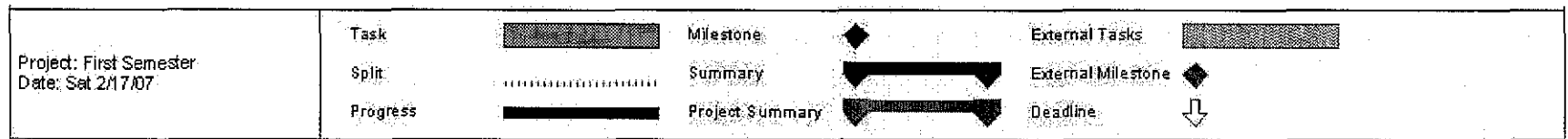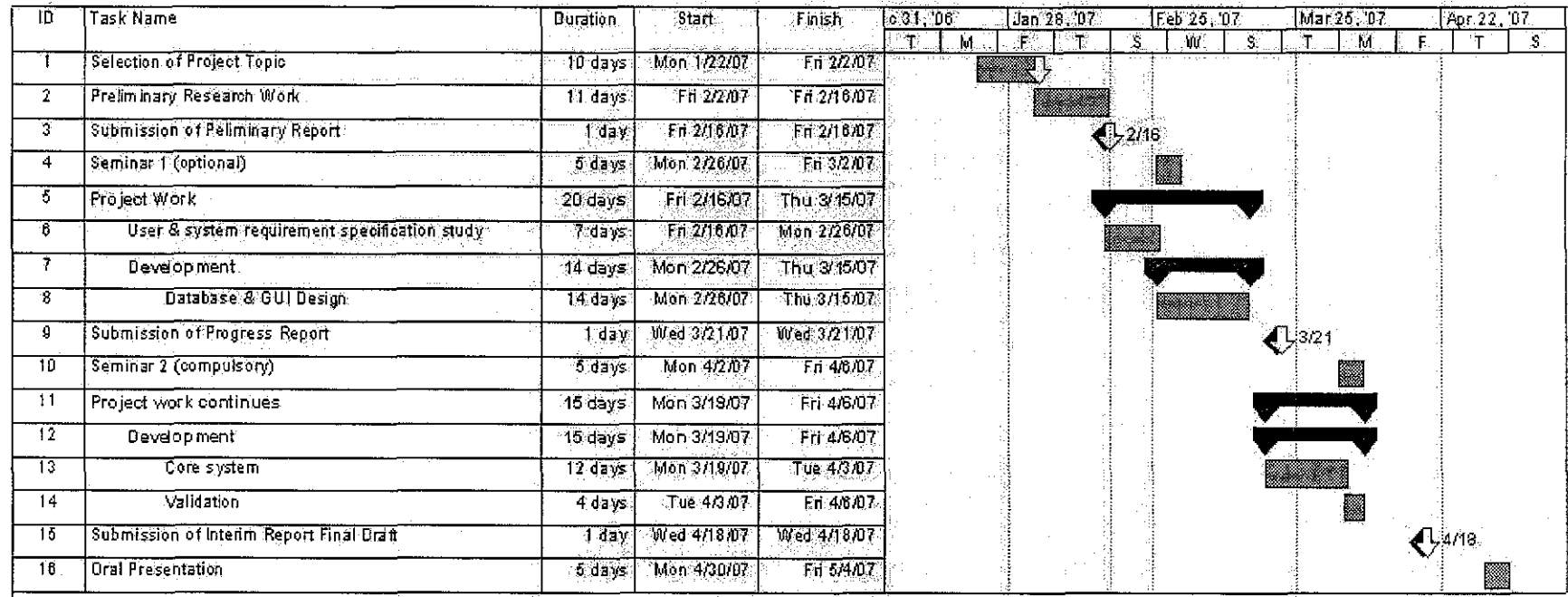| Project: First Semester Date: Sat 2/17/07	Task		Milestone	◆	External Tasks	
	Split	....	Summary		External Milestone	◆
	Progress		Project Summary		Deadline	⇩

Figure 9: Gantt-Chart

20

3.10. Hardware, Software and Technique Required

- PHP
- MySQL
- XML
- Apache
- Macromedia Dreamweaver 2004
- Macromedia Firework 2004
- Macromedia Flash 2004
- Adobe Illustrator CS
- Adobe Photoshop CS

CHAPTER 4: RESULTS AND DISCUSSION

4.1. E-Commerce Market and Development

4.1.1. Internet Access and ICT Usage

Based on the static, Africa has 915,210,928 of population, it equals to 14.1% of the world population, and the internet usage in Africa is 32,765,700 which is 3.6% compare to world usage is 3.0%. The usage growth in year 2000-2006 is 625.8%.

For Asia the population is 3,667,774,066 equals to 56.4% of the world population and the internet users are 278,593,457 which is 10.3% of the population compare to the internet users in the world is 35.2% and the usage growth is 231.2%.

Oceania/ Australia, the population is 33,956,977 equals to 0.5% of the world population and the internet users are 18,364,772 which is 54.1% of the population compare to the internet users in the world is 1.7% and the usage growth is 141.0%.

World Regions	Population (2006 Est.)	Population % of the World	Internet usage latest data	Penetration - % of pop.	Usage - % of the World	Usage growth 2000 - 2006
Africa	915,210,928	14.1 %	32,765,700	3.6 %	3.0 %	625.8 %
Asia	3,667,774,066	56.4 %	378,593,457	10.3 %	35.2 %	231.2 %
Europe	807,289,020	12.4 %	311,406,751	38.6 %	28.9 %	196.3 %
Middle East	190,084,161	2.9 %	19,028,400	10.0 %	1.8 %	479.3 %
North America	331,473,276	5.1 %	231,001,921	69.7 %	21.5 %	113.7 %
Latin America / Caribbean	553,908,632	8.5 %	85,042,986	15.4 %	7.9 %	370.7 %
Oceania / Australia	33,956,977	0.5 %	18,364,772	54.1 %	1.7 %	141.0 %
World total	6,499,697,060	100.0 %	1,076,203,987	16.6 %	100.0 %	198.1 %

Table 1: World Internet Usage and Population Statistics, 2000–2006

Europe, the population is 809,289,020 equals to 12.4% of the world population and the internet users are 311,406,751 which is 38.6% of the population compare to the internet users in the world is 28.9% and the usage growth is 196.3%.
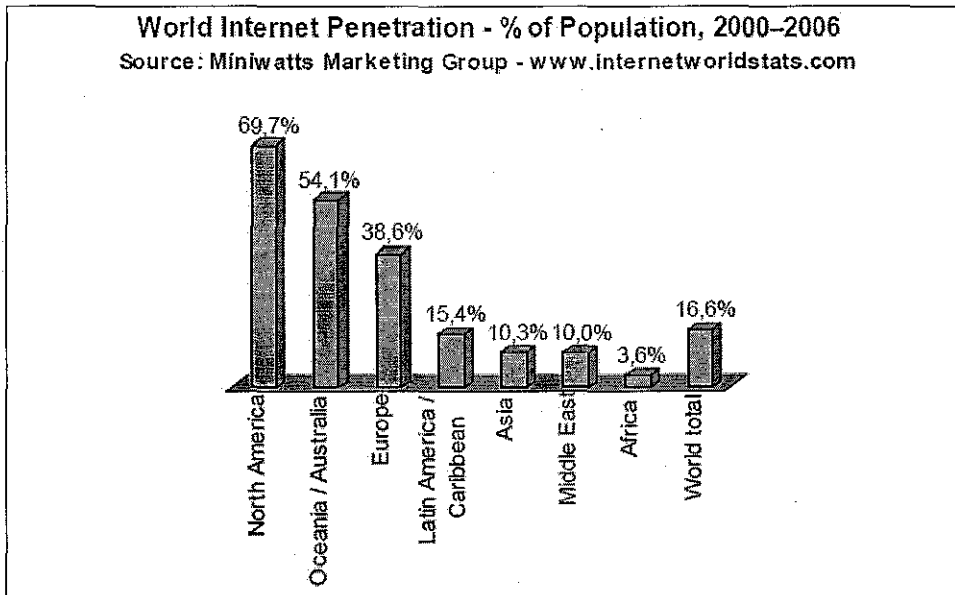
Figure 10: World Internet Penetration

Middle East, the population is 190,084,161 equals to 2.9% of the world population and the internet users are 19,028,400 which is 10.0% of the population compare to the internet users in the world is 1.8% and the usage growth is 479.3%.
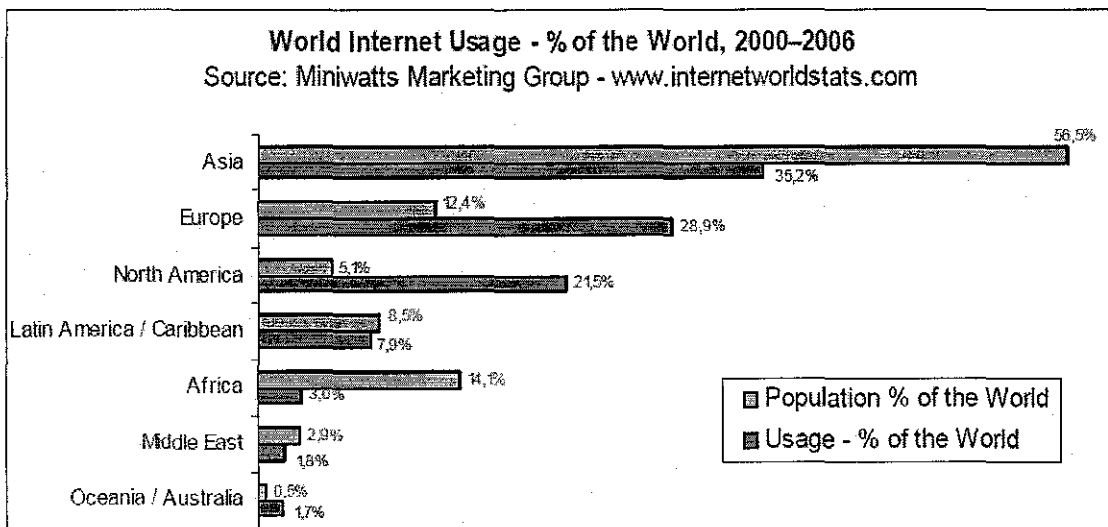

Figure 11: World Internet Usage

North America, the population is 331,473,276 equals to 5.1% of the world population and the internet users are 231,001,921 which is 69.7% of the population compare to the internet users in the world is 21.5% and the usage growth is 113.7%.
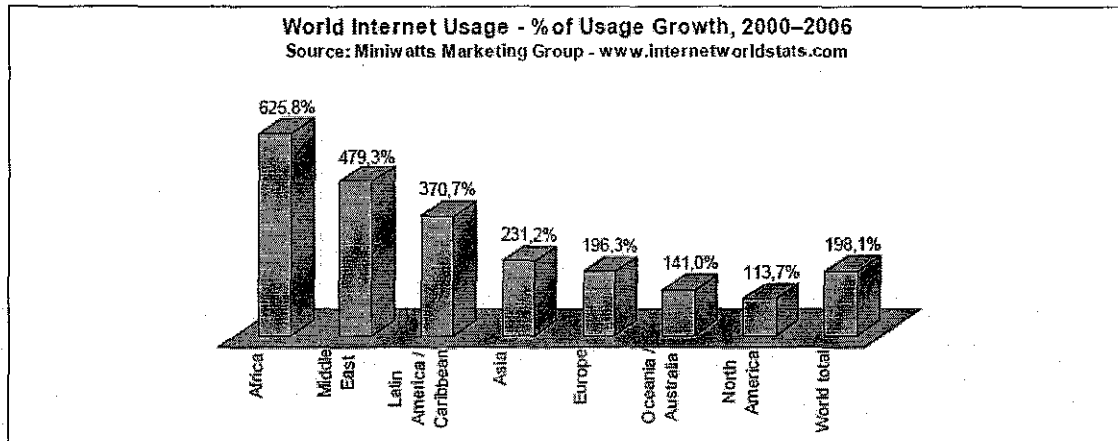

Figure 12: World Internet Usage

Latin America/ Caribbean, the population is 553,908,632 equals to 8.5% of the world population and the internet users are 85,042,986 which is 15.4% of the population compare to the internet users in the world is 7.9% and the usage growth is 370.7%.

4.1.2. Use of Internet by businesses in developed countries

- Internet sales are mainly domestic or regional

- E-commerce is more prevalent in services than in manufacturing, and it features particularly in financial services, business services and wholesale trading;

- Business-to-consumer (B2C) e-commerce still accounts for only a small share of e-commerce, but it is growing;

- The perceived major barriers are not related to access Internet and use, but rather to the lack of network security, slow and unstable communications, and legal uncertainties concerning payments, contracts and delivery;

- SMEs have the greatest potential for productivity gains through e-business.

4.1.3. Use of Internet by businesses in developing countries

- E-payments are rare, and even for sales generated online most payments are made by bank transfer;

- Small companies use more e-marketplaces, whereas medium-sized companies use company websites (of third parties or their own) for selling online;

- Small companies are ready to invest more in ICTsover the next few years. This shows the dynamics and rapid development of e-business adoption;

- A constraint for SMEsis the fact that they do not have established brand names; online customers prefer to trust well-known brands rather than buying from unknown companies over the Internet.

E-commerce sales in the United States, 2000–2006 (million USD)
Source: US Bureau of Census – February 2006

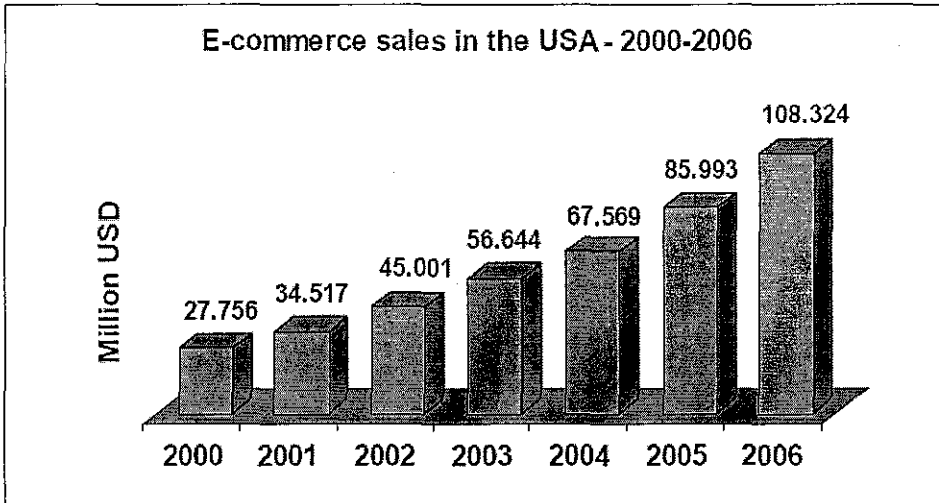| Year	Retail sales (millions of dollars)		% of e-commerce	% change from prior year	
	Total	E-commerce		Total	E-commerce
2006	3.944.638	108.324	2,7%	4,5%	26,0%
2005	3.775.349	85.993	2,3%	9,6%	27,3%
2004	3.444.438	67.569	2,0%	5,5%	19,3%
2003	3.265.477	56.644	1,7%	4,2%	25,9%
2002	3.134.322	45.001	1,4%	2,2%	30,4%
2001	3.067.725	34.517	1,1%	2,6%	24,3%
2000	2.988.756	27.765	0,9%		

Table 2: E-commerce sales in the United States, 2000-2006
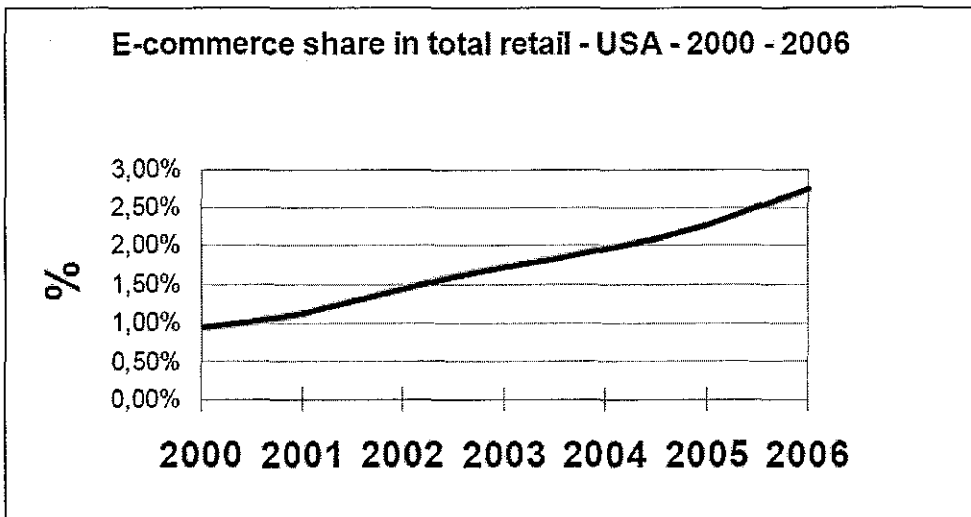
Figure 13: E-commerce sales in the USA

Figure 14: E-commerce share in total retail-USA
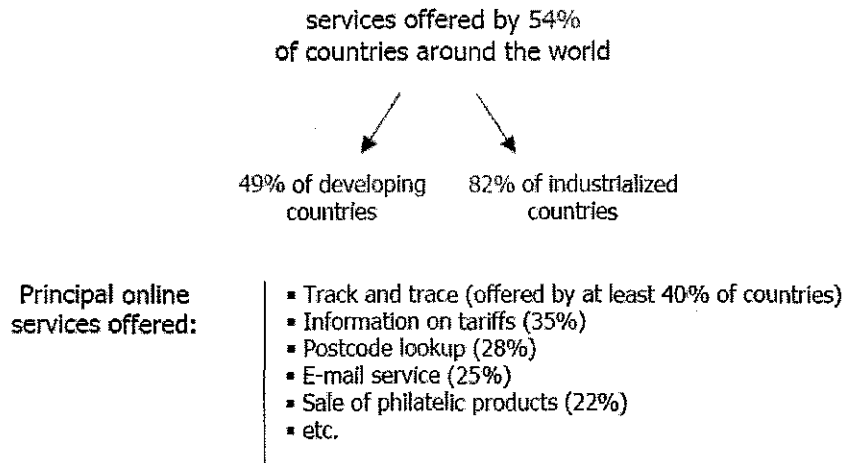
▪ New products

Online Internet services

services offered by 54%
of countries around the world

/ \

| 49% of developing | 82% of industrialized |
| countries | countries |

Principal online	▪ Track and trace (offered by at least 40% of countries)
services offered:	▪ Information on tariffs (35%)
	▪ Postcode lookup (28%)
	▪ E-mail service (25%)
	▪ Sale of philatelic products (22%)
	▪ etc.

Figure 15: New products, Online Internet Services

Africa ▢ Latin America and Caribbean ▨ Asia and Pacific ▨ Europe and CIS ▢ Arab countries ▨ Industrialized countries

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

88% **100%** **63%** **38%** **30%** **29%** **58%** **100%** **63%** **68%** **100%** **46%**

Postal parcels, domestic service   **Postal parcels, international sevice**
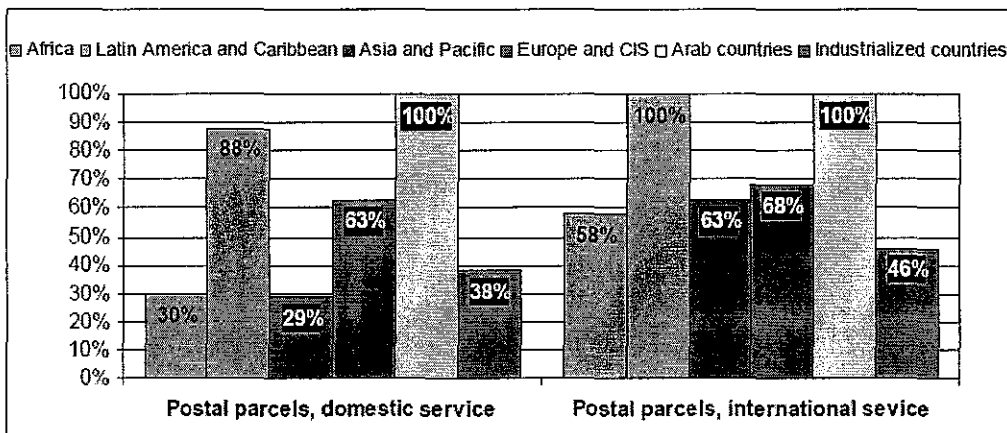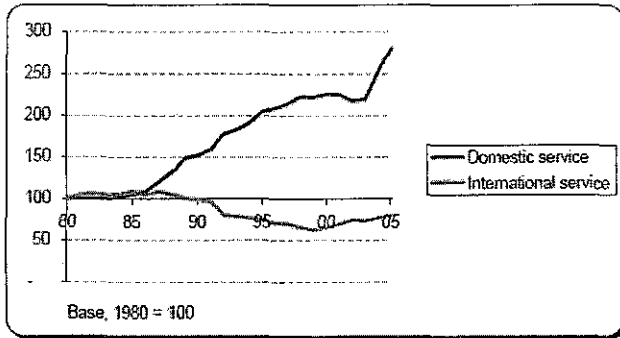
Figure 16: Postal administrations predicting an increasing in postal parcel traffic for

2004-2008 periods

27

Worldwide volumes of postal parcels reached record levels in 2005

Base, 1980 = 100

| | Average annual variation | | | |
	1980-1990	1990-2000	2000-2005	2004-2005
▪ Domestic service	4.3 %	4.1 %	4.4 %	10.9 %
▪ International service	-0.2 %	-4.0 %	4.2 %	3.4 %

Figure 17: Ordinary parcels world estimates traffic

4.2. SWOT Analysis

Postal opportunities on e-commerce: Opportunities on both domestic and international levels

Delivery	Payment	Hosting	Customer Relationship Management
• Order fulfillment and tracking • Logistics • Supply chain management • Reverse logistics • Home and/or post office delivery	• E-payment • Money orders • Micro-payment • Prepaid card • Cash payment at the Post office	• E-shop • E-market place • E-advertisement • Product service and support	• Customer acquisition • Knowledge management • Direct Marketing • Call center

Table 3: Postal opportunities on e-commerce

28

Strengths	Weaknesses
• Postal network coverage • Logistics processes • Supply chain support • Service ability in physical, financial and electronic dimensions • International standard introduction • Excellence in international operations • Quality of service • Trusted brand • Strong financial basis • Possible influence on regulations • Strong partners for alliances and cooperation	• Less flexible than private sector • Slower technology introduction • May require big technology investments • Weak on-line brand awareness • Low on-line business opportunity awareness • Bound by regulations that make competing with private enterprises difficult in new markets • Dependence on third party technology
Opportunities	Threats
• Supply chain completion – posts as strong partners • Technology companies look for alliances to strengthen trust • The market needs trusted brands • Lack of market players capable of supporting the full e-commerce value chain • Growing on-line sales • Develop Trustmark • Client relationship intermediary • New source of revenue and cost reduction	• Rapid technology changes • Lots of new players entering the market • Growing costs of back office technology • Regulations in favor of the competition • Competitors' reprisal

Figure 18: SWOT Analysis

Key success factors:

- Vision / management engagement
- Alliances with other operators as well as with private enterprises
- HR strategy

29

- Strategic use if ICT

4.3. Questionnaire

Since 1999, the WPIIS has worked with the Voorburg Group (the United Nations City Group on Service Statistics) and Eurostat to develop a model questionnaire on the use of ICT goods and services in the business enterprise sector. The activity was led by the statistical offices of the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden), which were the first to establish a project for a common set of guidelines to measure ICT usage in enterprises. After two years of sharing and testing, a model questionnaire on ICT usage in the business sector was approved by the OECD in 2001 [DSTI/ICCP/IIS (2001)1/REV1]. The questionnaire is intended to provide guidance for the measurement of indicators of ICT, Internet use and electronic commerce, and is composed of separate, self-contained modules to ensure flexibility and adaptability to a rapidly changing environment. While the use of "core" modules makes measurement on an internationally comparable basis possible, additional modules can be added to respond to evolving or country-specific policy needs. The five core modules in the current version of the OECD model questionnaire are:

A. *General information about ICT systems.* These questions relate to the type of computer-mediated devices, applications or networks used in the enterprise. They also measure the extent to which employees use personal computers (PCs) and the Internet in their daily work.

B. *Use of the Internet.* The module first focuses on the type of connection used and its speed. It then turns to the business processes for which the Internet is used. At this stage, the indicators mainly relate to information- and communication-intensive activities (*e.g.* information search, banking and financial activities, etc.) and to business processes that involve transactions over the Internet. A distinction is made, and separate questions are asked about, processes relating to purchases (the enterprise as a customer) and sales (the enterprise as a provider) of goods and services. In the case of selling-related activities, the

30

indicators are restricted to the functionality of the enterprise's Web site in order to focus on innovative ways of marketing, managing information, selling and providing payment facilities and other interactive services to customers.

C and D. *Electronic commerce: Internet transactions and electronic transactions via EDI and other computer-mediated networks.* Drawing on OECD work to define and measure electronic commerce (see the box on the definitions of electronic transactions), the questionnaire contains two modules on electronic commerce transactions.

Module C measures indicators for Internet sales and purchases. Questions relating to the monetary amount of the transactions or their breakdown by customer and geographical destination, are expressed in terms of percentage of total sales or purchases in order to maximise the response rate. In general, statistical offices will be able to use that information to provide estimates of the monetary amount of the electronic transactions. EDI (electronic data interchange) and other computer-mediated networks are traditionally used to conduct electronic transactions.

Module D aims at better monitoring the development of new forms of sales by separating the turnover of Internet sales from that of other types of computer-mediated networks. The scope of EDI should be restricted to proprietary EDI and EDIFACT. Ideally, EDI transactions transported over the Internet and in the HTML-based format, XML, should be included in module C (electronic commerce via the Internet). This would allow countries to monitor the migration towards Internet technologies and the substitution between computer-mediated transactions and Internet transactions.

E. *Barriers to the use of the Internet to sell goods and services, and barriers to the use of the Internet and ICT ingeneral.* While information about perceived barriers may not traditionally be collected as part of official statistical surveys, it is important for policy makers. For example, indicators on barriers can help in monitoring issues of digital divide, potential bottlenecks related to the technology, lack of appropriate skills, or concerns about security and logistics. Answers about perceived barriers and their

evaluation (*e.g.* no importance – some importance – much importance) are inevitably qualitative in nature and limit the use of these indicators for purposes of international comparisons. Nevertheless, they can aid in detecting common obstacles to the diffusion of new information technologies and may be used with other types of quantitative indicators to explain differences in the intensity of use of new technologies across countries. The questions presented in the OECD model questionnaire mainly take a qualitative approach to the need for internationally comparable ICT usage statistics. The questions primarily focus on the use of ICT, especially the Internet, as a tool and on the barriers to its use. At the moment, the model does not contain questions on the impact of ICT use on enterprises' organisation, production processes and skills, or quantitative questions such as investment in ICT goods and services. This is because the model has been designed to cover a core set of initial indicators related to the "readiness" and "intensity" of use of ICT and to limit the response burden. As the diffusion and impact of ICT increase, and as experience is gained in the measurement of internationally comparable indicators, new modules covering "impact" and quantitative indicators will be tested and added to the questionnaire. The modules related to "readiness" and "intensity" of use of ICT will need to be revised and updated to take into account the emergence of new technologies and ICT-related services.

4.4. Ajax

[8] **Ajax**, or **AJAX**, is a web development technique used for creating interactive web applications. The intent is to make web pages feel more responsive by exchanging small amounts of data with the server behind the scenes, so that the entire web page does not have to be reloaded each time the user requests a change. This is intended to increase the web page's interactivity, speed, functionality, and usability.

Ajax is asynchronous in that XML data loading does not interfere with normal HTML and JavaScript page loading. JavaScript is the programming language in which Ajax function calls are made. Data retrieved using the technique is commonly formatted

using XML, as reflected in the naming of the *XMLHttpRequest* object from which Ajax is derived.

Ajax is a cross-platform technique usable on many different operating systems, computer architectures, and Web browsers as it is based on open standards such as JavaScript and XML, together with open source implementations of other required technologies.
Ajax uses a combination of:

- XHTML (or HTML) and CSS, for marking up and styling information.

- The DOM accessed with a client-side scripting language, especially ECMAScript implementations such as JavaScript and JScript, to dynamically display and interact with the information presented.

- The XMLHttpRequest object is used to exchange data asynchronously with the web server. In some Ajax frameworks and in certain situations, an IFrame object is used instead of the XMLHttpRequest object to exchange data with the web server, and in other implementations, dynamically added `<script>` tags may be used.

- XML is sometimes used as the format for transferring data between the server and client, although any format will work, including preformatted HTML, plain text and JSON. These files may be created dynamically by some form of server-side scripting.

Like DHTML, LAMP, and SPA, Ajax is not a technology in itself, but a term that refers to the use of a group of technologies.
The "core" and defining element of Ajax is the XMLHttpRequest object, which gives browsers the ability to make dynamic and asynchronous data requests without having to unload and reload a page. Given XMLHttpRequest can eliminate the need for page

refreshes, other technologies have become more prominently used and highlighted with this development approach.

Besides XMLHttpRequest, the use of DOM, CSS, and JavaScript provides a more-enhanced "single-page" experience.

4.4.1. How does it Work

You've changed almost nothing in the client-side code other than making the references point to the PHP code. So, how is the PHP code different? Well, PHP has no native support for hash tables as a data structure; instead, you are forced to use a multidimensional array in which to store the Session variable. Apart from that, however, the code almost directly corresponds to the ASP.NET code. Once again, you have four scenarios to deal with:

- User adding an item, and that item is already present in the cart
- User adding a new item that isn't already in the cart, but there is already a cart
- User removing an item
- User adding an item and there is no cart present, so one must be created as well

Because PHP doesn't require you to strongly type your variables, it makes the code you must provide slightly shorter and simpler than the ASP.NET code. Because a specific on_load event is not required, the PHP code you want to run every time the page is called is just placed at the head of the page.You start by registering a Session variable called Cart, which holds the shopping cart. You set the Content-Type of the response to be text/xml, so that it can be used by the responseXML method.

```
session_register('Cart');
header('Content-Type: text/xml');
```

You create two variables to store the book title and the action the user has chosen to perform. These are taken from the GET collection, which has been appended as a querystring to the request made by the JavaScript:

```
$newitem = $_GET["book"];
$action = $_GET["action"];
```

You query the $_Session["Cart"] variable to see if it is empty or not. If it isn't empty, then you create a variable called $MDA to store the Session variable. Because you are not using strong typing, you don't have to worry about casting the PHP variables from one type to another. This is all handled automatically.

```
if ($_SESSION["Cart"] != "")
{
$MDA = $_SESSION["Cart"];
```

You check to see if the $action variable contains the word "Add," which has been passed from the JavaScript originally. If it does, then you have one of two scenarios to deal with. The first one is where you already have an item in the cart and you simply add one to the value, store the new value in the array, store the array in the Session variable, and then serialize the array, as follows:

```
if ($action == "Add")
{
if ($MDA[$newitem] != "")
{
$value = $MDA[$newitem] + 1;
$MDA[$newitem] = $value;
$_SESSION["Cart"] = $MDA;
ECHO (toXml($MDA));
}
```

The array works in a very similar way to ASP.NET's hash table. Each element is referenced by the book title stored in it. The index value of the array is simply the book

35

title. If there isn't an item in the cart, then you set the value to nothing, store the array in the Session variable, and serialize the array to XML.

```
else
{
$MDA[$newitem] = "";
$_SESSION["Cart"] = $MDA;
ECHO (toXml($MDA));
}
}
```

In scenario three, you remove an item by setting the array and Session variable to be empty strings, and then you serialize that to XML:

```
else
{
$MDA= "";
$_SESSION["Cart"] = "";
ECHO (toXml($MDA));
}
```

Last, the fourth scenario (where there is no cart in existence) uses the same code as the second one.

```
$MDA[$newitem] = "1";
$_SESSION["Cart"] = $MDA;
ECHO (toXml($MDA));
```

You set the value to 1. You create the Session variable cart and assign it the array. Then you serialize the array to XML. While PHP doesn't natively have a set of methods specifically for dealing with the creation of XML documents, it does have a DomDocument method. In this example, let's create the XML document as a DOM document, and create and append the XML elements to the document and the text nodes as with the ASP.NET. You have a root element <cart>, and inside that you create a book

element for each separate title in the cart. The book element contains a <title> element and a <quantity> element and you assign text nodes to these to store the data.

```
function toXml($MDA)
{
$doc = new DomDocument('1.0');
$cart = $doc->createElement('cart');
$cart = $doc->appendChild($cart);
foreach ($MDA as $Item => $ItemName)
{
$book = $doc->createElement('book');
$book = $cart->appendChild($book);
$title = $doc->createElement('title');
$title = $book->appendChild($title);
$value = $doc->createTextNode($Item);
$value = $title->appendChild($value);
$quantity = $doc->createElement('quantity');
$quantity = $book->appendChild($quantity);
$value2 = $doc->createTextNode($ItemName);
$value2 = $quantity->appendChild($value2);
}
$strXml = $doc->saveXML();
return $strXml;
}
```

You use the saveXML function to compile the document as a single entity. You store this as a string and return this to the ECHO function. The ECHO function writes to the Response stream and passes the information back from the server to the client-side script, where the XML document is used in the assembling of the HTML page.
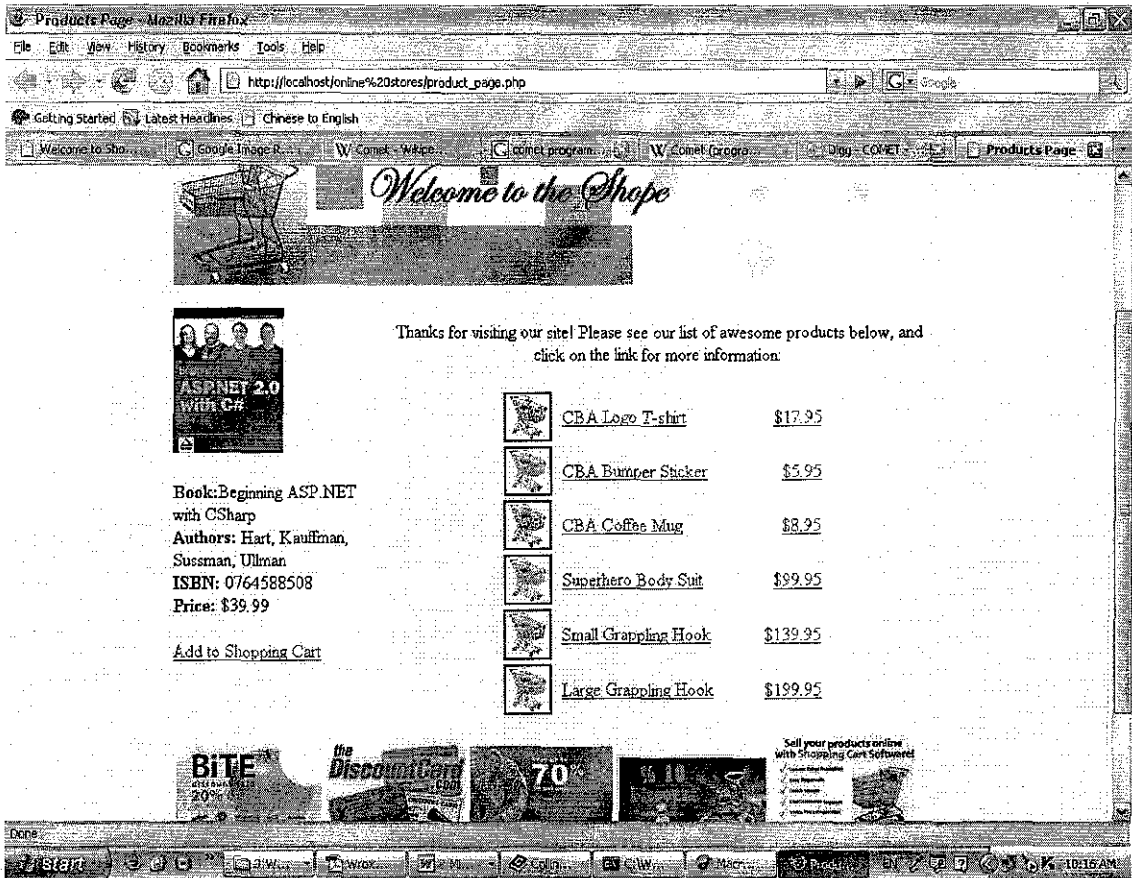
Figure19: Product Page with Ajax Integrated

4.5. Client-Server Architecture

[9] "...**Client server** is network architecture which separates a client (often an application that uses a graphical user interface) from a server. Each instance of the client software can send requests to a *server*. Specific types of servers include web servers, applicatio servers, file servers, terminal servers, and mail servers. While their purposes vary somewhat, the basic architecture remains the same..."

Although this idea is applied in a variety of ways, on many different kinds of applications, an easy example to visualize is an internet site. For instance, if you are browsing an online store, your computer and web browser would be considered a *client*, and the computers, databases, and applications that make up the online store would be considered the *server*. When your web browser requests a particular page from the online

store, the server finds all of the information required to display the article in the database, assembles it into a web page, and sends it back to your web browser for you to look at.

Characteristics of a server:
- Passive (slave)
- Waits for requests
- Upon receipt of requests, processes them and then serves replies

Characteristics of a client:
- Active (master)
- Sends requests
- Waits for and receives server replies

Servers can be stateless or stateful. A stateless server does not keep any information between requests. A stateful server can remember information between requests. The scope of this information can be global or session-specific. An HTTP server for static HTML pages is an example of a stateless server while Apache Tomcat is an example of a stateful server.

The interaction between client and server is often described using sequence diagrams. Sequence diagrams are standardized in the UML.
Another type of network architecture is known as a peer-to-peer architecture because each node or instance of the program is both a "client" and a "server" and each has equivalent responsibilities. Both architectures are in wide use.

For this architecture, there are some pros and cons are taken into the consideration.

Advantages
- All the data are stored at the servers, so it has better security control ability. The server can control access and resource to make sure only let those permitted users access and change data.

39

- It is more flexible than P2P paradigm for updating the data or other resources.
- There are already many matured technologies designed for C/S paradigm which ensures security, the user-friendliness of the interface, and ease of use.

- Any element of a C/S network can be easily upgraded.

Disadvantages

- Traffic congestion has always been a problem since the first day of the birth of C/S paradigm. When a large number of clients send requests to the same server at the same time, it might cause a lot of troubles for the server. The more clients there are the more troubles it has. Whereas, P2P network's bandwidth is made up of every node in the network, the more nodes there are, the better bandwidth it has.

- C/S paradigm does not have as good robustness as P2P network has. When the server is down, clients' requests cannot be fulfilled. In most of P2P networks, resources are usually located on nodes all over the network. Even if one or a few nodes depart or abandon the downloading; other nodes can still finish the downloading by getting data from the rest of the nodes in the network.

- The software and hardware of a server is usually very strict. A regular personal computer's hardware may not be able to serve over a certain amount of clients. Meanwhile, a Windows XP home edition does not even have IIS to work as a server. It needs specific software and hardware to fulfill the job. Of course, it will increase the cost.

4.6. Testing

To make sure that the project successfully done with no less error, the testing was conducted. Black box testing was used to test this system.

40

4.6.1. Black Box Testing

[9] **Black Box Testing** is testing without knowledge of the internal workings of the item being tested. For example, when black box testing is applied to software engineering, the tester would only know the "legal" inputs and what the expected outputs should be, but not how the program actually arrives at those outputs. It is because of this that black box testing can be considered testing with respect to the specifications, no other knowledge of the program is necessary. For this reason, the tester and the programmer can be independent of one another, avoiding programmer bias toward his own work. For this testing, test groups are often used, "Test groups are sometimes called professional idiots...people who are good at designing incorrect data." 1 Also, do to the nature of black box testing, the test planning can begin as soon as the specifications are written. The opposite of this would be glass box testing, where test data are derived from direct examination of the code to be tested. For glass box testing, the test cases cannot be determined until the code has actually been written. Both of these testing techniques have advantages and disadvantages, but when combined, they help to ensure thorough testing of the product.

[10] **Black box testing** takes an external perspective of the test object to derive test cases. These tests can be functional or non-functional, though usually functional. The test designer selects valid and invalid input and determines the correct output. There is no knowledge of the test object's internal structure.
This method of test design is applicable to all levels of software testing: unit, integration, functional testing, system and acceptance. The higher the level, and hence the bigger and more complex the box, the more one is forced to use black box testing to simplify. While this method can uncover unimplemented parts of the specification, one cannot be sure that all existent paths are tested.

4.6.2. Testing Results

No	Functions	Actions	Expected Result	Actual Result
1	Login	Insert username and password in the textboxes	User will be notified if the text field is not filled	Successfully notified textboxes through error prompt
		Sample data used	User verification process	Successful verification and login data is recorded in the session cookie
		Valid user	User will be directed to home page	Successfully directed the user to home page
		Invalid user	User verification process. System will notify that the user is invalid	Successfully notified the system that the user is invalid or not in the system
2	Register	Sample data	All data entered by user will be recorded on the database and direct user to the home page	Successfully registered new users.
3	Add to cart	If amount of	Items should be	Success

42

		item is input, the items are added to the cart.	added to the cart	
		else error occurs, like Out of range value adjusted for column 'carttemp_quan' at row 1	Error should be displayed	Success
4	Remove Item	If click on the remove item button, the item will be removed	The items should be removed from cart.	Sucess
5	Change quantity	If click on the button, the quantity inside the box is removed and user should input new quantity	The quantity number inside the box should be removed	Success
6	Empty cart	If click on the button, all the items are removed	All items should be removed from the cart	Success
7	Delete Item	If click on the button, the item	The item should be	Success

			is deleted	removed from the cart	
8	Checkout		If click on the button, the second checkout page will display	Second checkout page should be displayed	Success
9	Print		If click on the button, the report will be printed out	The checkout report should be printed out	Fail
10	Update account		If click on the link, the update account page will display	The update account page should be displayed	Success
			If click on the cancel button, it will return to update account page	Update account page should be displayed again	Success
			If click on the update button, the new or modified information will be recorded and the user will be notified that the	New information should be updated to the database	Success

		information have been updated		
11	Delete account	If click on the link, the delete account page will display to confirm the user if want to remove account from the system if click on yes button, else it will return to personal information page	Confirmation of delete account should be displayed	Success

Table 4: Functionalities Testing

4.6.3. Integration testing

[11] **Integration testing** (sometimes called Integration and Testing, abbreviated **I&T**) is the phase of software testing in which individual software modules are combined and tested as a group. It follows unit testing and precedes system testing.

Integration testing takes as its input modules that have been unit tested, groups them in larger aggregates, applies tests defined in an integration test plan to those aggregates, and delivers as its output the integrated system ready for system testing.

Module/ Component	Expected Result	Actual Test Result
Integration between sub-	To ensure the integration	Successfully integrated

modules	between subsystem is successful without any flaws or error	
	To ensure each sub system is well-functioning	Each subsystem is well functioning
Integrated subsystem as a whole system	To ensure that the system is well functioning.	System is functioning well
	To guarantee there is no flaws or error after integrated all the subsystem.	No flaws and errors detected
System and database	To ensure connection between system and database is success	Successfully connected the system with database

Table 5: Integration Testing

No	Page	Button/ Link	Mark as working	Mark as not worrking
1	Home	Register link	√	
		Login link	√	
2	Login	Register link	√	
		Login button	√	
		Return home link	√	
3	Register	Register button	√	
		Clear button	√	
		Return home link	√	
4	Products	Items link	√	

		Add to shopping cart link (Ajax integrated)	√	
5	About us	Return home link	√	
6	Contact us	Return home link	√	

<div align="center">Table 6: Navigation Testing</div>

4.6.4. Users Testing

The testing was conducted by asking the students in UTP to use and try out the system. During the testing, timer was set and recorded manually. Below are the results from the testing:

	User 1	User 2	User 3	User 3	User 4	User 5	Mean
Time to complete	5	6	4	3	5	6	4.833333
Number of clicks	2	3	2	2	3	2	2.333333
Errors made	1	2	1	0	1	1	1
Satisfaction	8	6	7	8	7	6	7
Ease of use	7	6	7	8	7	6	6.833333
Refresh time	3	4	3	4	3	4	3.5

<div align="center">Table 7: User Testing of the Page with Ajax</div>
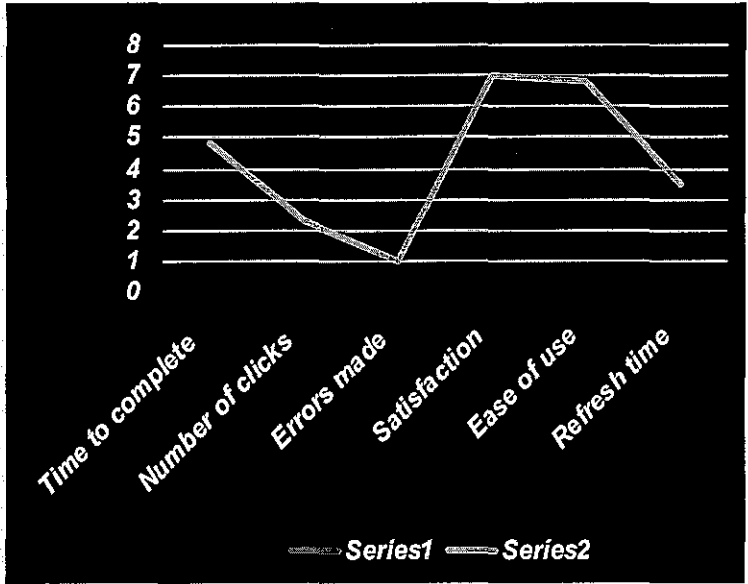
Figure 20: Test Result of Page with Ajax

	User 1	User 2	User 3	User 3	User 4	User 5	Mean
Time to complete	20	16	18	10	17	20	16.83333
Number of clicks	5	6	4	6	6	7	5.666667
Errors made	3	3	4	3	3	4	3.333333
Satisfaction	5	6	4	5	6	4	5
Ease of use	4	5	4	6	4	4	4.5
Refresh time	15	22	24	23	20	30	22.33333

Table 8: User Testing of the Page without Ajax
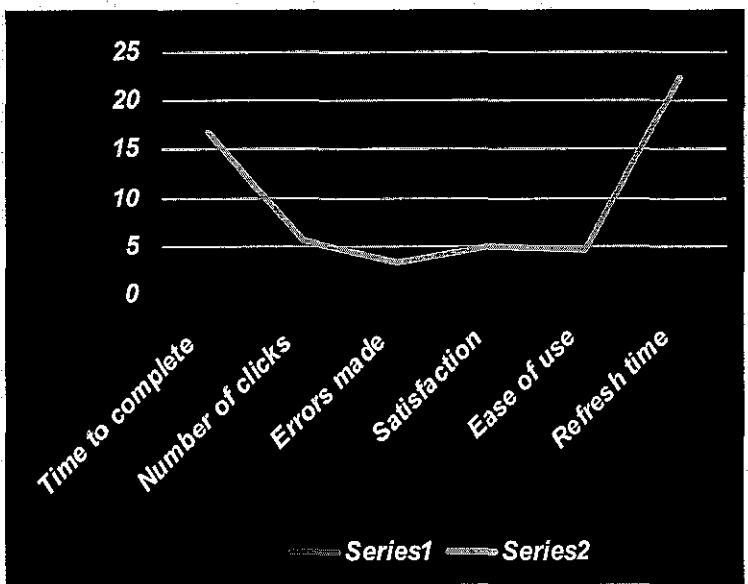
Figure 21: Test Result of Page without Ajax

48
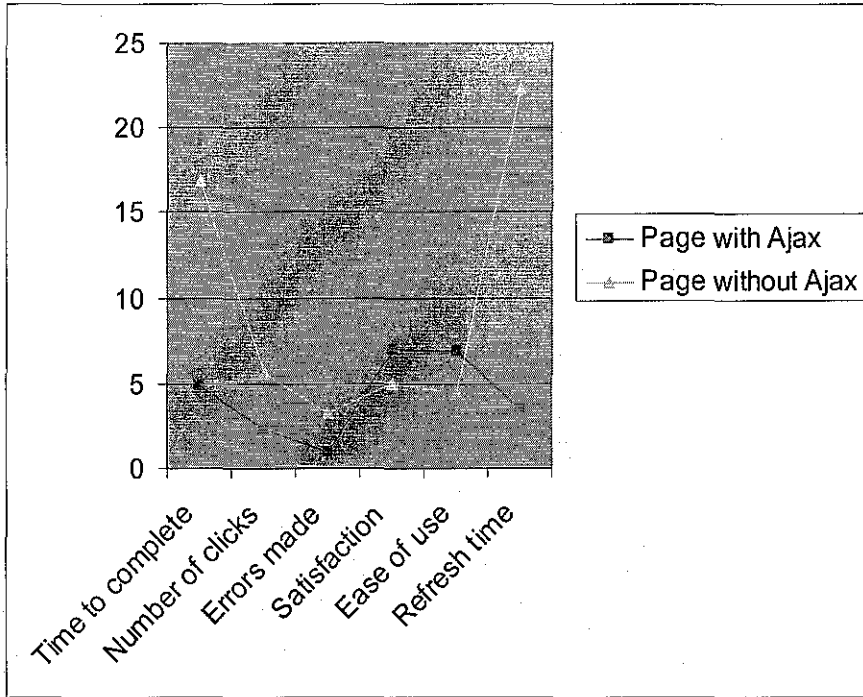
Figure 22: Comparisons of Page with Ajax and Page without Ajax

The results show that, time to complete, number of clicks, errors made, and refresh time of page with Ajax are less than the page without Ajax whereas the satisfaction and ease of use of page with Ajax is higher than the page without Ajax. Overall, we can see that the page with Ajax is more efficient in term of time consuming, meaning it is faster and the level of satisfaction and ease of use from the users is better compare to the page without Ajax.

CHAPTER 5: CONCLUSION & RECOMMENDATION

5.1. RECOMMENDATION

Consider parcels and express mail services as a unique package offer for electronic commerce

- E-commerce needs logistics and delivery services with quality, regularity and affordability. Price differentiation according toadded-value services should be offered as alternatives for customers.

- However, the express and economic alternatives should include international tracking and tracing systems and pricing models tailored to both the domestic and international e-commerce markets.

Ensure legal and technical interoperability for e-commerce delivery related services

- In order to ensure participation in the future global e-commerce market place, the development and deployment of postal delivery and payment related services should be done under international legal and technical standards.

Develop quality of service measurement for the e-commerce delivery related services

- The same initiatives for the letter post and express mail services quality measurement should be adapted to the e-commerce delivery and payment related services.

Develop and promote a global postal trust mark for e-commerce in coordination with other global postal e-service branding initiatives;

- In order to take advantage of the strengths of the brand recognition and geographical coverage a global postal trust mark should be created.

- Doing this, Posts are facilitating the entrance of the enormous e-commerce non-client community.

Sponsor the development of a global marketplace for e-commerce delivery and payment related services in connection within the postal designated operators.

- The new business, communication and entertainment environment isthe web. Services should be provided where the costumers are.

- With the entrance of the 90th generation, that was born in the digital era, into the consumption market, business will be on the internet or will disappear.

Treat e-commerce opportunity in a broader vision and more integrated approach

- Many postal activities are coping with the e-commerce phenomenon and many UPU bodies and groups are considering e-commerce as a major issue.

- Despite the e-shopping through post opportunities, e-commerce involves more than buy –pay –delivery and this matter should be treated in a broader vision.

5.2. CONCLUSION

It is a long discussion from the beginning until the end. Everything is completely done according to the plan and time frame. The project was developed by using the system development life cycle which are initialization stage, analysis stage, development stage, testing stage, and product delivery. As the project moved on, there were a lot of problems were faced, but it was solved. It is just a summary of the work progress; on the background of study, it is mentioned on the history of the e-commerce and the product suitability. Next, the objectives and scope of study were set and the feasibility study and the time frame was also mentioned. And the literature review on the growing of e-commerce and the effects of B2C e-commerce were discussed.

In the result and discussion part, a lot research studies were conducted. Some techniques were to collect data like questionnaire and survey. It is discussed on the data which had been collected and come up with the grasp representations. The technical part was also discussed like Ajax and its implementation and how does it work. To make sure that the system is working properly, the testing was conducted. It is discussed on the black box testing, integration testing and its results.

It seems that it has come to the end. The system was successfully developed. It is hope that the system would benefit the people to solve their problems in the daily life.

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APPENDICES

APPENDIX 1: SCREEN SHOTS

File   Edit   View   History   Bookmarks   Tools   Help

http://localhost/online%20stores/registration_page.php

Getting Started   Latest Headlines   Chinese to English

Online St★re

easy payment, buy online

Registration

The Username, Password, Email, First Name, and Last Name fields are required!

Username:
Password:
Email:
First Name:
Last Name:
City:
State:

Hobbies/Interests: (choose at least one)

Golfing
Hunting
Reading
Dancing
Internet
Flying
Traveling
Exercising
Computers
Other Than Listed

Done

start | Wind... | Collins C... | WIN... | Macrom... | 2 Micro... | Registra... | 11:52 AM

57

Welcome to the Shope

Thanks for visiting our site! Please see our list of awesome products below, and click on the link for more information:

CBA Logo T-shirt	$17.95
CBA Bumper Sticker	$5.95
CBA Coffee Mug	$8.95
Superhero Body Suit	$99.95
Small Grappling Hook	$139.95
Large Grappling Hook	$199.95

Book: Beginning ASP.NET
with CSharp
Authors: Hart, Kauffman,
Sussman, Ullman
ISBN: 0764588508
Price: $39.99

Add to Shopping Cart

BiTE

the DiscountCard.com

70

% 10

Sell your products online with Shopping Cart Software!

58

Online St✦re

easy payment, buy online

| Home | Login | Register | Products | About us | Contact us |

CBA Logo T-shirt
This T-shirt will show off your CBA connection. Our t-shirts are high quality and 100% preshrunk cotton.

Product Number: 00001
Price: $17.95
Quantity:
Add to cart

View cart

Back
Return to Home

© copyright by Online Store 2007

Item added.

Online St★re

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| *Home* | *Login* | *Register* | *Products* | *About us* | *Contact us* |

You currently have 1product(s) in your cart.

Quantity	Item Image	Item Name	Price Each	Extended Price		
1	THUMBNAIL IMAGE	CBA Logo T-shirt	17.95	17.95	Change Qty	Delete Item
Your total before shipping is:				17.95		Empty Cart

Proceed to Checkout

Back
Return to Home

© copyright by Online Store 2007

File   Edit   View   History   Bookmarks   Tools   Help

http://localhost/online%20stores/checkout.php   Google

Getting Started   Latest Headlines   Chinese to English

Online St✪re

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| Home | Login | Register | Products | About us | Contact us |

Order Checkout
Step 1 - Please Enter Billing and Shipping Information
Step 2 - Please Verify Accuracy of Order Information and Send Order
Step 3 - Order Confirmation and Receipt

Billing Information		Shipping Information	
First Name		Shipping info same as Billing	☐
Last Name		First Name	
Billing Address		Last Name	
Billing Address 2		Billing Address	
City		Billing Address 2	
State		City	
Zip		State	
Phone Number		Zip	
Fax Number		Phone Number	
E-Mail Address		E-Mail Address	

Done

61

File Edit View History Bookmarks Tools Help

http://localhost/online%20stores/checkout2.php

Getting Started | Latest Headlines | Chinese to English

Step 3 - Order Confirmation and Receipt

Billing Information		Shipping Information	
First Name		Shipping Info same as Billing	☐
Last Name		First Name	
Billing Address		Last Name	
Billing Address 2		Billing Address	
City		Billing Address 2	
State		City	
Zip		State	
Phone Number		Zip	
Fax Number		Phone Number	
E-Mail Address		E-Mail Address	

Quantity	Item Image	Item Name	Price Each	Extended Price	
1	THUMBNAIL IMAGE	CBA Logo T-shirt	17.95	17.95	Make Changes to Cart
1	THUMBNAIL IMAGE	CBA Bumper Sticker	5.95	5.95	Make Changes to Cart
		Your total before shipping is:		23.90	

Send Order →

Done

start | 9 Wind... | Collins C... | C:\WIN... | Macrom... | 2 Micro... | Step 2 o... | 11:53 AM

62

Online St★re

easy payment, buy online

Checkout Report

Step 1 - Please Enter Billing and Shipping Information
Step 2 - Please Verify Accuracy and Make Any Necessary Changes
Step 3 - Order Confirmation and Receipt

Here is a recap of your order:

Order date: 2007-10-01
Order Number: 0

Bill to: Ship to:

,   ,

---

2   0.00

1   CBA Logo T-shirt   17.95   17.95

File   Edit   View   History   Bookmarks   Tools   Help

http://localhost/online%20stores/about_page.php

Getting Started   Latest Headlines   Chinese to English

Online St★re

easy payment, buy online

About us

We have established in the recetly year 2007. The Online Store is the leading online shopping and popular most to all customers in the world. We provide good service, care, and deliver on time.

Returen to Home

Done

Online St★re

easy payment, buy online
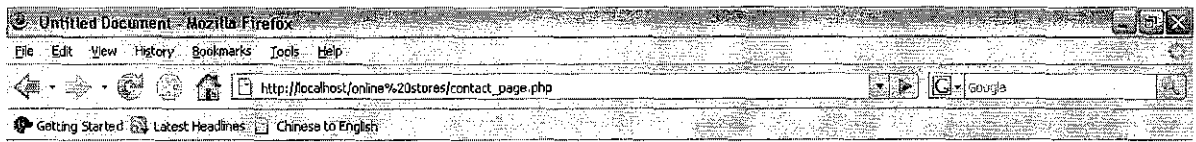
Contact us

Please contact us at:

- Name: Yim Tithya
- Position: Software Engineer
- Contact No: +(60) 16 548 3635
- E-mail: yimt83@yahoo.com

Return to Home

APPENDIX 2: HOW TO SET UP PHP MYSQL

How to Setup a MySQL Database

Learn how to easily install PHP-MySQL programs on your website

You've downloaded a new program to install on your website, but it requires a MySQL database be setup, in order to run. Now what? That's what you're here to learn. And the fact is -- it's easy. All you need do is to know 4 little snippets of information, and finding those 4 is the subject of our quest. Here's a description of those 4 mystery snippets:

1) The name of the MySQL server
2) A username authorized to access the database
3) A password for that username
4) The name of a MySQL database

In your downloaded program, you will find a Configure page where you asked to enter these 4. And once you do that, you're ready to install the program using FTP. And then run it successfully. **Question**: does your server support PHP? It's essential if you're going to install and run a PHP-MySQL program. Here's a good way to find out.... First, we'll look at each of these snippets... and then you'll discover where you can go in order to get these for your program.

I. MySQL Server Name

(An aside: on 8 out of 10 webhosts, this name will be 'localhost'.) This is the name that has been assigned by your webhost, to the server (program) that is MySQL. Your program simply needs to know the name of the MySQL server. When it has the name, it can locate everything it needs.

II. A username authorized to access the database.

This is a security measure. MySQL needs a username -password pair to tell it that it's OK to access the database. Without this security measure, anyone and everyone can get at your database -- not just to read what's there, but to change it, too. That would be a no-no. Hence, the username -password security.

III. A password for that username.

See above.

IV. The name of a MySQL database.

Some programs that you want to install may ask for the name of a database that you have already created. And some programs may create the database for you. Don't be put off by the term "create a database". It simply means to define a name. MySQL uses that name to reserve space for tables to go into the database. OK? So now we know about the snippets. Where do we go to get those? Let's start with the basics. You have a webhost. You must have, or you couldn't have a website. When you signed up for your website with your webhost, they would have sent you all the info you need to run your website. That's usually in an email they send you. In that email would be the FTP info you need, in order to access your website. (For more about FTP, click here.) Also, in that email, will be a web address of a "Control Panel" for your website. Sometimes, it's called a Manager or an Administrator program. Along with that web address will be a userid and password that you need to enter when you get to that webpage. So this is the first step. Go to that web address and enter the userid and password you were provided.

Note: let's assume you are using a webhost that does NOT provide a Control Panel for your website. Personally, I wouldn't deal with a webhost who did notprovide a control panel, but there are still some around who think (incorrectly, in my opinion) that it's more secure NOT to provide a control panel. All you can do is contact your webhost and ask them to provide these 4 snippets for you. That will work, but since it's a good idea to

have access to a PHPMyAdmin program, that's not likely to be available on a system without a control panel. Once you enter the Control Panel, you'll find links for setting up your Email and your File Manager and other things. But what you're looking for, at this point, is a link that says "Databases" or "MySQL" or something similar.

Note: if you simply cannot find such a link, it may mean that your webhost either does not provide MySQL databases (in which case, you're out of luck) or you need to upgrade your hosting service (read: pay more) in order to have a MySQL database. Once you've upgraded your service, you'll find a database link in the control panel here. Once you click on the Database link, you'll come to a Database Setup screen. (Or you may find choices for Setup or Admin. You want to choose Setup, at this point. (Or you may have landed directly in the Setup page...) Here, you'll find a way to define a username and password. So do that. Setup a username and a password to use with your databases. You'll also likely find here a place where you can create a database. So just choose a name and that'll create the database. (Note: on some webhosts, they've pre-defined a database name for you. So just make a note of that database name.)

If you have a choice of defining a database name AND setting up a username - password, it's a good idea to create the database FIRST. (Although it's no problem, if you do things in reverse order.) After creating the database, then define the username-password pair. When you setup a username -password, the control panel will ask you to authorize how that username can work on the database you've created (or been assigned.) If you hadn't created the database FIRST, you'll have to go back into the username definition afterwards, in order to do the authorizations. It's just more efficient to create the database first.

Note: In most cases, you'll just give the username full authorization. In fact, I've never run into a situation where I've given the username less than full authorizations. But just know that "authorization" means that you can allow the username only the ability to read the database, but not write to it. Or modify data, but not enter any. Like that. But in most cases, you can just forget about the different choices and just authorize everything. So

there you have 3 of the 4 snippets: a username-password and the database name. What about the server name? If it isn't shown you clearly at the top of the MySQL setup page, looking something like "mysql.servername.net" then it's a safe assumption that you can use "localhost" as the server name.

(Or you can go to the Admin page on your database webserver - usually called PHPMyAdmin, and the MySQL server name will be displayed there.) Now, you can enter these 4 snippets in the appropriate place in the Configure page of your program. And then you're ready to FTP the program to your website. Usually, you will find a file named something like config.php You will edit that file.

In there, you'll find something like this:

```
$sqlserver = "localhost";
$sqluserid = "userid";
$sqlpassword = "password";
$sqldatabase = "database name";
```

And now you know those 4 snippets. Just modify those PHP statements above by replacing the info between the quotes with the right data. Let's say you've found that the servername is localhost, you've define a username as george, a password as fred and a database name as mydata. You would then end up with this:

```
$sqlserver = "localhost";
$sqluserid = "george";
$sqlpassword = "fred";
$sqldatabase = "mydata";
```

And you'll always find instructions in the program how to enter a web address (URL) where the programs starts.

That's it. You're done!

Here's a way to tell if the database is properly setup on your website BEFORE you install any PHP-MySQL programs. Just copy/paste this code (using a simple text editor like Notepad), call it testmysql.php Actually, there is one more thing that it's wise to know about, although by no means essential. You can view the contents of your database by using a program called PHPMyAdmin, which is installed on the majority of webhosts who offer MySQL.

PHPMyAdmin

Testing if PHP Works on Your Website

Just copy/paste the following code into a text file, call it testif.php and FTP it to your webserver at www.mydomain.com Then run it by going to www.mydomain.com/testif.php If PHP is properly installed on your webserver, you will see a screen (mostly in blue) that begins with PHP Version X.X.X And followed by a lengthy screen full of data about the PHP installation on your server. That's what you want. That tells you PHP will work nicely. You're done. However, if you should see a screen that simply says: phpinfo(); OR the screen is mostly blank, then you have NOT got PHP installed on your webserver and your PHP programs will NOT work. You're outta luck.

Here's the code:

```
<html>
<head>
<title>PHP Test</title>
</head>
<body>
<p><font face="Verdana" size="3"><b>A Test of the PHP
system</b></font></p>
<?php
phpinfo();
?>
</body>
```

```
</html>
```

Testing if MySQL Works on Your Website

Just copy/paste the following code into a text file, call it testmysql.php and FTP it to your
webserver at www.mydomain.com Then run it by going to
www.mydomain.com/testmysql.php
Make sure you change the database server section to reflect the 4 snippets you've setup in
your control panel. If the result is a line that reads, "Looks good! Success!" then you are
practically guaranteed that any program using the 4 snippets will work successfully.
Here's the code:

```php
<?php
// ***************************
// ** database server section **
// ***************************
$sqlserver = "localhost";
$sqluserid = "userid";
$sqlpassword = "password";
$sqldatabase = "database";
if( !@mysql_connect($sqlserver, $sqluserid, $sqlpassword) ) {
echo("Unable to connect to the database at this time.<br><br>");
exit();
}
if( !@mysql_select_db($sqldatabase) ) {
echo("Unable to locate the database at this time.<br><br>");
exit();
}
$sql = "SHOW TABLES from $sqldatabase";
$resultset = @mysql_query($sql);
if( !$resultset ) {
echo("Unable to run a query at this time.<br><br>");
exit();
}
$row = mysql_fetch_array($resultset);
echo("Looks good! Success!");
```

?>

FTP -- The Webmaster's Best Friend

Assuming you have content you'd like to put on your website, how do you get it there? That's what FTP is all about. Actually, FTP is only one way of managing your website, but since it's so common (and so useful) let's start with that. It's kinda like using a Windows Explorer for your webiste. FTP stands for File Transfer Protocol (you knew that, right?) Just like you store files on your hard disk, and use Windows Explorer to examine the various files and folders, FTP is like a Windows Explorer for your website. It allows you to quickly see what files and folders are on your site, and gives you the facility to view, edit or add files and folders. This is not to say it's the best way to do that -- it's just a quick and easy way to do it. For some files, it's the ONLY way they can get onto your website. For example, some Internet PHP-MySQL programs are optimally installed by using FTP. Thus, you have to move such pages to your site using an FTP program (or Fetch, if you're living in the Apple Mac world.). Just like Windows Explorer is **the** main program for organizing and maintaining your hard disk, it's not the **only** program that can do that. There's quite a few "disk organizers" available, but Windows Explorer is the most well-know. Similarly, there's lots of FTP programs available for you to use, but I suspect that WS_FTP (by Ipswitch Software) is practically the standard in the FTP world. You can download a copy here. I've found that WS_FTP (Light Version) does everything I need to do, and so I'll make my comments based upon that program. All the other FTP programs will work in a similar manner. After installing the FTP program you've downloaded, you need to tell it the name and web address of your site. You do this by filling in "Host Name/Address" with www.yourdomain.com. Then the "User ID" and "Password" must be the same ones you use to publish your website (which would have been sent to you, when yousigned up with your webhost.)

The Root of the Issue

It's a good idea to know what the name of the root folder is, on your website. You use the StartUp tab to get to the place where you fill in that information, which can be gotten from your web host. It's usually listed on the documentation you get when you sign up with your webhost, but if you don't have it, and you want to guess, try "/www" or "/public_html". Or you may not need it at all. The root folder may bedisplayed as soon as you "FTP" to your site for the first time.

In the root folder will be a list of the webpages that you have previously published (if any). It will also contain a list of the folders in your website. And there will also be some you may not recognize. Usually, there's a CGI-BIN folder where CGI scripts can be kept. There may be a WEBSTATS folder and others. Or you may not see these folders at all, and be wondering where they are. Click on the green up-arrow at the top of the list, in that case. That "moves up a level" as in Windows Explorer. At that point, you should see all the folders that your web host provides for you, among them CGI-BIN, WEBSTATS, and etc. On some webhosts, you will not be able to move up a level from the root directory. The FTP program is fairly simple to operate. Once you've arrived where you view a list of the pages on your site, see the buttons on the right of the FTP window? If you select a file in the list (in the right-side window), and then click the View button, you'll see a Notepad text display of the contents of that file. (Don't bother trying to change anything here -- it's a read-only file -- all changes will
be ignored. If there's no Edit button, you can **right-click** on a filename and choose the Edit option. Then, you can make changes and they'll be saved. I would do this sparingly and only if you know exactly what you're doing.)

FTP Command Buttons

ChgDir Change Directory You can type the name of a directory folder to go to.
MkDir Make Directory Make a new folder on your website
View View File Displays the contents of the file in Windows Notepad
Rename Rename a File Obvious
Delete Delete a File Obvious

DirInfo Directory List Display a list of all the files in the current folder, with their permissions It is possible to publish entire websites using only FTP. That would require an intimate knowledge of HTML. I call FTP "the webmaster's best friend." Life would be pretty hard without it.

FTP Software

If you'd like to investigate FTP programs that have added benefits or features, you can try some of these:

FTP Voyager
FTP Commander
FTP Surfer (Freeware)

(Similar to an FTP, but for MySQL Databases)

Suppose you have a MySQL database setup and functioning, and you want to see the contents or layout of the tables in the database. You could write programs in PHP to do that, but a standard way is to use PHPMyAdmin. This program is usually installed on all webhosts that offer MySQL. In the same spot where you can setup (or create) your databases, you'll usually find a link to PHPMyAdmin. When you click on that link, you'll be asked for the username - password pair that you setup when you created your first database. On the left border, you'll find a drop-down list of the databases you have defined on your website. Click on one, and then you'll see a list of the tables in that database on the right-hand frame. Click on a table and you'll see the layout of the fields in that table. You'll also see buttons where you can Browse the info already in the table, or you can edit/delete that info. It is not essential for you to know how to use PHPMyAdmin, if you're simply installing
a PHP-MySQL program to run on your website. But it's nice to know it's there. For much more about PHPMyAdmin, click here.