

**CHRISTIAN SERVICE UNIVERSITY COLLEGE,
KUMASI**



**DEPARTMENT OF COPUTER SCIENCE
B.S.C COMPUTER SCIENCE**

**ONLINE AUCTION WITH MULTI BRAND PRODUCT SELECTION
CASE STUDY: TEMA HARBOUR**

**BY
NIMOH PETER
DERRICK ALLOTEY MURPHY**

**A THESIS PRESENTED TO CHRISTIAN SERVICE UNIVERSITY COLLEGE IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF
B.S.C COMPUTER SCIENCE**

JUNE, 2014

STATEMENT OF AUTHENTICITY

We have read the university regulations relating to plagiarism and certify that this report is our own work and do not contain any unacknowledged work from any other source. We also declare that we have been under supervision for this report herein submitted by:

STUDENT'S NAME	SIGNATURE	DATE
NIMOH PETER (10140782)
DERRICK ALLOTEY MURPHY (10140930)

CERTIFIED BY

SUPERVISOR'S NAME

DR. THOMAS YEBOAH
-------------------	-------	-------

HEAD OF DEPARTMENT'S NAME

DR. THOMAS YEBOAH
-------------------	-------	-------

DECLARATION

We hereby declare that this piece of work was undertaken by us. We further affirm that this work has never been submitted to any University in part or whole for a diploma, degree or any award. That the work of which is an auctioning system has been done by us. All quotations have been distinguished either by quotation marks or indentations in the body of the essay. The source of information has specifically been acknowledged by means of footnotes.

DEDICATION

We dedicate this work to the sustainer of life, God Almighty, our family and all loved ones.

ABSTRACT

The online auctioning system is a flexible solution for supporting lot- based online auctions. The thesis explains the construction of an auction website. The system has been designed to be highly-scalable and capable of supporting large numbers of bidders in an active auction. The online auction system lets you easily browse lots and place bids using a secure server. All cost of mailing lots will be paid by the buyer. The objective is to develop a user-friendly auctioning site where any kind of product can be auctioned and provide value added services to the bidders and the sellers. The products will be authenticated and the site provides a safe environment for online users.

ACKNOWLEDGEMENTS

We give glory and honour to the Lord Almighty who has shown to us his unfailing love. Am also very thankful to Dr. Thomas Yeboah and Mrs. Judith Ayembilla who took patience and pain to read and correct the script severally with the provision of necessary information and suggestions for the success of this study.

We are grateful to Mr. Felix Nimoh and Veronica Asantewaah who assisted us in the interviews for the study and gave us all the support we needed to make this study a success. We appreciate Mrs. Adoley Murphy and Mr. Daniel Kwesi Nimoh who helped by providing the necessary information needed for the study.

We sincerely express our gratitude to our family and all friends and loved ones who gave us the encouragement towards the completion of this research work.

TABLE OF CONTENTS

	Pages
Title Page	i
Statement of authenticity	ii
Declaration	iii
Dedication	iv
Abstract of the thesis	v
Acknowledgements	vi
Table of content	vii
List of figures	ix

CHAPTER ONE: INTRODUCTION

1.0 Introduction	1
1.0.1 Description For module	1
1.1 Existing system	3
1.2 Problem Statement	3
1.3 Proposed System	3
1.4 Objective of the Study	4

1.5 Research Questions	4
1.6 Methodology	4
1.7 Significance of the Study	5
1.8 Tools	5
1.9 Definition of term	6

CHAPTER TWO:LITERATUREREVIEW

2.0 Introduction	8
2.1History of auction sales	8
2.2The conceptual framework	9
2.3 Related studies of online auctioning system	9
2.4 Types of auction sales	10
2.5 Limitations and delimitations of the study	12

CHAPTER THREE: METHODOLOGY

3.0 Introduction	13
3.0.1Life circle models	14
3.1 Methodology to be use	14

3.1.1Rapid application development	14
3.1.2 The RAD Life Circle Composes of Four Stages	15
3.1.2.1 Requirements Planning (RP)	16
3.1.2.2 User Design (UD)	18
3.1.2.3 Rapid Construction (RC)	19
3.1.2.4 Transition (TR)	20
3.2 Core elements of rapid application development	20
3.2.1 Prototyping	21
3.2.2 Iterative Development	21
3.2.3 Time Boxing	21
3.2.3 Team Members	22
3.2.4 Management Approach	22
3.2.5 RAD Tools	22
3.3 Benefits of rad	23

CHAPTER FOUR: SYSTEM SPECIFICATION AND DESIGN

4.0 Introduction	24
4.1 Requirement specification	24
4.1.1 Feasibility study	24
4.1.2 Operation feasibility	25
4.2 Hardware specification	26

4.3 Software specification	27
4.4 Functional Requirements Techniques	27
4.6 Systems Design	34
4.6.1 Logical design	35
4.6.2 Physical design	35
4.7 System testing	35
4.7.1 Unit testing	36
4.7.2 Integration testing	36
4.8 User interface design requirement	36
4.9 Evaluating the project	43
4.10 Acceptance testing	44

CHAPTER FIVE: RECOMMENDATION AND CONCLUSION

5.0 Limitations of the system	45
5.1 Recommendation	45
5.2 Discussion	46
5.3 Conclusion	46
References	47
Appendix	49

LIST OF FIGURES

	Pages
1. Figure 1.0 RAD life cycle Stages, Software Engineering, 7th Edition	4
2. Figure 3.1 RAD life cycle Stages	15
3. Figure 3.2 Overview of structure	16
4. Figure 3.3 Context level diagrams	28
5. Figure 4.2 Sub system level flow diagrams	29
6. Figure 4.3 E-R diagram	30
7. Figure 4.4 Use Case Diagrams	31
8. Figure 4.5 Database Design Diagrams	34
9. Figure 4.6 Home pages	37
10. Figure 4.7 Existing user login	38
10. Figure 4.8 User login and registration form	39
11. Figure 4.9 Product registration form	40
12. Figure 4.10 Products descriptions	41
13. Figure 4.11 My auction form	42
14. Figure 4.12 Order details form	43

CHAPTER ONE

1.0 INTRODUCTION

An auction is the process of buying and selling things by offering them up for bid, taking bids, and then selling the item to the highest bidder (Paul, 2004).

There are different auction methods and one of the most popular methods is English auction system. The auction system has been designed to be user- friendly and capable of supporting large numbers of bidders in an active auction

The auction system after careful analysis has been identified to be presented with the following modules:

- i. Administrator Module.
- ii. Search Module
- iii. Seller Module.
- iv. Buyer Module.
- v. Reports.

1.0.1 Description for Modules

The following sections include the descriptions for modules.

i. Administrator Module

This module provides the complete information related to products for sale and the buyers can bid for the products and can own them. Registration information about buyers and sellers are kept by the administrator. All this has to be provided and maintained by the administrator

because the complete auction process is to be kept under control till the product sale gets confirmed.

ii. Search Module

Search module is where a seller, buyer and visitors can search for product and services available for auctioning.

iii. Seller Module

Sellers want a place where seller can sell their products at a higher price and get maximum benefit out of that. This is the place where the seller can display all his products and sell them.

iv. Buyer Module

The people always want different things to purchase. With this application new buyer can register here via this module and buy any product from any of choice at the best competitive price and own the product.

v. Visitor Module

Visitors are all the people who visit this application online. They can know the information of all the products, which are for sale under this application.

vi. Report

In this module, different actors can generate the different types of reports according to their access. Administration can monitor online activity (bids, orders, and payments) by viewing the reports at Online Site.

1.1 EXISTING SYSTEM

From recent study it was noted that the current online auctioning systems:

- i. Do not notify registered bidders as a winner of an auctioning when a bidder goes offline.
- ii. Auctioneers also face growing fraud issues.

1.2 PROBLEM STATEMENT

The problems with the existing systems are:

- i. Bidders are not informed as the winner of a bid after auctioning when they go offline.
- ii. Fraud report by auctioneer
Fraudster's intent to deceive auctioneers by creating and hacking into the accounts and this slows the application.

1.3 PROPOSED SYSTEM.

We will develop the web application in a way that:

- i. Registered bidders will receive results, winners of past and current bidding announcement through phones and newspapers.
- ii. The proposed system will be authenticated; users who login and out of the system will be monitored by administrators to check frauds.

1.4 OBJECTIVES OF THE STUDY

The objective of this study is to create a web based electronic auctioning system for the procurement of any kind of products:

- i. To create a cost effective way for fairly used or brand new products Ghana.
- ii. To fulfill the satisfaction of helping individuals buy products at truly perceived price.
- iii. To open up the procurement of products to a wider market allowing buyers, suppliers make bids without being restricted by geographical location.
- iv. To create an efficient, open and transparent web based auctioning system Ghana.

1.5 RESEARCH QUESTIONS

- i. How can the system help a bidder find out the results of an auction?
- ii. How can the system help a bidder find out when an auction will take place?
- iii. How can the system help a bidder participate in an auction?

1.6 METHODOLOGY

RAPID APPLICATION DEVELOPMENT

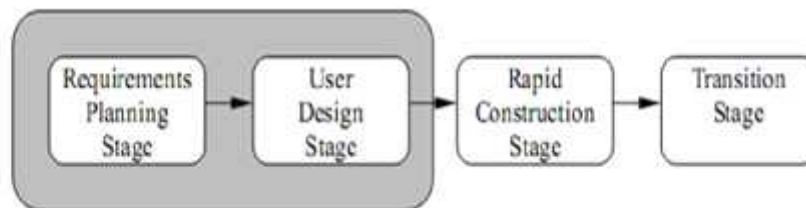


Fig 1.0 RAD life cycle Stages, Software Engineering, 7th Edition

The RAD (Rapid Application Development) model is based on prototyping and iterative development with no specific planning involved. The process of writing the software involves the planning required for developing the product. These steps may include the following as shown in figure 1.0 above:

A typical RAD life cycle is composed of the following Stages

-) Requirements Planning;
-) User Design;
-) Rapid Construction;
-) Transition.

1.7 SIGNIFICANCE OF THE STUDY

The process of an online auction is much the same as a live auction. This means that users place bids for items, and the goods get sold to the highest bidder. You are notified through email and phone on the status of your bids, which is when you place a bid, when you have been outbid and when you have won an item. Buyers and sellers can also access the web page at anywhere anytime.

1.8 TOOLS

i. HTML

Hypertext Markup Language (HTML), the languages of the World Wide Web (WWW) allows users to produce web pages that include text, graphics and pointer to other web pages (Hyperlinks).

ii. Visual Basic. Net 2010

Visual Basic (VB), formerly known as Visual Basic .NET, is an object-oriented computer programming language that can be viewed as an evolution of the classic Visual Basic (VB), which is implemented on the .NET Framework.(Wikipedia).

There are four versions and five releases of Visual Basic .NET implemented by the Visual Basic Team. After considering the various versions of VB.Net, the best version we intend to use in our project is Visual Basic.Net 2010 which was released together with the Microsoft .NET Framework 3.5 on 12 April 2010

iii. MICROSOFT SQL SERVER 2008.

A database management system (DBMS) is computer software designed for the purpose of managing databases, a large set of structured data, and run operations on the data requested by numerous users. SQL Server 2008 the best version we intended to use to manage the auctioning database, which was released on 6 August, 2008

1.9 DEFINITION OF TERMS

The following term are defined below to aid in better understanding of this project.

- i. **Auctioneer:** is someone who is in charge of an auction.
- ii. **Bid:** to make an offer to pay or accept a specified price.
- iii. **Bidder:** is someone who makes an offer to pay a price for a product which is for sale.
- iv. **Bidding:** the process of making bids in an auction
- v. **Registration:** Prospective bidders must register online to become authorized bidders.
Registration times are not set but it must always be before the auctioning

- vi. **Merch:** are items, goods or merchandise assembled in an auction house to be sold off in the auction. Gathering these items could take weeks before an auction.
- vii. **Reserve Price (Reservation):** is the least/maximum acceptable price for which a good may be sold/ bought.
- viii. **Outbid:** To bid higher than others in an auction.
- ix. **Overbid:** make a higher bid than a previous bid.
- x. **Underbid:** make a bid lower than another.
- xi. **Deliberate Bid:** A deliberate bid implies a considered decision made by a bidder.

CHAPTER TWO

LITERATURE OVERVIEW

2.0 INTRODUCTION

This chapter presents a review of the literature related to the study. Past studies are important as they guide the researcher on other studies done on the same project. This chapter presents literature review on auction sales, the different auction method and how auction started. This is presented in form of theoretical review.

2.1 HISTORY OF AUCTION SALES

The history of auction can be traced back to 500B.C. when women were auctioned off as wives in Babylon. Although traditional auctions have evolved for thousands of years, online auctions are still in their infancy. It is generally accepted that Internet-based auctions began in 1995 with the earliest websites hosted by Onsale and eBay. Since 1999, online auctions have experienced exponential growth in merchandise sales.

Online auctions have become one of the most successful new business models due to their economic value. First of all, an auction joins a posted price and a negotiation process as the three fundamental mechanisms for conducting business in today's marketplace. Secondly, online auctions can be viewed as a marketing tool to test whether the price of a new product will be accepted by the consumers. Finally, online auctions can be used as a medium for advertising on the Internet.

The present paper seeks to examine the key parameters of an online auction as well as investigate the level at which each of them should be set to maximize the price at which an object is sold and

how registered bidders will receive results of past and current bidding announcement through phones and newspapers. This is accomplished by comprehensively reviewing the current literature and summarizing the major findings reported. The ultimate goal is to provide a set of useful guidelines for achieving desirable results from the perspective of an auctioneer.

2.2 THE CONCEPTUAL FRAMEWORK

In this article it intently defines an online auction module as an auctioning module that is presented on a website. The term 'online auction' is used in this context. The rapid growth of online auctions underscores the need to analyse the mechanism of auctions. The theoretical and empirical research bases for tradition auctions are well established. A broad conceptual is developed that can form the basis of future research in online auctions. The input, process and output are discussed to develop the action module. The conceptual model provides impetus and direction for future research into online auctions, taking advantage of existing tradition but also forming the basis for development and testing of the needed theories that will expand the borders of knowledge in online auctioning systems.

2.3 RELATED STUDIES OF ONLINE AUCTIONING SYSTEM

Over the past decade, online transactions have changed a lot and enabled the merchants to increase their customer base and also initiated a number of successful companies which operated online. Consumer-to-Consumer (C2C) commerce has created new opportunities for consumers and businesses. The use of Internet has made auctions very easy, cost-effective and transparent. eBay India, Yahoo, auctionindia.com and Bidrivals.com are some of the famous auction sites in India. The present article traces the evolution of auctions by highlighting its advantages,

challenges, issues and legislations related to online consumer protection in various countries. This article takes the example of eBay and critically examines the mechanism, payment method, and consumer protection policies at eBay.

2.4 TYPES OF AUCTION SALES

This section looks at different forms of auctions. Different types of auctions have different bidding behaviors. How a bidder will behave in an auction depends on the reason with which the bidder is participating in the auction in the first place. One reason for participating in an auction is that the bidder wishes to acquire the auctioned good for personal consumption. One can consider a painting being auctioned and a buyer bidding on it for personal use. In this situation, the bidder estimates his personal consumption value of the item, and no one other than the bidder knows what that value is.

It is probably useful to note that even the seller does not know the values that the bidders place on the auctioned item, since if he did he would just set the price equal to the highest valuation.

The other reason for participating in an auction is to resell the item or use it for commercial use. In such a situation the bidder's valuation of the auctioned item is determined by his estimate of the future resale value of the item. So the item is actually worth the same to all, however no one actually knows what that common value is. Think of business houses trying buy a piece of land to acquire mineral rights. Each has different information and different estimates of the future value of this land and consequently would bid differently for it.

William Vickrey (1961) modeled four different types of auctioning system:

i. English auctions. (Ascending-bid auctions)

These auctions are carried out interactively in real time; with bidders present either physically or electronically. The seller gradually raises the price; bidders drop out until finally only one bidder remains, and that bidder wins the object at this final price. Oral auctions in which bidders shout out prices, or submit them electronically, are forms of ascending-bid auctions.

ii. Dutch auctions. (Descending-bid auctions).

This is also an interactive auction format, in which the seller gradually lowers the price from some high initial value until the first moment when some bidder accepts and pays the current price. These auctions are called Dutch auctions because flowers have long been sold in the Netherlands using this procedure.

iii. First-price sealed-bid auctions

In this kind of auction, bidders submit simultaneous “sealed bids” to the seller. The terminology comes from the original format for such auctions, in which bids were written down and provided in sealed envelopes to the seller, who would then open them all together. The highest bidder wins the object and pays the value of her bid.

iv. Vickrey auctions. (Second-price sealed-bid auctions).

Bidders submit simultaneous sealed bids to the sellers; the highest bidder wins the object and pays the value of the second-highest bid. These auctions are called Vickrey.

2.5 LIMITATIONS AND DELIMITATIONS OF THE STUDY

The limitations of the system are:

- i. Only registered buyers and sellers can take part in bidding activities.
- ii. System works in all windows platforms and its compatible environments.

Some of the delimitations of the study are

- i. Poor internet service access.
- ii. Possibility of fraud.

CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

This chapter describes the methodology that was used to develop the web-based application. Methodology is the strategy, process, steps, directions, or actions used to develop the system. Several software development authors refer to methodologies in software development as a software development process or simply a software process (Ambler, 1999). This research study was conducted based on the methodology. Methodology plays an important role in implementing this research study accordingly. The details of the methodology are explained this chapter.

Software life cycle is a general model of software development process, including all the activities and work products required to develop an online auction system. A software life cycle model is composed of a number of clearly defined and distinct work phases which can be used to plan for, design, build, test and deliver the web-based application. Software life circle aims to produce high systems that meet and exceed customer expectations, based on customer requirements, by delivering systems which move through each clearly defined phases, within scheduled time-frames and cost estimates. Software life cycle captures the order in which these activities are to be taken. (Wikipedia)

3.0.1 Life Circle Models

There are various life cycle models to improve software development processes listed below. In this project Rapid Application Development was used.

- i. Rapid Application Development
- ii. Spiral Model
- iii. Waterfall Model
- iv. Iterative Model
- v. V- Model
- vi. Agile Model

3.1 METHODOLOGY TO BE USE

3.1.1 Rapid Application Development (RAD)

RAD refers to a development life cycle designed to give much faster development and higher quality systems than the traditional life cycle. It is designed to take advantage of powerful development software like CASE tools, prototyping tools and code generators. The key objectives of RAD are: High Speed, High Quality and Low Cost. RAD is a people-centered and incremental development approach and also user involvement. Testing is integrated throughout the development life cycle so that the system is tested and reviewed by both developers and aspiring bidders incrementally.

In short, Rapid Application Development is exactly that. It is a process through which the development cycle of an application is expedited. Rapid Application Development thus enables quality products to be developed faster, saving valuable resources.

RAD was first introduced in OGCIO (the then ITSD) in January 1995. A pilot project was conducted in mid-1995 followed by 9 initial roll-out projects which were launched between 1996-1997. The general roll-out of RAD was announced in November 1997 and became one of the standards for systems development.

3.1.2 The RAD Life Cycle Composes Of Four Stages

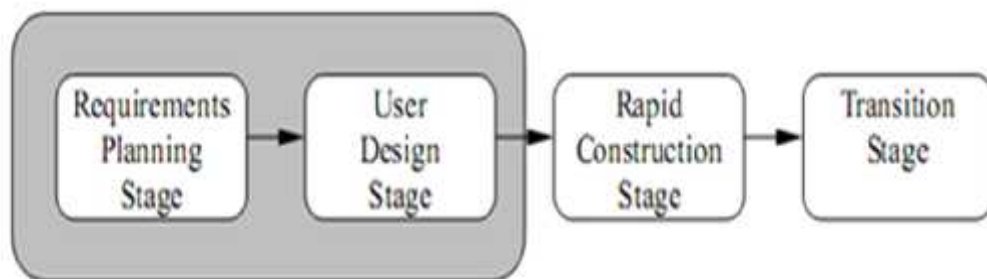
A typical RAD life cycle is composed of the following Stages

3.1.2.1 Requirements Planning;

3.1.2.2 User Design;

3.1.2.3 Rapid Construction;

3.1.2.4 Transition.



if the requirements are obvious,
the first two stages may be combined.

Figure 3.1 RAD life cycle Stages

The following diagram shows clearly the Stages and Tasks in RAD: -

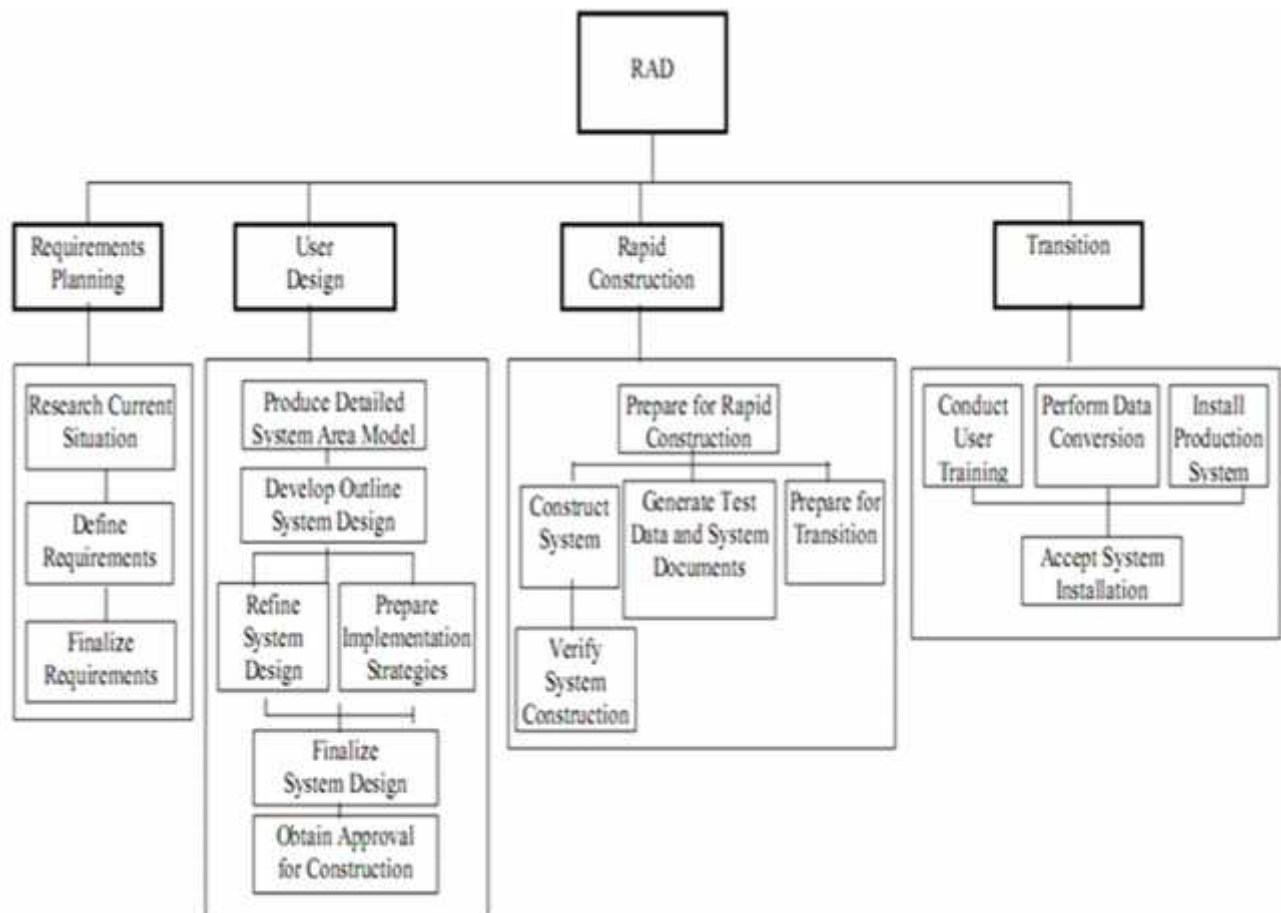


Figure 3.2 Overview of structure

3.1.2.1 Requirements Planning (RP)

The objectives of the RP stage are

- i. To establish a general understanding of the business problems that surrounds its development and eventual operation.
- ii. To become familiar with existing system.
- iii. To identify the business processes that will be supported by the proposed application.

The Requirements Planning Stage consists of a review of the areas immediately associated with the proposed system. This review produces a broad definition of the system requirements in terms of the functions that the system will support. An outline of the system area and a definition of the system scope are developed. Project board (consisting of Business executives, end users and IS professionals) takes part in workshops which progress through a structured set of steps; with the results recorded in the CASE tool.

The deliverables from the Requirements Planning Stage include an outline system area model of the area under study, a definition of the system's scope, and a cost justification for the new system.

The tasks of the Requirements Planning are shown in the diagram below:



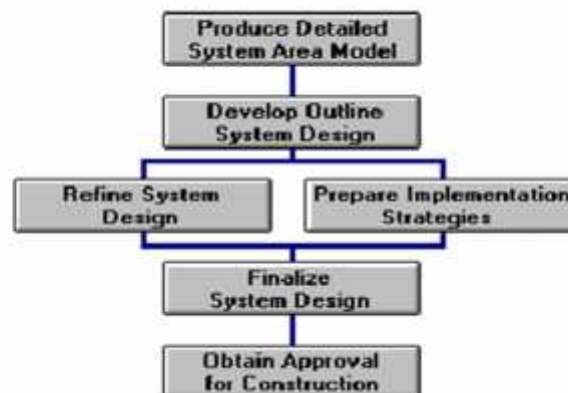
3.1.2.2 User Design (UD)

The objectives of the UD stage are

- i. To analyze in detail business activities associated with the proposed auctioning system.
- ii. To analyze in detail the business data associated with the proposed system area.
- iii. To develop the system structure in terms of the automated and manual functions that will comprise the system;
- iv. To develop proposed screen layouts for the most important automated functions.
- v. To select the appropriate construction approach for the system and;

The User Design Stage consists of a detailed analysis of the business activities and data related to the proposed system. Key users, meeting in workshops, decompose business functions and define data associated with the system. They complete the analysis by defining the interactions between processes and data. The results of the workshops are recorded in the CASE tool. Following the analysis, the design of the system is outlined. System procedures are designed, and preliminary layouts of screens and reports are developed. Prototypes of critical procedures are built and reviewed. An appropriate construction approach for the system is selected. A plan for implementing the system is prepared.

The tasks of the User Design are shown in the diagram below:



3.1.2.3 Rapid Construction (RC)

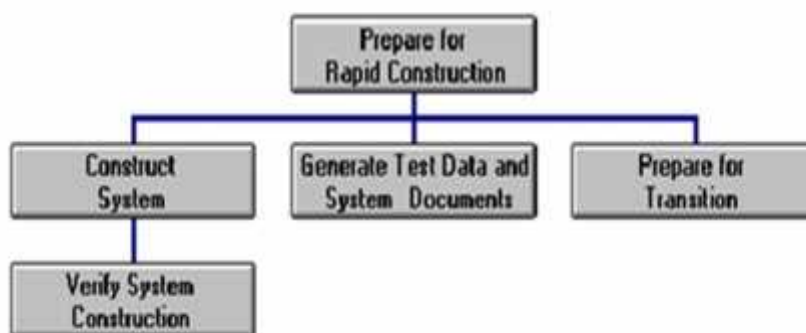
The objectives of the Rapid Construction stage are

- i. To complete the detailed design of the proposed system.
- ii. To create and test the software that implements the proposed system.
- iii. To generate a system that operates at an acceptable level of performance.
- iv. To prepare documentation necessary to operate the proposed application.
- v. To design, develop, and test the required transition software and.
- vi. To perform the steps necessary to prepare for the conversion of the system to production status.

A team of developer's works directly with users finalizes the design and builds the system. The software construction process consists of a series of "design-and-build" steps in which the users have the opportunity to fine-tune the requirements and review the resulting software implementation. The transition plan to production is also prepared.

The Rapid Construction Stage deliverables include documentation and instructions necessary to operate the new application, routines and procedures needed to put the system into operation.

The tasks of the Stage are shown in the diagram below:



3.1.2.4 Transition (TR)

The objectives of the TR stage are

- i. To install the system in production operation with minimal disruption of normal business activity;
- ii. To maximize the effectiveness of the system in supporting the intended business activities.
- iii. To identify potential future enhancement.

The system developed in the Rapid Construction stage becomes operational in the Transition stage. At this time, the developers prepare existing data for the new system and train users to operate the new application. Transition stage also provides support to resolve any problems that arise immediately after the application becomes operational.

The tasks of the Stage are shown in the diagram below:



3.2 CORE ELEMENTS OF RAPID APPLICATION DEVELOPMENT

RAD has many core elements that make it a unique methodology including

3.2.1 Prototyping

3.2.2 Iterative development

3.2.3 Time boxing

3.2.4 Team members

3.2.5 Management approach

3.2.6 RAD tools.

3.2.1 Prototyping

A key aspect of RAD is the construction of a prototype for the purpose of jumpstarting design and flushing out user requirements. The objective is to build a feature light version of the finished product in as short an amount of time as possible, preferably days. The initial prototype serves as a proof of concept for the bidders, but more importantly serves as a talking point and tool for refining requirements.

3.2.2 Iterative Development

Iterative development means creating increasingly functional versions of a system in short development cycles. Each version is reviewed with the client to produce requirements that feed the next version. The process is repeated until all functionality has been developed. The ideal length of iterations is between one day (which is closer to Agile Methodologies) and three weeks.

Each development cycle provides the user an opportunity to provide feedback, refine requirements, and view progress (in focus group session meetings). It is ultimately the iterative development that solves the problems inherent in the inflexible methodologies created in the 1970's.

3.2.3 Time Boxing

Time boxing is the process of putting off features to future application versions in order to complete the current version in as short amount of time as possible. Strict time boxing is an important aspect of RAD, because without it scope creep can threaten to lengthen development

iterations, thus limiting client feedback, minimizing the benefits of iterative development, and potentially reverting the process back to a waterfall methodology approach.

3.2.3 Team Members

The RAD methodology recommends the use of small teams that consist of experienced, versatile, and motivated members that are able to perform multiple roles. As the client plays a vital role in the development process, dedicated client resources must be available during the initial Joint Application Development (JAD) sessions as well as Focus Group Sessions conducted at the end of development cycles. Development teams (also known as SWAT or Skilled Workers with Advanced Tools) should ideally have experience in Rapid Application Development and should have experience with the Computer Aided Software Engineering tools.

3.2.4 Management Approach

Active and involved management is vital to mitigate the risks of lengthened development cycles, client misunderstandings, and missed deadlines. Above all management must be stalwart and consistent in their desire to use the Rapid Application Development methodology. In addition to enforcing a strict timeline, management must focus on team member selection, team motivation, and on clearing bureaucratic or political obstacles.

3.2.5 RAD Tools

One of the primary objectives of the Rapid Application Development methodology developed by James Martin in the late 1980's was to take advantage of the latest technology available to speed development. Clearly the technology of the 1980's is obsolete today, but RAD's focus of the

latest tools is as important today as it was when the methodology was initially created. This article has a section dedicated to tools following the process section.

3.3 BENEFITS OF RAD

The following benefits can be realized in using RAD: -

- i. High quality system will be delivered because of methodology, tools and user involvement.
- ii. Business benefits can be realized earlier.
- iii. Capacity will be utilized to meet a specific and urgent business need.
- iv. Standards and consistency can be enforced through the use of CASE tools.
- v. Time required to get system developed will be reduced.
- vi. Productivity of developers will be increased.

CHAPTER FOUR

SYSTEM SPECIFICATION AND DESIGN

4.0 INTRODUCTION

The purpose of this Software Requirement Specification (SRS) is to help the project. It is provided with some requirements which are used in the web based application. All parts; design, coding and testing will be prepared with helping of SRS. The purpose of this document is to detail the requirements placed on system and serves as a contract between the customers and the developers as to what is to be expected of the online auction system, and how the components of the system are to work with each other with external systems.

4.1 REQUIREMENT SPECIFICATION

The primary goal of the system analyst is to understand the requirements of the new system that is to be developed. For that the study of specification of the requirements is very essential. For the development of the new system, a preliminary survey of the existing system will be conducted. Investigation is done whether the up gradation of the system into an application program could solve the problems and eradicate the inefficiency of the existing system.

4.1.1 Feasibility Study

The basic idea behind feasibility study is to determine whether the project is feasible or not. Feasibility is conducted to identify a best system that meets all the requirements. This includes an identification, description, an evaluation of the proposed systems and selection of the best system for the job.

The requirements of the system are specified with a set of constraints such as system objectives and the description of the out puts. It is then duty of the analyst to evaluate the feasibility of the proposed system to generate the above results. Three key factors are to be considered during the feasibility study.

4.1.2 Operation Feasibility

An estimate should be made to determine how much effort and care will go into the developing of the system including the training to be given to the user. Usually, people are reluctant to changes that come in their progression. The computer initialization will certainly affected the turn over, transfer and employee job status. Hence an additional effort is to be made to train and educate the users on the new way of the system.

) Technical Feasibility

The main consideration is to be given to the study of available resources of the organization where the software is to be implemented. Here the system analyst evaluates the technical merits of the system giving emphasis on the performance, reliability, maintainability and productivity.

By taking the consideration before developing the proposed system, the resources availability of the organization was studied. The organization was immense computer facilities equipped with sophisticated machines and the software hence this technically feasible.

) Economic Feasibility

Economic feasibility is the most important and frequently used method for evaluating the effectiveness of the proposed system. It is very essential because the main goal of the proposed system is to have economically better result along with increased efficiency. Cost benefit

analysis is usually performed for this purpose. It is the comparative study of the cost verses the benefit and savings that are expected from the proposed system. Since the organization is well equipped with the required hard ware, the project was found to be economically.

4.2 **HARDWARE SPECIFICATION**

The following are the recommended hardware system specification for online auction web based application system. Recommended refer to our advice for best performance to operate the software applications. Below are the standard hardware requirements for the auction system.

<u>Hardware</u>	<u>Specification</u>
Processor	: 2.0GHz and Above
Main Memory	: 512 MB.
Hard Disk	: 60 GB.
Disk Space	: 500 MB.
Modem	: 56 KBPS/ADSL Broadband
Keyboard	: ANY
Mouse	: PS2/ Serial
Monitor	: SVGA COLOR
Rom Drive	: DVD ROM

4.3 SOFTWARE SPECIFICATION

Operating System	:	Windows
Browser	:	Internet explorer 5.5 or Firefox
Server Side Scripting	:	ASP.NET /Microsoft Visual Web 10
Client side Scripting	:	HTML Script
Data Base	:	Windows SQL Server 2008
Connection	:	ADO.NET
Protocol	:	HTTP, SMTP

4.4 FUNCTIONAL REQUIREMENTS TECHNIQUES

4.4.1 Structured Analysis Techniques

4.4.1.1 Context level DFD

4.4.1.2 Sub System Level Data Flow

4.4.1.3 Entity Relationship Diagrams (ERD)

4.4.2 Object Oriented Analysis

4.4.2.1 Use Case Diagrams

4.4.1.1 Context level (DFD)

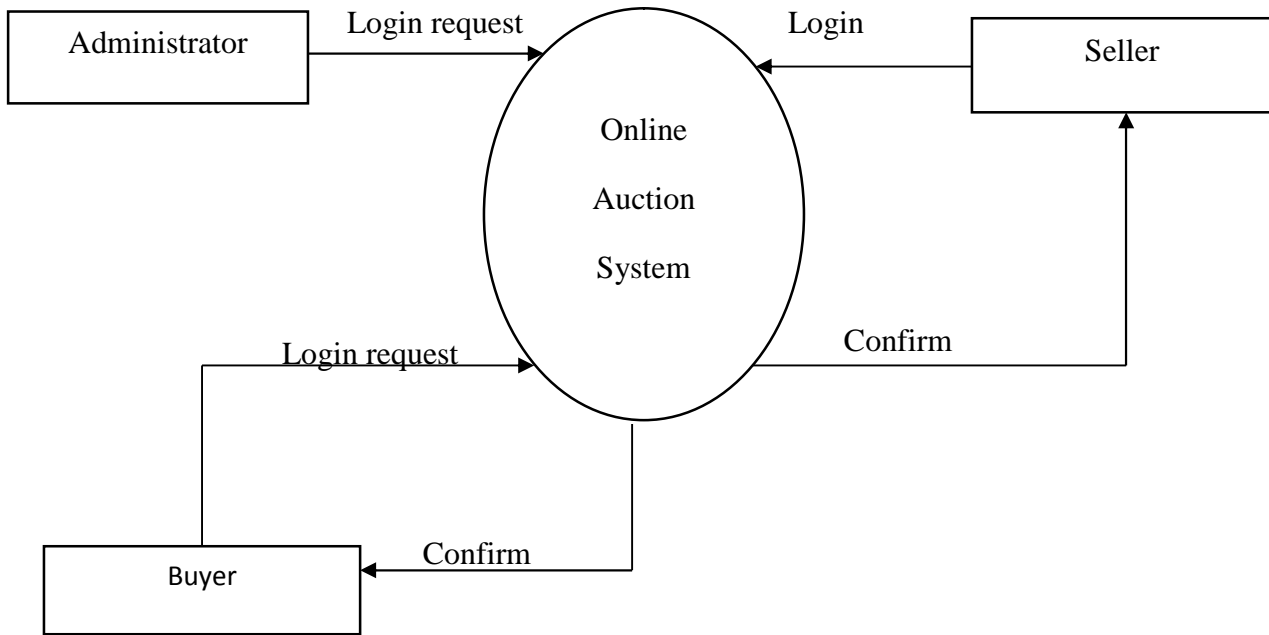


Figure 4.1 Context level diagrams.

4.4.1.2 Sub System Level Data Flow

DFD describes the next level of details within the system, detailing the data flows between subsystems, which make up the whole.

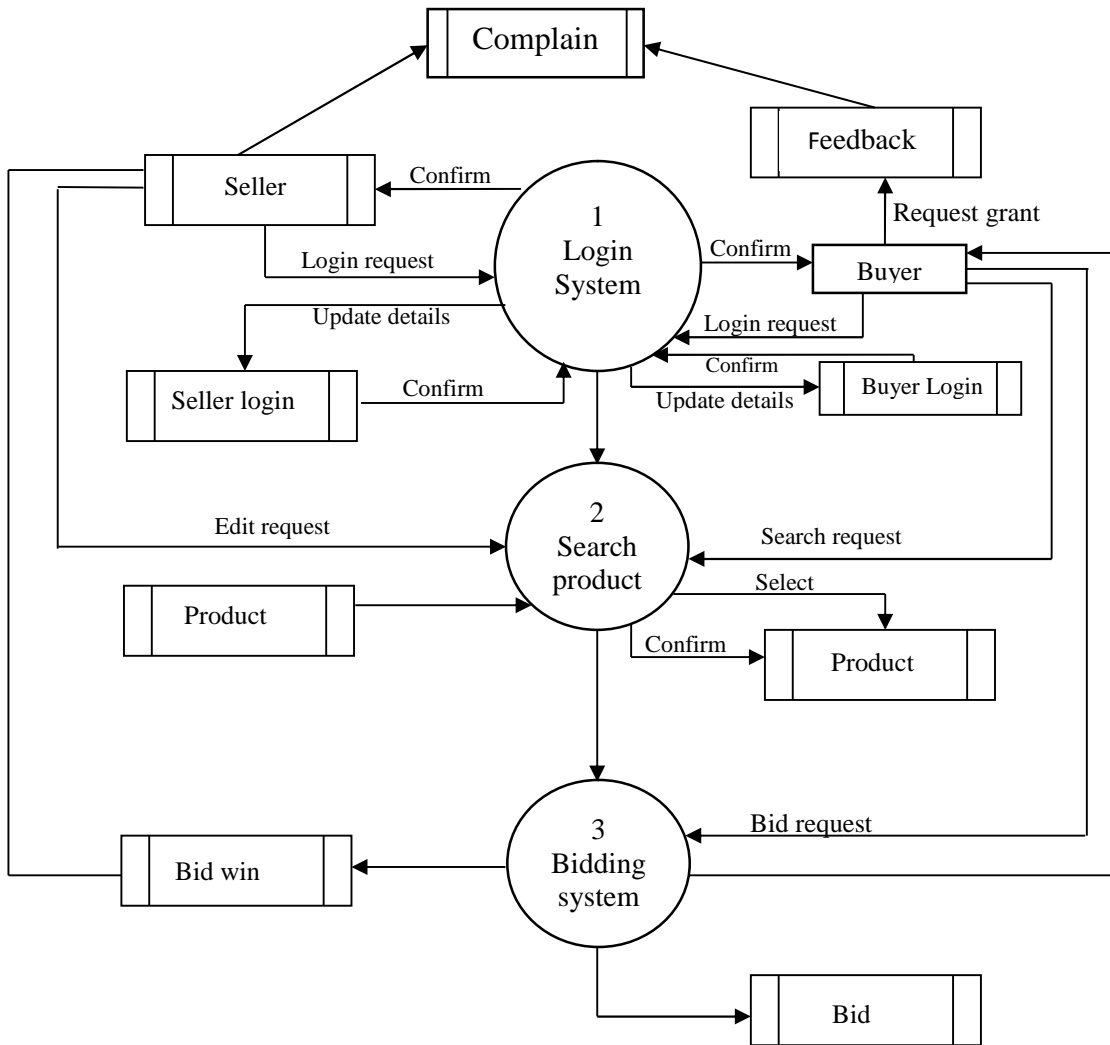


Figure 4.2 Sub system level flow diagram

4.4.1.3 Entity Relationship Diagrams (ERD)

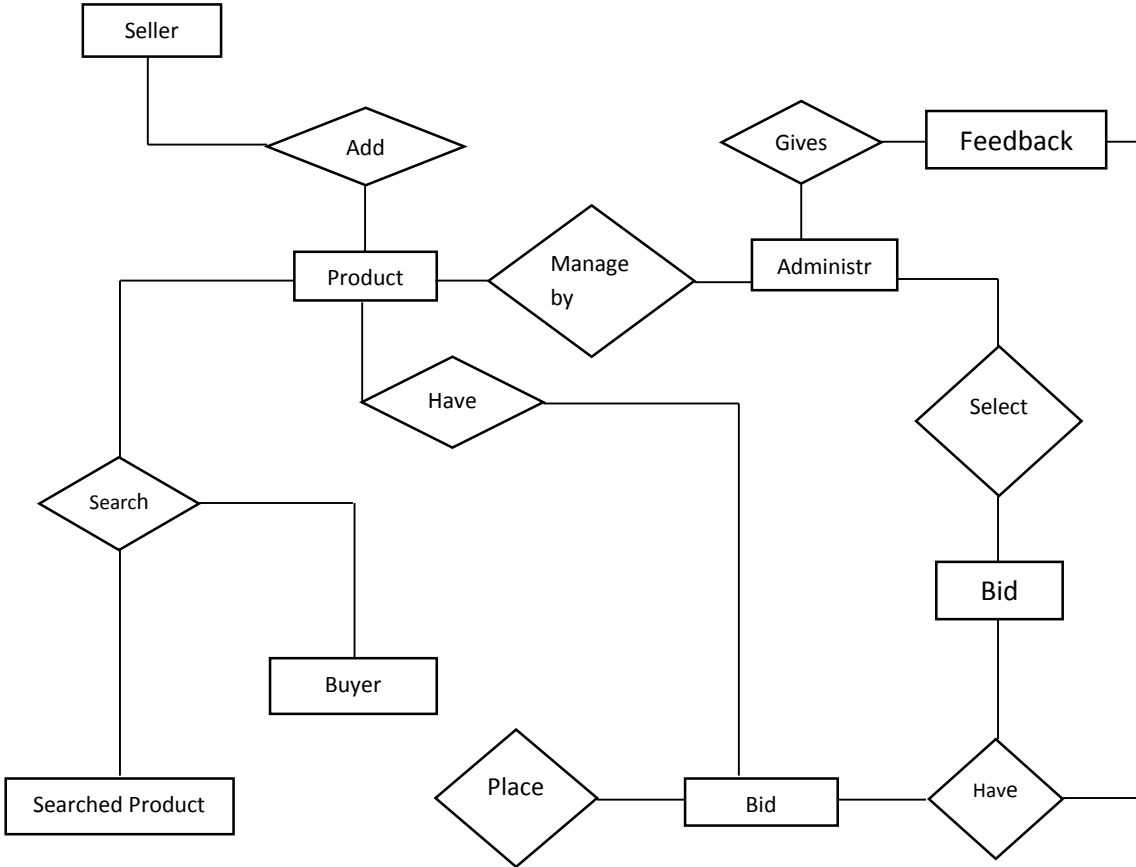
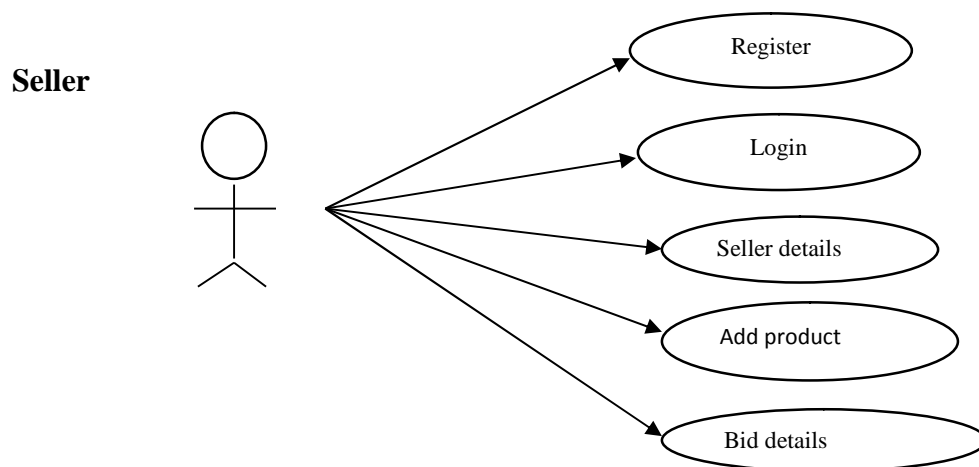
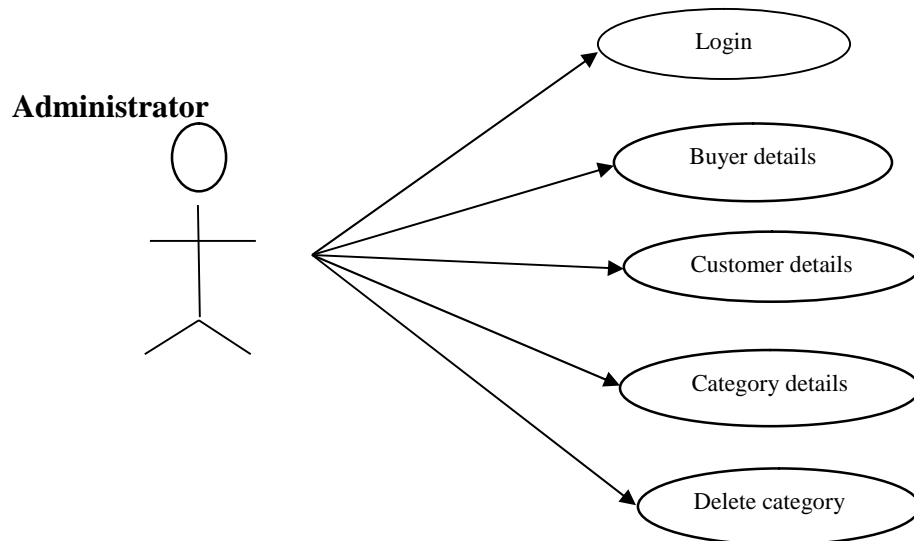


Figure 4.3 E-R diagram

4.4.2.1 Use Case Diagrams

Administrator: Administrator controls Products details and category details and also Buyer details and Buyer reports and Sub category details and Buyer registrations. Administrator can also delete any categories and user.



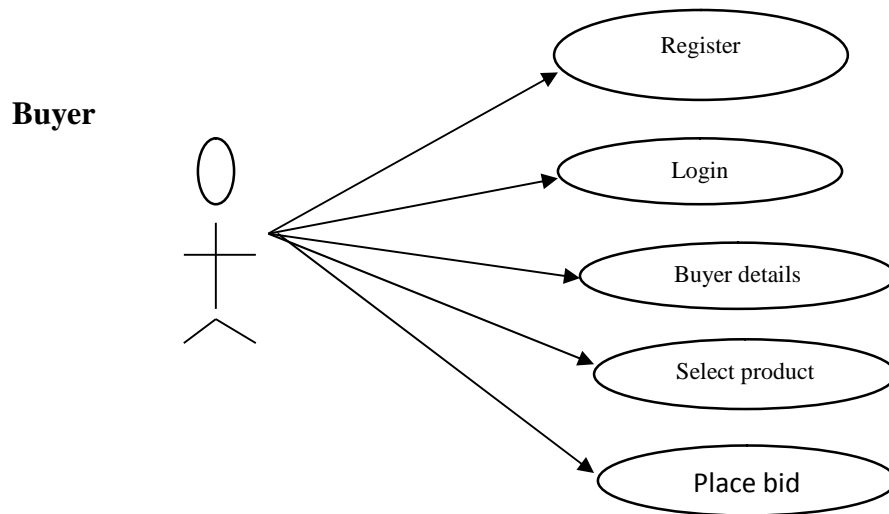


Figure 4.4 Use Case Diagrams

4.5 DATA DICTIONARY

Database Tables (Data Dictionary): After careful analysis the system has identified to be presented with the following database tables

i. Buyer

Table - dbo.Buyer	Table - dbo.Tbl_StaffDetails	Table - dbo
Column Name	Data Type	Allow Nulls
BuyerId	int	<input type="checkbox"/>
CurrentBid	int	<input type="checkbox"/>
UrBiddingPrice	nvarchar(50)	<input type="checkbox"/>
ProductName	nvarchar(50)	<input type="checkbox"/>
UserId	varchar(50)	<input checked="" type="checkbox"/>
		<input type="checkbox"/>

ii. Signup

Column Name	Data Type	Allow Nulls
loginid	int	<input type="checkbox"/>
userName	nvarchar(50)	<input type="checkbox"/>
Password	nvarchar(50)	<input type="checkbox"/>
FirstName	nvarchar(50)	<input type="checkbox"/>
lastName	nvarchar(50)	<input checked="" type="checkbox"/>
Email	nvarchar(50)	<input type="checkbox"/>
PhoneNo	nvarchar(50)	<input checked="" type="checkbox"/>
Address	nvarchar(50)	<input type="checkbox"/>
City	nvarchar(50)	<input type="checkbox"/>
State	nvarchar(50)	<input type="checkbox"/>
Pin	nvarchar(50)	<input type="checkbox"/>
Country	nvarchar(50)	<input type="checkbox"/>
Type	nvarchar(50)	<input type="checkbox"/>
HintQuestion	nvarchar(50)	<input type="checkbox"/>
Answer	nvarchar(50)	<input type="checkbox"/>

iii. Product

Table - dbo.Product		Summary
Column Name	Data Type	Allow Nulls
ProductId	int	<input type="checkbox"/>
SubCategoryId	int	<input type="checkbox"/>
ProductName	nvarchar(50)	<input type="checkbox"/>
Quantity	int	<input type="checkbox"/>
Price	int	<input type="checkbox"/>
Date	datetime	<input type="checkbox"/>
Status	nvarchar(50)	<input type="checkbox"/>
AboutProduct	nvarchar(50)	<input type="checkbox"/>
ShippingPrice	int	<input type="checkbox"/>
ProductImage	nvarchar(50)	<input type="checkbox"/>
UrBiddingPrice	varchar(50)	<input checked="" type="checkbox"/>
EndOfbidDate	varchar(50)	<input checked="" type="checkbox"/>

iv. Database

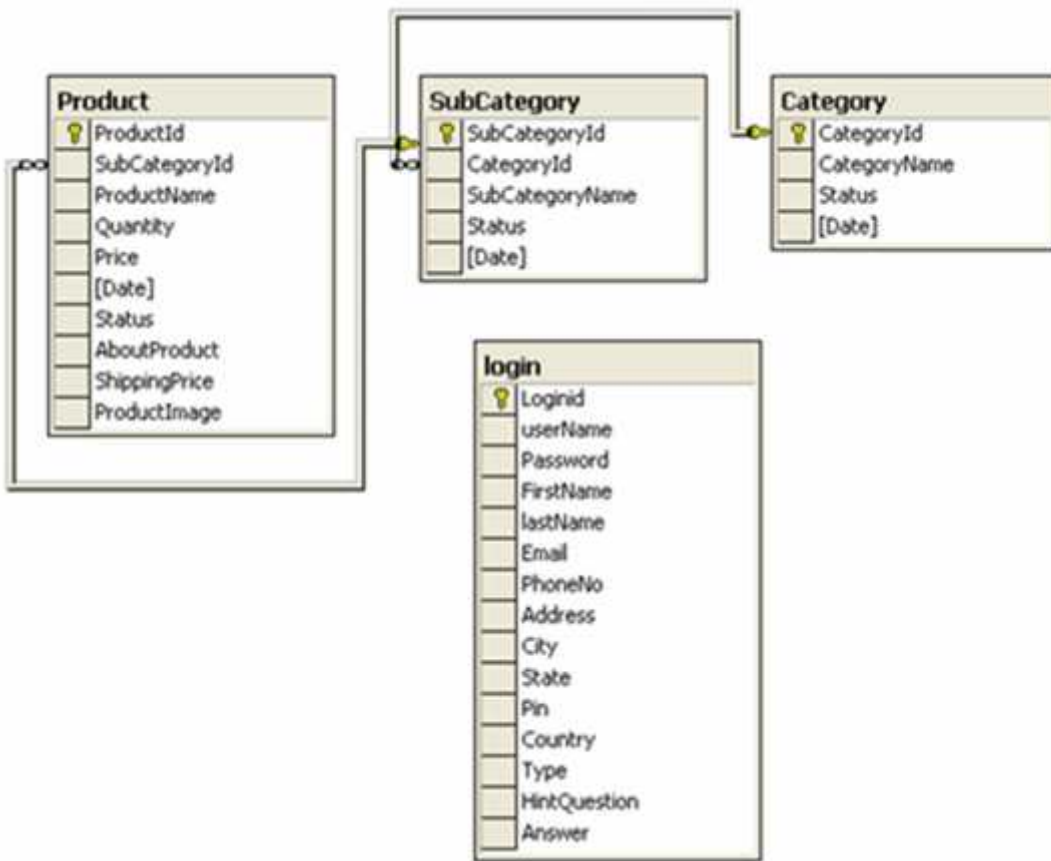


Figure 4.5 Database Design Diagrams

4.6 SYSTEMS DESIGN

The basic goal of system design is to plan a solution for the problem. This phase focuses on the detailed implementation and the researched work gathered of the auctioning system. It emphasizes on translating design specifications to performance specification and focuses. System design has two phases of development, logical and physical design.

4.6.1 Logical Design

Logical design talks about the functions and the features of the auctioning system and the relationships among its components. This includes the output that must be produced by the system, the input needed by the system, and the processes that must be performed by the system without regard to how tasks will be accomplished physically.

4.6.2 Physical Design

In similarity to the logical design, the physical design of the auctioning system is the plan for the actual implementation of the system. It is built upon the logical design as a sort of blue print that describes the actual construction of a building. It concerns itself with how the systems requirements can be achieved.

4.7 SYSTEM TESTING

The process of checking whether the developed system is working according to the original requirements and objectives from auctioneers, bidders and sellers is known as system testing. There are basically two sources of data for testing. These are Live and Artificial. Live data are actually extracted from the organization's files. Artificial data are generated for test purposes only.

The purpose of system testing is to test the system systematically. It is the application developer's last opportunity to check that the system works before asking the users to accept it. Therefore, it is often split between test running and bug fixing. This helps ensure adequate control over the way corrections are applied to the system and system test version control documents are kept. System testing incorporates a number of other classes of testing.

4.7.1 Unit Testing

The first level of test is unit testing. The purpose of unit testing is to ensure that each subprogram (subroutine) is fully tested. To successfully test a system the programmer writes a test plan. A test Plan is a document that describes the objectives, scope, approach, and focus of a software testing effort. This includes a number of test runs such as the valid paths through the code, the exception and error handling paths.

4.7.2 Integration Testing

The next step is integration testing. This is sometime called link, subsystem or level one testing. The purpose of integration testing is to test the interface between programs in the same functional area. The output from unit testing becomes the input to integration testing. Each program is linked to the other entire program with which it interacts.

4.8 USER INTERFACE DESIGN REQUIREMENT

Input design consists of developing specifications and procedures for bidding preparation, those steps necessary to put transaction of products between sellers and bidders into the auctioning system. The main objectives are to create an efficient, open, user-friendly and transparent web based auctioning system. The graphical user interface (GUI) forms below are to be used by both the users and the administrators



Figure 4.6 Home page

Home Page - The Home page is designed in such way that the layout is as user friendly as possible. There is a navigational menu at the top of the page which links to various inner pages.

A login form for "Auction Sales". At the top left is the "Auction Sales" logo. Below it is a white space. Then an orange bar with the text "Please Provide Log in Information". Below that are two input fields: "User ID" with a placeholder "User ID" and "Password". A "Sign in" button is centered below the fields. At the bottom, there are two links: "Can't access your account? Click Here" and "New User, Don't have account? Click Here".

Figure 4.7 Existing user login form

It is where registered bidders and sellers with User ID can login

PLEASE PROVIDE PERSONAL INFORMATION

Item Name	<input type="text"/>
First Name	<input type="text"/>
Middle Name	<input type="text"/>
Last Name	<input type="text"/>
Date of Birth	<input type="text" value="5/14/2014"/>
Address	<input type="text"/>
Country/State	<input type="text"/>
City	<input type="text"/>
Zip Code	<input type="text"/>
E-Mail Address	<input type="text"/>
Profession	<input type="text"/>
Personal Contact	<input type="text"/>

Figure 4.8 User login and registration form

New user can register through this form.

My AUCTION SALES

[[Log out](#)]

[Home](#) [Manage Accounts](#) [Registration](#) [Upload Item](#) [About](#)

PLEASE PROVIDE INFORMATION REQUIRED

Item Name	<input type="text"/>
Item Type	<input type="text"/>
Model	<input type="text"/>
Manufacturer	<input type="text"/>
Date Manufactured	<input type="text" value="5/14/2014"/>
Date Displaced	<input type="text" value="5/14/2014"/>
Ending Date	<input type="text" value="5/14/2014"/>
Batch Number	<input type="text"/>
Seller Name	<input type="text"/>
Quantity	<input type="text"/>
Contact Number	<input type="text"/>
Short Description	<input type="text"/>

Figure 4.9 Product registration form

Sellers have to register his products before placing it for bidding.



Figure 4.10 Products description

It gives product name, model, data manufactured, state and state for aspiring bidders to know before place a bid.

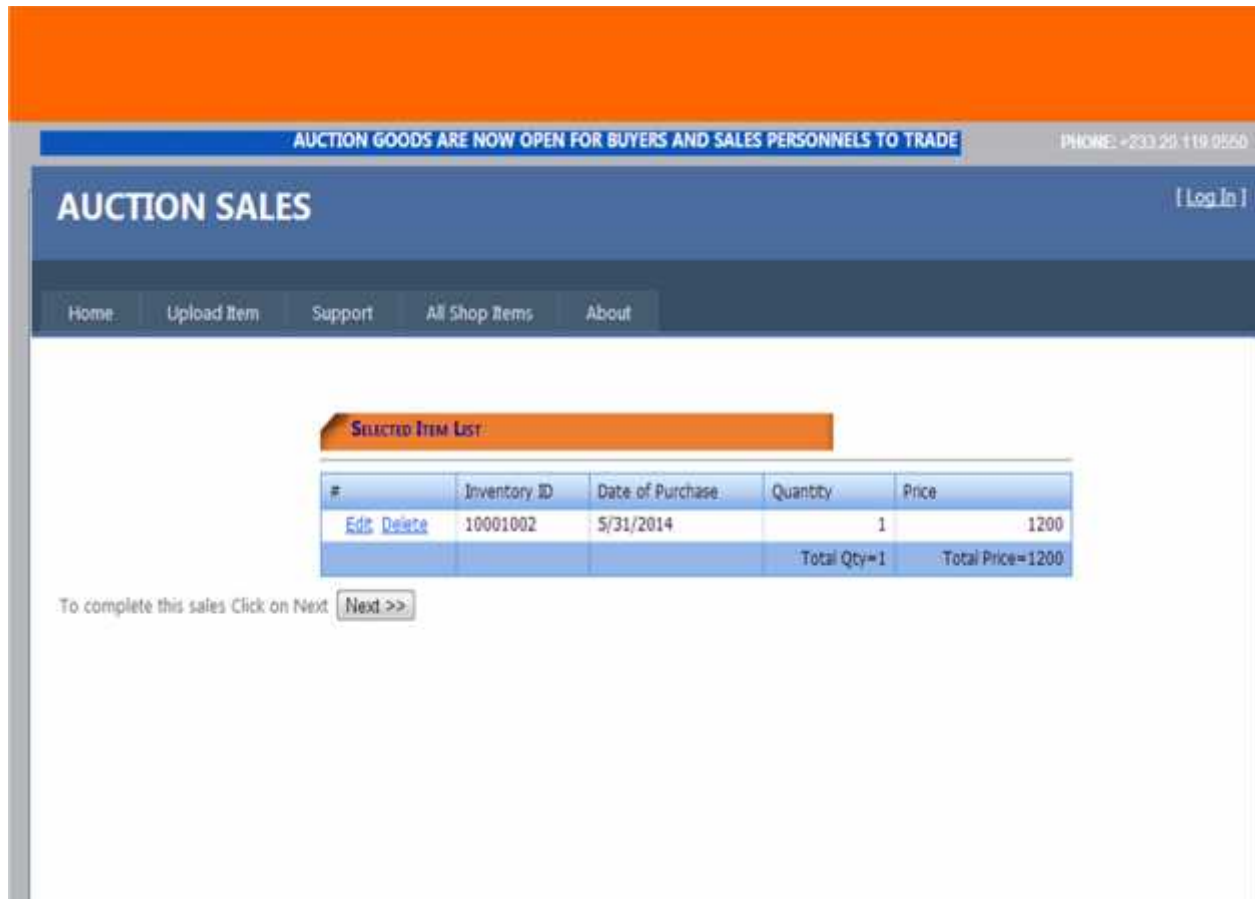


Figure 4.11 My auction form

Both seller and bidder can view his/ her status.

The image shows a web application interface for an auction. At the top, there is a blue banner with the text "AUCTION GOODS ARE NOW OPEN FOR BUYERS AND SALES PERSONNELS TO TR/" and a phone number "+233 20 119 0550". Below this is a dark blue header with "AUCTION SALES" and a "[Log In]" link. A navigation menu contains "Home", "Upload Item", "Support", "All Shop Items", and "About". The main content area features a form titled "ORDER DETAILS" with an orange header. The form contains the following fields: "User ID", "Receiver Name", "Address" (a larger text area), "City", "Zip", "State", and "Shipping Type". At the bottom of the form are "Submit" and "Reset" buttons.

Figure 4.12 Order details form

This is where administrator enters the information of a winner of a bid for delivery or shipment.

4.9 EVALUATING THE PROJECT

After meeting all the requirement of users, the motive of carrying out this project has been met. The auction system now helps aspiring bidders and sellers know when bidding is taken place through phones and newspapers .How to participate as a new user. The desired solution for the project was attained and could easily be uploaded on a web server with little training of sellers and aspiring bidders. Security of the system has been taken care of and well authenticated by administrator to prevent fraud issues.

4.10 ACCEPTANCE TESTING

The user formally accepts the system when it has successfully passed the acceptance test. The purpose of an acceptance test is to prove to the users that the system meets their requirement agreed in the problem statement and research questions. The acceptance test is run by a user or under designer's supervision. When all problems have been resolved, the user signs for acceptance of the system. The result from this phase is a system that works to the satisfaction of the user as defined in the requirements specification document and any related change request documents.

CHAPTER 5

RECOMMENDATION AND CONCLUSION

5.0 LIMITATIONS OF THE SYSTEM

The limitations of the system are:

- i. Only registered bidder and sellers can take part in of the bidding process of system.
- ii. System works in all platforms and its compatible environments.
- iii. Advanced techniques are used to check the authorization.

5.1 RECOMENDATION

It is not possible to develop a system that makes all the requirements of the user. User requirements keep changing as the system is being used. Some of the future enhancements that can be done to this system are:

- i. As the technology emerges, it is possible to upgrade the system and can be adaptable to desired environment.
- ii. Because it is based on object-oriented design, any further changes can be easily adaptable.
- iii. Based on the future security issues, security can be improved using emerging technologies.
- iv. Sub modules can be added.
- v. Any in-built web browser can be added.

5.2 DISCUSSION

For most solutions, choosing the appropriate tool will require the developer to weigh the importance of several solution criteria. There are many solutions that might have accomplished this task. Microsoft Visual Basic.Net 2010, Microsoft SQL Server 2008 and DXperience-12.2.8 have made it simple and easy by meeting the requirements. The auctioning system was able to be designed to be user- friendly and capable of supporting large numbers of bidders and sellers in an active auction.

5.3 CONCLUSION

The “Online Auctioning System” was successfully designed and is tested for accuracy and quality. During this project we have accomplished all the objectives and this project meets the needs of the organization. The developed will be used in searching, retrieving and generating information for the concerned requests.

Goals:

- i. Reduced entry work
- ii. Easy uploading of products by sellers
- iii. Easy retrieval of product information.
- iv. Reduced errors due to human intervention.
- v. User friendly screens to enter the data.
- v. Portable and flexible for further enhancement.
- vi. Web enabled.
- vii. Fast finding of information requested.

REFERENCES

1. <http://www.eBid.net/>
2. <http://shopping.indiatimes.com/>
3. <http://www.ebay.com/>
4. An Introduction to PRINCE [G38a]
5. RAD Procedures Guide [G47]
6. RAD Documentation Guide [G48]
7. Fred Barwell, Richard Blair (2004)'Professional VB.NET 2nd Edition', Wrox Press Ltd.
8. Klemperer Paul 2004 auctions theory and practice. <http://www.paulklemperer.org>
9. Dalton, Patrick. (2000) Microsoft SQL Server Black Book, Coriolis Group Books Inc.
10. Pressman, Roger S. Software Engineering (2010) A Practitioner's Approach. 3rd Edition. McGraw-Hill.
11. E. FREEMAN AND E. FREEMAN, Head First HTML with CSS & XHTML, O'Reilly Media, Sebastopol, California, 2005.
12. Senn, James A. (1989) Analysis and Design of Information Systems. McGraw-Hill, 2nd Edition.
13. Pressman, Roger S. Software Engineering (2010) A Practitioner's Approach. 3rd Edition. McGraw-Hill.
14. Karl E. Peterson. "Microsoft Basic: 1976–2001, R.I.P.". <http://vb.mvps.org>.
15. Lim, S. (2002). The self-confrontation interview: Towards an enhanced understanding of human factors in web-based interaction for improved website usability. Journal of Electronic Commerce Research 3(3), pp.161 173

16. W.WANG, H. ZOLTÁN, AND A. B.WHINSTON, Shill bidding in multi-round onlineauctions, in Proceedings of the 35th Hawaii International Conference on SystemSciences, Big Island, Hawaii, 2002.
17.] E. FREEMAN AND E. FREEMAN, Head First HTML with CSS & XHTML, O'Reily Media, Sebastopol, California, 2005.


```

<spanstyle="color: white; font-family: arial, sans-serif; font-size:
12px;"><strong>PHONE:</strong> +233.20.119.0550</span>
</td>
</tr>
</table></center>

</div>
<divclass="page">

<divclass="header">
<divclass="title">
<h1>
                My AUCTION SALES
</h1>
</div>
<divclass="loginDisplay">
<asp:LoginViewID="HeadLoginView"runat="server"EnableViewState="false">
<AnonymousTemplate>
[ <a href="~/Default.aspx"ID="HeadLoginStatus"runat="server">Log out</a> ]
</AnonymousTemplate>
<LoggedInTemplate>
                Welcome
<spanclass="bold"><asp:LoginNameID="HeadLoginName"runat="server"/></span>!
[
<asp:LoginStatusID="HeadLoginStatus"runat="server"LogoutAction="Redirect"LogoutText="Log
Out"LogoutPageUrl="~/"/> ]
</LoggedInTemplate>
</asp:LoginView>
</div>
<divclass="clear hideSkiplink">
<asp:MenuID="NavigationMenu"runat="server"CssClass="menu"EnableViewState="false"IncludeSt
yleBlock="false"Orientation="Horizontal">
<Items>
<asp:MenuItemNavigateUrl="~/Default.aspx"Text="Home"/>
<asp:MenuItemNavigateUrl="~/About.aspx"Text="About"/>
<asp:MenuItemNavigateUrl="~/Inventory List.aspx"Text="Inventory"
Value="Inventory"></asp:MenuItem>
<asp:MenuItemNavigateUrl="~/Detail Personal List.aspx"Text="Personal Details"
Value="Personal Details"></asp:MenuItem>
<asp:MenuItemNavigateUrl="~/Cart List.aspx"Text="Cart Items"
Value="Cart Items"></asp:MenuItem>
</Items>
</asp:Menu>
</div>
<!--<div id="SmallAdvert"
                style=" height:84px; padding-top:15px; background-color:Purple">

</div>-->
</div>
<divclass="main">
<asp:ContentPlaceHolderID="MainContent"runat="server"/>
</div>
<divclass="clear">
</div>
</div>

</form>
<divclass="footer"style="background-color: #336699">

```



```

<table>

<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label1"runat="server"Text="User ID"></asp:Label>
</td>
<td>
<asp:TextBoxID="TxtUserID"runat="server"EnableViewState="False"Width="255px"></asp:TextBo
x>
<asp:RequiredFieldValidatorID="RequiredFieldValidator1"runat="server"ControlToValidate="T
xtUserID"ErrorMessage="Provide User ID"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
&nbsp;</td>
<td>
&nbsp;</td>
</tr>
<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label3"runat="server"Text="Receiver Name"></asp:Label></td>
<td>
<asp:TextBoxID="TxtFirstname"runat="server"EnableViewState="False"Width="258px"></asp:Tex
tBox>
<asp:RequiredFieldValidatorID="RequiredFieldValidator3"runat="server"ControlToValidate="T
xtFirstname"ErrorMessage="Provide Full
Name"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>

<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label5"runat="server"Text="Address"></asp:Label></td>
<td>
<asp:TextBoxID="TxtAddress"runat="server"Height="66px"TextMode="MultiLine"Width="369px"En
ableViewState="False"></asp:TextBox>
<asp:RequiredFieldValidatorID="RequiredFieldValidator5"runat="server"ControlToValidate="T
xtAddress"ErrorMessage="Provide Address"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<tdstyle="width:40px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label6"runat="server"Text="City"></asp:Label></td>
<td>
<asp:TextBoxID="TxtCity"runat="server"EnableViewState="False"Width="260px"></asp:TextBox>
<asp:RequiredFieldValidatorID="RequiredFieldValidator6"runat="server"ControlToValidate="T
xtCity"ErrorMessage="Provide City"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>
<tr>
<tdstyle="width:150px"></td>

```

```

<tdclass="auto-style4">
<asp:LabelID="Label7"runat="server"Text="Zip"></asp:Label></td>
<td>
<asp:TextBoxID="TxtZip"runat="server"EnableViewState="False"Width="263px"></asp:TextBox><
/td>
</tr>
<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label8"runat="server"Text="State"></asp:Label></td>
<td>
<asp:TextBoxID="TxtState"runat="server"EnableViewState="False"Width="263px"></asp:TextBox
>
<asp:RequiredFieldValidatorID="RequiredFieldValidator7"runat="server"ControlToValidate="T
xtState"ErrorMessage="Provide State"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>

<tr>
<tdstyle="width:150px"></td>
<tdclass="auto-style4">
<asp:LabelID="Label10"runat="server"Text="Shipping Type"></asp:Label></td>
<td>
<asp:TextBoxID="TxtPhoneNumber"runat="server"EnableViewState="False"Width="264px"></asp:T
extBox>
<asp:RequiredFieldValidatorID="RequiredFieldValidator8"runat="server"ControlToValidate="T
xtPhoneNumber"ErrorMessage="Provide Type of
Shipping"ForeColor="#FF3300"></asp:RequiredFieldValidator>
</td>
</tr>

</table>
<br/>

<table>
<tr>
<tdclass="style1"></td>
<td>
<asp:ButtonID="Button1"runat="server"Text="Submit"OnClick="Button1_Click"/>
<td>
<asp:ButtonID="Button2"runat="server"Text="Reset"/></td>
</tr>
</table>
</div>
</asp:Content>

<%@PageTitle=""Language="C#"MasterPageFile="~/Administator.Master"AutoEventWireup="true"Code
odeBehind="Users.aspx.cs"Inherits="Auction_Sales.Users"%>

<%@RegisterAssembly="DevExpress.Web.v12.2, Version=12.2.8.0, Culture=neutral,
PublicKeyToken=b88d1754d700e49a"
Namespace="DevExpress.Web.ASPxGridView"TagPrefix="dx"%>
<%@Registerassembly="DevExpress.Web.v12.2, Version=12.2.8.0, Culture=neutral,
PublicKeyToken=b88d1754d700e49a"namespace="DevExpress.Web.ASPxEditors"tagprefix="dx"%>
<asp:ContentID="Content1"ContentPlaceHolderID="HeadContent"runat="server">
</asp:Content>
<asp:ContentID="Content2"ContentPlaceHolderID="MainContent"runat="server">

```



```

<dx:ASPxGridViewID="ASPxGridView1"runat="server"
AutoGenerateColumns="False"DataSourceID="SqlDataSource1"
KeyFieldName="User ID"Width="886px">
<Columns>
<dx:GridViewDataTextColumnFieldName="User ID"ReadOnly="True"VisibleIndex="0">
</dx:GridViewDataTextColumn>
<dx:GridViewDataTextColumnFieldName="Password"VisibleIndex="1">
</dx:GridViewDataTextColumn>
<dx:GridViewDataTextColumnFieldName="E-mail"VisibleIndex="2">
</dx:GridViewDataTextColumn>
<dx:GridViewDataTextColumnFieldName="Oid"ReadOnly="True"VisibleIndex="3">
<EditFormSettingsVisible="False"/>
</dx:GridViewDataTextColumn>
</Columns>
</dx:ASPxGridView>
<asp:SqlDataSourceID="SqlDataSource1"runat="server"
ConnectionString="<%$ConnectionStrings:DbaseAuctionSalesConnectionString%>"
DeleteCommand="DELETE FROM [tblUser] WHERE [User ID] = @User_ID"
InsertCommand="INSERT INTO [tblUser] ([User ID], [Password], [E-mail]) VALUES (@User_ID,
@Password, @column1)"
SelectCommand="SELECT * FROM [tblUser]"
UpdateCommand="UPDATE [tblUser] SET [Password] = @Password, [E-mail] = @column1, [Oid] =
@Oid WHERE [User ID] = @User_ID">
<DeleteParameters>
<asp:ParameterName="User_ID"Type="String"/>
</DeleteParameters>
<InsertParameters>
<asp:ParameterName="User_ID"Type="String"/>
<asp:ParameterName="Password"Type="String"/>
<asp:ParameterName="column1"Type="String"/>
</InsertParameters>
<UpdateParameters>
<asp:ParameterName="Password"Type="String"/>
<asp:ParameterName="column1"Type="String"/>
<asp:ParameterName="Oid"Type="Int32"/>
<asp:ParameterName="User_ID"Type="String"/>
</UpdateParameters>
</asp:SqlDataSource>
</asp:Content>

```