

TECBIDDER

A PROJECT REPORT

Submitted By

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to

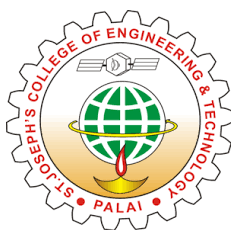
the APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for

the award of the degree

of

MASTER OF COMPUTER APPLICATIONS



Department of Computer Science and Applications

**ST.JOSEPH COLLEGE OF ENGINEERING AND
TECHNOLOGY,PALAI**

May, 2019

DECLARATION

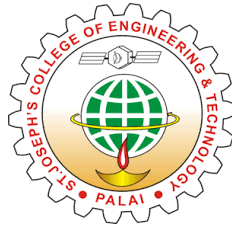
I undersigned hereby declare that the project report “TECBIDDER” , submitted for partial fulfillment of the requirements for the award of degree of Master of Computer Applications of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me under supervision of **Mrs.Soumya George**,Asst.Prof,MCA.This submission represents my ideas in my own words and where ideas or words of others have been included, I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

Place : Choondachery

Date : 29/05/2019

JUHI JOY

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CERTIFICATE

This is to certify that the report entitled **TecBidder** submitted by **JUHI JOY** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Master of Degree in Computer Applications is a bonafide record of the project work carried out by her under our guidance and supervision.

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ACKNOWLEDGMENT

I, Juhi Joy, hereby declare that the project report TecBidder, submitted for partial fulfillment of the requirements for the award of Master of Degree in Computer Applications of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me under supervision of **Mrs. Soumya George**, Asst. Prof, MCA. This submission represents my ideas in my own words and where ideas or words of others have been included, I have adequately and accurately cited and referenced the original sources. I also declare that I have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my submission. I understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University.

JUHI JOY

ABSTRACT

Online shopping is now a days become an important part of human life because each and every product is available in E-commerce websites customers can easily access to their requirements. There are many E-commerce websites are available but a customer will not get any additional benefits when they choose these online sites. The proposed system will remove these inconveniences and will ensure customer satisfaction. The proposed system provides a platform for the customer to buy the products by bidding in a competitive manner. The project “Tecbidder” is an online auction system that provide a platform for the customer to buy the products by bidding in a competitive manner. Tecbidder has introduced a completely new and funny way of online shopping. Tecbidder.com is a new exciting auction website where you can win branded factory sealed new products at huge discounts. Tecbidder gives an opportunity to those people who can’t afford to purchase costly branded products, they can try our risk-free auctions to win their desired products like Smartphones, Laptop, Tablets and branded watches.

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Chapter 1

INTRODUCTION

1.1 Problem definition

According to current tendency of people everyone is trying to purchase from online rather than going to shop for their needs. when people are purchasing from online most of the time they will not get more additional benefits .Because of the inefficiency of the current system consumer will not get more benefits .However the proposed system will remove these inconvenience and will ensure customer satisfaction .proposed system provide a platform for the customer to buy the products by bidding in a competitive manner.

1.2 Objective of the Project

The purpose of “Tecbidder”, is to provide users a platform for buyers and sellers to come together and trade electronics. It aims at accuracy, efficiency and security.

1. An ethical bidding environment for our customers
2. Accurate product and pricing information
3. Quick responses to customer inquiries and problems
4. Highest standards for our customer’s privacy
5. Constant innovation and development of new features
6. Long-term relationship with our suppliers and partners

1.3 Existing System

According to current tendency of people everyone is trying to purchase from online rather than going to shop for their needs. When people are purchasing from online most of the time they will not get more additional benefits .Because of the inefficiency of the current system consumer will not get more benefits. The different E-commerce websites available can considered as existing system but the user will not get any additional benefit from this system.

1.4 Proposed System

The project “Tecbidder” is an online auction system that provide a platform for the customer to buy the products by bidding in a competitive manner. Tecbidder has introduced a completely new and funny way of online shopping.Tecbidder.com is a new exciting auction website where you can win branded factory sealed new products at huge discounts. Tecbidder gives an opportunity to those people who can’t afford to purchase costly branded products, they can try our risk free auctions to win their desired products like Smartphones, Laptop, Tablets and branded watches. Bidder boy gives an opportunity to those people who can’t afford to purchase costly branded products,they can try our risk free auctions to win their desired products like Cars, Bikes, Smartphones, Laptop, Tablets and branded watches.

The customer need to buy credits to participate in online bidding Registration is free, secure and simple. Costumer can sign in into the Tec bidder account from the home page by verify your Email and Mobile number .If the customer is an already user he can login by using Tec bidder id.To place bids on any auction, you will need Credits. You can buy Credits by multiple payment methods, including: Debit/Credit Cards, VISA, MasterCard, Net Banking, Cash Cards etc.

Real Competition starts when last few Seconds are remaining in Timer. Once Auction starts... Click on the 'BID NOW' button to place your bid. Each time you place a bid, number of Credits will be deducted from your balance, and time to the clock will be added. Time is added to clock every time a user places a 'BID'. This gives enough time for someone else to make the decision to BID if they are interested. If you are the last bidder when the timer expires, YOU WIN! After you win, you can Claim that product by paying its Bid Closing Price + Processing Charges.

Advantages

1. An ethical bidding environment for our customers
2. Accurate product and pricing information
3. Quick responses to customer inquiries and problems

4. Highest standards for our customers privacy
5. Constant innovation and new products
6. User can buy products in less price
7. Seller can easily sell the products

1.5 Feasibility Study

During system analysis, a feasibility study of the proposed system was carried out to see whether it was beneficial to the organization. The main aim of the feasibility study is to determine whether it would be financially and technically feasible to develop the product. While evaluating the existing system, many advantages and disadvantages raised. Analyzing the problem thoroughly forms the vital part of the system buddy. Problematic areas are identified and information is collected.

The benefits of this site are users can easily interact and get the services without much complexity. It helps to make it possible that more users can interact with the site at a time. Feasibility study is to determine whether the proposed system is technically, economically and behaviorally feasible in all respects.

The main aim of feasibility study is to evaluate alternative site and propose the most feasible and desirable site for development. If there is no loss for the organization then the proposed system is considered financially feasible. A feasibility study is carried out to select the best system that meets performance requirements.

The feasibility study activity involves the analysis of the problem and collection of all relevant information relating to the product such as the different data items which would be input to the system, the processing required to be carried out on these data, the output data required to be produced by the system as well as various constraints on the behavior of the system.

In this scenario, problems are identified. Essential data are being gathered for the existing problems. It is necessary that this analysis familiarizes the designer with objectives, activities, and the function of the organization in which the system is to be implemented. The feasibility study was divided into four:- Technical, Economical, Operational and Behavioral. It is summarized below:-

1.5.1 Technical Feasibility

According to feasibility analysis procedure the technical feasibility of the system is analyzed and the technical requirements such as software facilities, procedure, inputs, are identified. While considering the problems of existing system, it is sufficient to implement the new system. The proposed system can be implemented to solve issues in the existing system. It includes the evaluation of and how it meets the proposed system. This system use ASP. NET as front end technology and SQL Server as back end technology.

1.5.2 Economic Feasibility

Economic analysis is most frequent used for evaluating of the effectiveness of the candidate system. More commonly known as cost/benefit analysis the procedure is to determine the benefit and saving that are expected from a candidate system and compare them with the existing system. Except for the initial capital amount and the amount after each financial year, no other huge amount is needed. The expenses can be handles by any participants. So, the system is economically feasible.

This feasibility involves some questions such as whether the firm can afford to build the system, whether its benefits should substantially exceed its costs, and whether the project has higher priority and profits than other projects that might use the same resources. Here there is no problem. This firm has fully equipped hard ware, and fully fledged software, so no need to spend money on these issues. And as the client and the developer are one, there is no further problem in economic issues.

1.5.3 Operational Feasibility

Methods of processing and presentation are all according to the needs of clients since they can meet all user requirements here. The proposed system will not cause any problem under any circumstances and will work according to the specifications mentioned. Hence the proposed system is operationally feasible. People are inherently resistant to change and computer has been known to facilitate changes. The system operation is the longest phase in the development life cycle of a system. So, Operational Feasibility should be given much importance. This system has a user-friendly interface. Thus it is easy to handle.

Chapter 2

SYSTEM ANALYSIS AND DESIGN

Designing the system in an effective way leads to the smooth working of any software's. System design is the process of developing specification for a candidate system that meet the criteria established in the system analysis. Major step in the system design is the preparation of the input forms and output reports in a form applicable to the user. The main objective of the system design is to use the package easily by any computer operator. System design is the creative act of invention, developing new inputs, and database, off-line files, method, procedure and output for processing business to meet an organization objective. System design builds information gathered during the system analysis. This system is designed neatly so that user will never get ambiguity while using the system.

2.1 Software Requirement Specification

The primary goal of the system analyst is to improve the efficiency of the existing system. For that study of specification of the requirement is very essential. For the development of the new system, a preliminary survey of the existing system will be conducted. An 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. This gives an idea about the system specifications required to develop and install the project "TECBIDDER".

The System Requirements Specification is based on the System Definition. The requirement specifications are primarily concerned with functional and performance aspect of a software product and emphasis are placed on specifying product characteristics implying how the product will provide those characteristics. One of the most difficult tasks is selecting software, once the system requirement is found out then we have to determine whether a particular software package fits for those system requirements. This selection summarizes the application requirement.

2.1.1 Hardware Requirement

Processor	Intel Core i5
RAM	4GB
Hard Disk	1TB
Mouse	Any pointing device

Figure 2.1: Hardware Requirement

2.1.2 Software Requirement

Front End	Microsoft Asp.Net
Back End	SQL Server 2014
Tools	Network Framework 4.5
Operating system	Windows 10
Software	Microsoft Visual Studio 2015

Figure 2.2: Software Requirement

2.2 UML Diagram

UML is a way of visualizing a software program using a collection of diagrams. The notation has evolved from the work of Grady Booch, James Rumbaugh, Ivar JAcobson and the RationalSoftware Corporation to be used for object-oriented design, but it has since been extended to cover a wider variety of software engineering projects. Today, 9 UML is accepted by the Object Management Group(OMG) as the standard for modelling software development.

UML stands for Unified Modeling Language.UML 2.0 helps extend the original UML specification to cover a wider portion of software development efforts including agile practices.

Improved integration between structural models like class diagrams and behavior models like activity diagrams.

The original UML specified nine diagrams; UML 2.x brings that number up to 13. The four new diagrams are called: communication diagram, composite diagram, interaction overview diagram and timing diagram. It also renamed state chart diagrams to state machine diagrams, also known as state diagrams.

Different types of UML Diagrams

The current UML standards call for 13 different types of diagrams: class, activity, object, use case, sequence, package, state, component, communication, composite structure, interaction overview, timing and deployment. These diagrams are organized into two distinct groups: structural diagrams and behavioral or interaction diagrams.

Structural Diagrams

- Class Diagram
- Object Diagram
- Package Diagram
- Component Diagram
- Deployment Diagram
- Composite structure Diagram

Behavioural Diagrams

- Activity Diagram
- Sequence Diagram
- Use Case Diagram
- State Diagram
- Communication Diagram
- Timing Diagram

2.2.1 Sequence Diagram

UML sequence diagrams are used to represent or model the flow of messages, events and actions between the objects or components of a system. Time is represented in the vertical direction showing the sequence of interaction of the header elements.

Sequence Diagrams are used primarily to design, document and validate the architecture, interfaces and logic of the system by describing the sequence of actions that need to be performed to complete a task. UML sequence diagrams are useful design tools because they provide a dynamic view of the system behavior which can be difficult to extract from static diagrams or specifications.

Although UML sequence diagrams are typically used to describe object-oriented software systems, they are also extremely useful as system engineering tools to design system architectures in business process, as message sequence charts and call flows for telecoms or wireless system design, and for protocol stack design and analysis.

A sequence diagram is an interaction diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the scenario. Sequence Diagrams are typically associated with use case realizations in the logical View of the system under development. Sequence diagrams are sometimes called event diagrams or event scenarios.

A sequence diagram shows, as parallel vertical lines (lifelines), different processes or objects that live simultaneously, and, as horizontal arrows, the messages exchanged between them, in the order in which they occur. This allows the specification of simple runtime scenarios in a graphical manner.

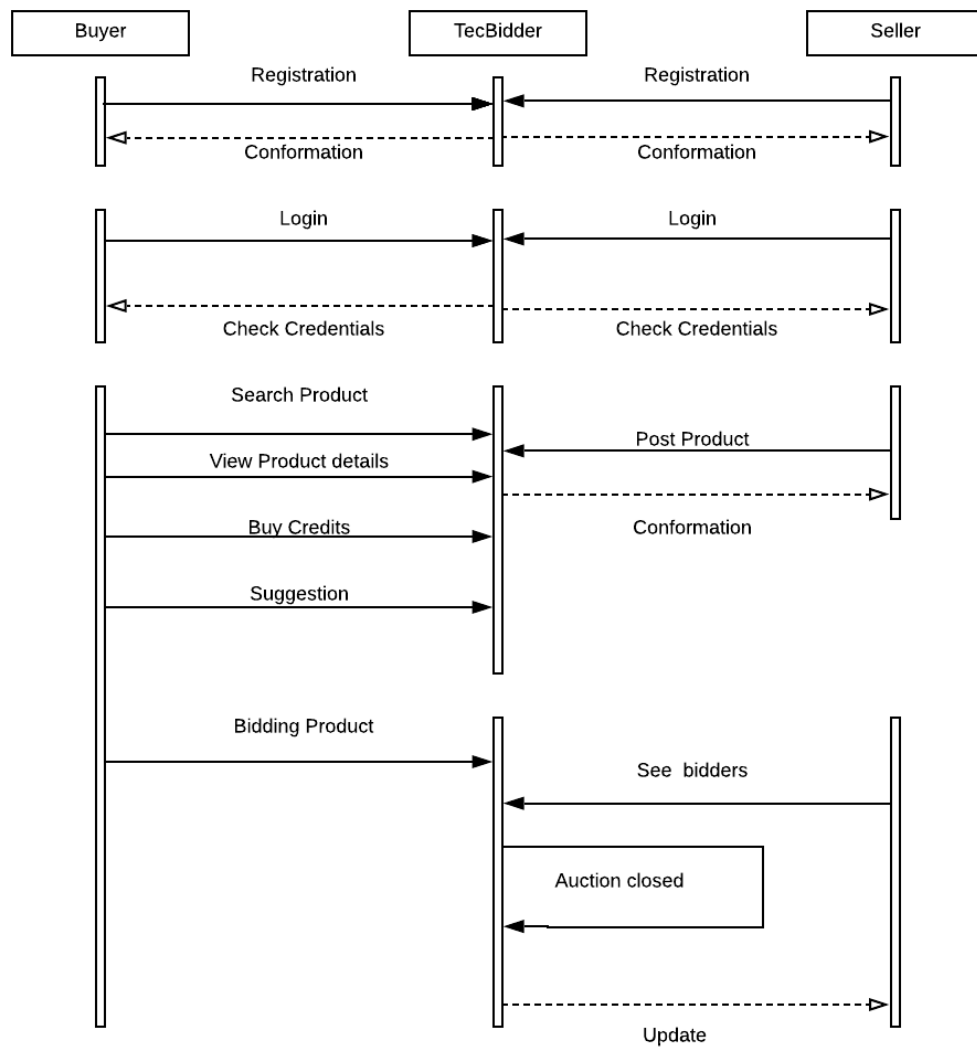


Figure 2.3: Sequence diagram

2.2.2 Activity Diagram

Activity diagram is another important diagram in UML to describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc.

The basic purposes of activity diagrams is similar to other four diagrams. It captures the dynamic behavior of the system. Other four diagrams are used to show the message flow from one object to another but activity diagram is used to show message flow from one activity to another. Activity is a particular operation of the system. Activity diagrams are not only used for visualizing the dynamic nature of a system, but they are also used to construct the executable system by using forward and reverse engineering techniques. The only missing thing in the activity diagram is the message part. It does not show any message flow from one activity to another. Activity diagram is sometimes considered as the flowchart. Although the diagrams look like a flowchart, they are not. It shows different flows such as parallel, branched, concurrent, and single.

2.2.3 Data Flow Diagram

Data flow diagram is the graphical representation of the system. It is a network that uses special symbols to describe the flow of data and process that transforms data throughout the system. Data flow diagram is a way of representing system requirements in a graphic form. A DFD also known as Bubble Chart has the purpose of clarifying system requirements and identifies major transformations that will become program in system design. So it is the starting point of design phase that functionally decomposes the requirements specifications down to the lowest level of details. A DFD consist of series of bubbles joined by lines.

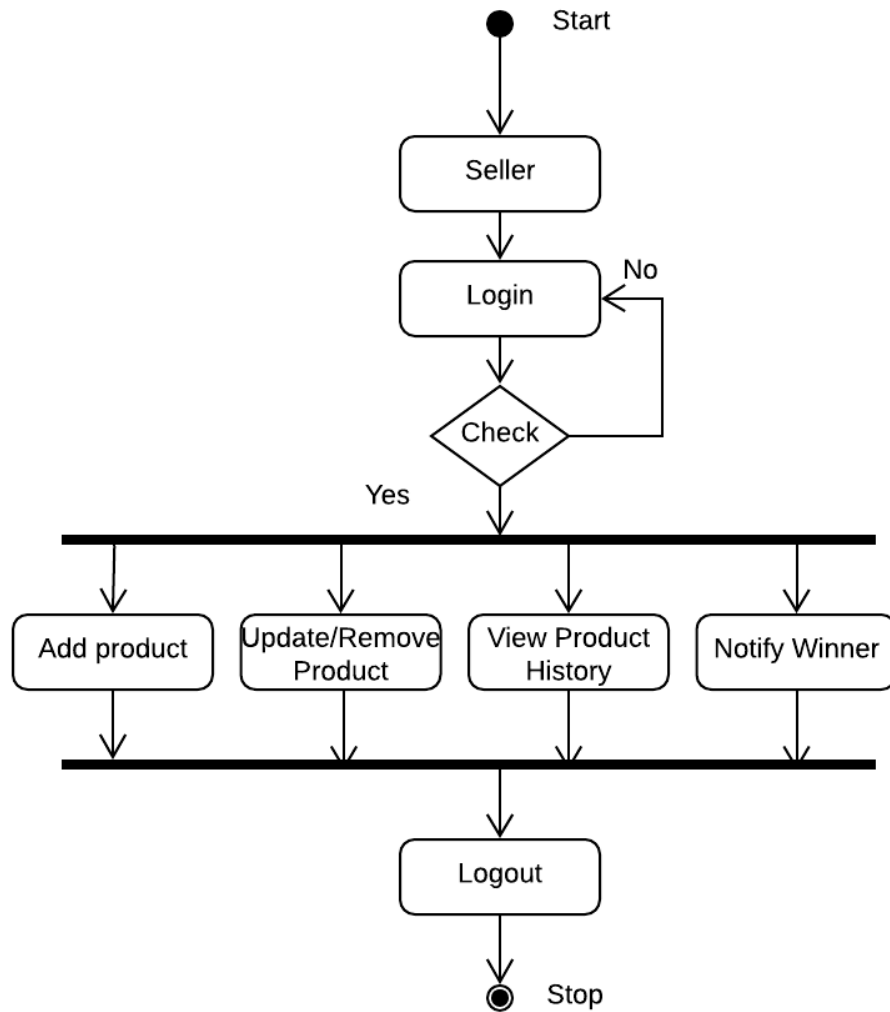


Figure 2.4: Activity Diagram for Seller

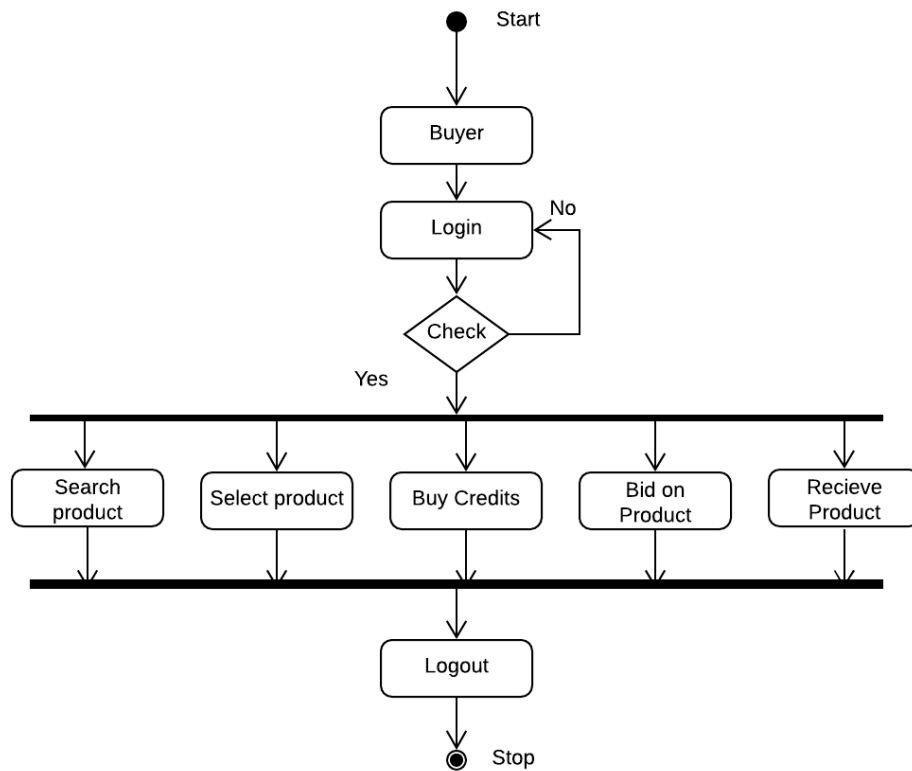


Figure 2.5: Activity Diagram for Buyer

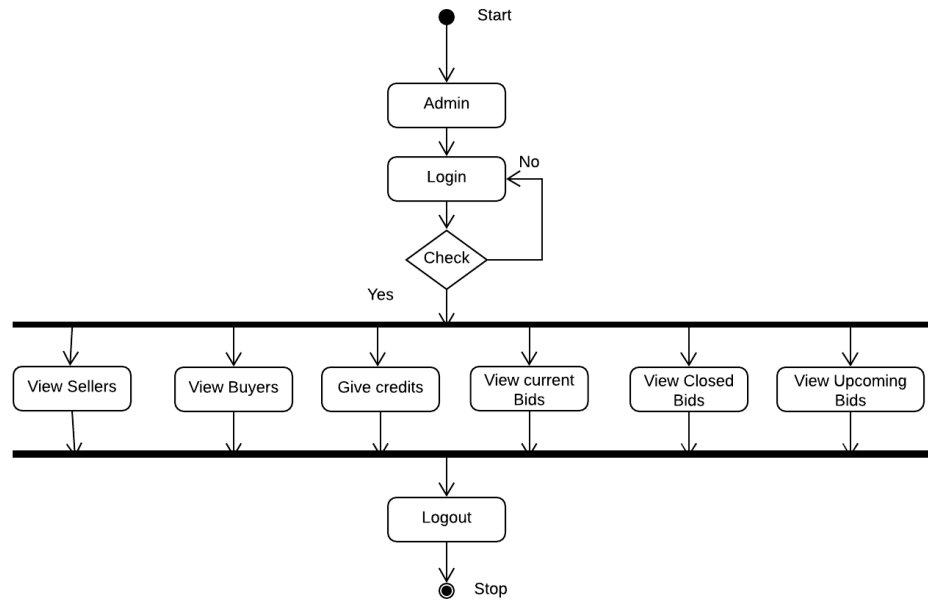


Figure 2.6: Activity Diagram for Admin

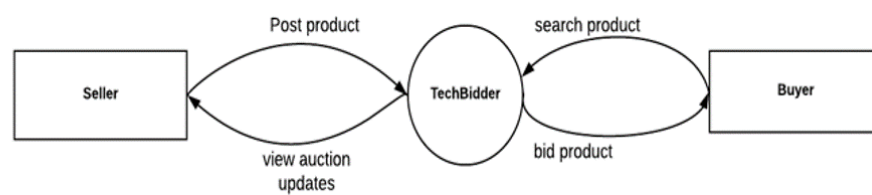


Figure 2.7: Context Level Data Flow Diagram

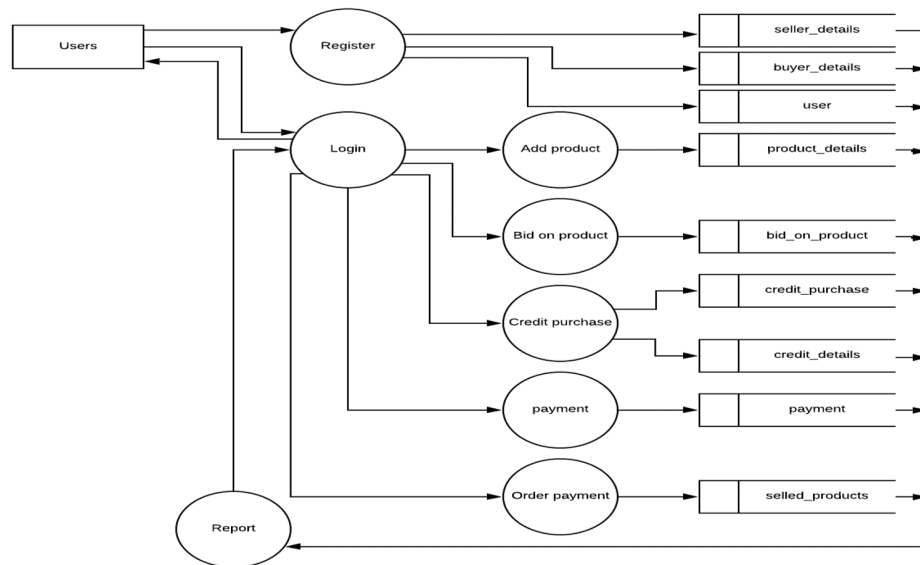


Figure 2.8: Level 1 Data Flow Diagram

2.3 System Design

The most creative and challenging phase of the system life cycle is the system design. The term design describes a final system and the process by which it is developed. It refers to the technical specification that will be applied in implementing the candidate system. In system design, we move from the logical to the physical aspects of the life cycle.

The first step is to determine how the output is to be produced and in what format. Then input data and master files have to be designed as the next step and finally the impact of the candidate system on the user and organization are documented and evaluated by the management. After identifying the problem and the limitation of the existing system, a detailed design of the proposed system is conducted.

Free flow personnel interview and reference to previous records prepared manually were the only methods taken to collect necessary information. At present, all organizations are on the path of computerization process.

Design is the phase that indicates the final system. It is the solution, the translation of requirements into ways of meeting them. In this phase the following elements were designed namely, data flow, data stores, processes, procedures was formulated in a manner that meet the project requirements. After logical design physical construction of the system is done.

The database tables, input screens, output screens, output reports are designed. After analyzing the various functions involved in the system the database, labels as dictionaries designed. Care is taken for the field name to be in self-explanatory form. Unnecessary fields are avoiding so as not affecting the storage system.

Care must be taken to design the input screen in the most user-friendly way so as to help even the novice users to make entries approximately in the right place. This is being accomplished by the use of giving online help messages, which are brief and cleanly prompts users for appropriate action.

Design is the only way that we can accurately translate a customer's requirements into a finished software product or system. Without design, risk of building an unstable system exist one that will fail when small changes are made, one that will be difficult to test.

All input screens in the system are user friendly and are designed in such a way that even a

layman can operate. The sizes of all screens are standardized.

Reports generated in this software give the finer accepts of the required information, which helps in taking vital decision.

The importance of the software design can be stated with a single word quality. Design is a place where quality is fostered in software development. Design is the only way where requirements are actually translated into a finished software product or system.

Mainly this project has four modules

- Admin Module
- Seller Module
- Buyer Module
- Payment Module

Admin Module

This module is the major part of our system admin can control over all working of system. Admin can see each and every sellers and buyers in the system. Each time admin will get reports from the system. The buyers in the system require credits to do purchase from the system that is given by the admin. Buyers will pay to admin by using credit card or Net banking method. Admin have separate login into the system for see the current bids, closed bids, upcoming bids etc.

Seller Module

Seller module facilitate the seller to login into the system. Each and every seller should register in the system to use system. Once a seller signed in the system, he can use the login option.

At the next time. Seller can sell his products to different buyers by put that for bidding. Seller can see each and every bid that happened on his/his product. Once bid happened on one product the payment is done user to seller. Seller can see the payment history and different ordered products. Seller can set base amount for his/her product. There is no intermediate between user seller payment processes. Whatever the amount paid by the buyer is directly go to the seller.

Buyer Module

This module facilitates the buyer to login into the system and he can do bidding on the system. The Buyer need to buy credits to participate in online bidding. Registration is free, secure and simple. Buyer can sign in into the Tecbidder account from the home page by verify his/her Email & Mobile number. If the customer is an already user, he can login by using Tecbidder id. To place bids on any auction, buyer need buy Credits. Buyer can buy Credits by multiple

payment methods, including: Debit/Credit Cards, VISA, MasterCard, Net Banking, Cash Cards etc. Real Competition starts when last few Seconds are remaining in Timer. Once Auction starts... Click on the 'BID NOW' button to place your bid. Each time you place a bid, number of Credits will be deducted from your balance, and time to the clock will be added. Time is added to clock every time a user places a 'BID'. This gives enough time for someone else to make the decision to BID if they are interested. If you are the last bidder when the timer expires.

Payment Module

Payment module is the important module of the system Tecbidder. There are two different types of modules in the system. One is the payment from user to admin and another one is the payment from buyer to seller. Buyer want to buy credits from admin then only he can able to participate in the bidding. Once a buyer won in bidding, he wants to order the product by pay the amount then only he can able to claim that the product is his own.

2.3.1 Input Design

In the input design, user-oriented inputs are converted in to a computer-based format. It also includes determining the record media, method of inputs, speed of capture and entry on to the screen. Online data entry accepts commands and data through a keyboard. The major approach to input design is the menu and the prompt design. In each alternative, the user's options are predefined. The data flow diagram indicates logical data flow, data stores, source and destination. Input data are collected and organized in to a group of similar data. Identified input media are selected for processing.

In this software importance is given to develop Graphical User Interface (GUI), which is an important factor in developing efficient and user-friendly software. For inputting user data attractive forms are designed. User can also select desired options from the menu, which provides all possible facilities.

End-users are people who communicate to the system frequently through the user interface, the design of the input screen should be according to their recommendations.

The data is validated wherever it requires in the project. This ensures only correct data is entered to the system. GUI is the interface used in input design. All the input data are validated in the order and if any data violates any condition the user is warned by a message and asks to re-enter data. If the data satisfies all the conditions then it is transferred to the appropriate tables in the database. This project uses text boxes and drop down to accept user input. If user enters wrong format then it shows a message to the user. User is never left in confusion as to what is happening. Instead appropriate error messages and acknowledgments are displayed to the user.

2.3.2 Output Design

A quality output is one, which meets the requirement of the end user and presents the information clearly. In any system results of processing are communicated to the user and to the other systems through outputs. In the output design it is determined how the information is to be displayed for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship and helps user decision making.

2.3.3 Database Design

A database is an organized mechanism that has the capability of storing Information through which a user can retrieve stored information in an effective and efficient Manner. The data is the purpose of any database and must be protected. The database design is a two level process. In the first step, user requirements are gathered together and a database is designed which will meet these requirements as clearly as possible. This step is called Information Level Design and it is taken independent of any individual Database Management System (DBMS). In the second step, this Information level design is transferred into a design for the specific DBMS that will be used to implement the system in question. This step is called Physical Level Design, concerned with the characteristics of the specific DBMS that will be used. A database design runs parallel with the system design.

Users Table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	User id
email	nvarchar (50)	Not null	Email id
user_name	nvarchar (10)	Not null	User name
password	nvarchar (20)	Not null	User password
role	int	Not null	User role

Figure 2.9: Users table

Admin Table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	id
name	nvarchar(50)	Not null	Should not be null
address	nvarchar(50)	Not null	Should not be null
phon_no	nchar(10)	Not null	Should not be null
admin_verify	binary(1)	Not null	Should not be null
user_id	int	Not null	Should not be null

Figure 2.10: Admin table

Seller details Table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Seller id
name	nvarchar (50)	Not null	Seller name
address	nvarchar (50)	Not null	Seller address
phone no	nchar (10)	Not null	Phone number of seller
admin_verify	int	Not null	Default
user_id	int	Not null	Foreign key

Figure 2.11: Seller details table

Selled products Table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Selled products id
product_id	int	Not null	Foreign key
seller_id	int	Not null	Foreign key
buyer_id	int	Not null	Foreign key
final_price	int	Not null	Final price

Figure 2.12: Selled Products table

Products Table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Product details id
name	nvarchar (50)	Not null	Product name
description	nvarchar (50)	Not null	Product description
price	int	Not null	Product price
bid_start_time	nvarchar (50)	Not null	Starting time of bid
photo	nvarchar (100)	Not null	Product picture
admin_verify	int	Not null	default
bid_time_intervel	int	Not null	Bid time interval
user_id	int	Not null	Foreign key
bid_end_time	nvarchar (50)	Not null	Bid end time

Figure 2.13: Products table

Payment

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Payment details id
user_id	int	Not null	Foreign key
cardnumber	nvarchar(25)	Not null	Credit Card number of user
cardholder	nvarchar(50)	Not null	Card holder name
expirydate	nvarchar(50)	Not null	Card Expiry date
cvv	int	Not null	Security number
amount	int	Not null	Payment amount
paymentdate	nvarchar(50)	Not null	Payment date
product_id	int	Not null	Foreign key

Figure 2.14: Payment table

Buyer details table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Buyer details id
name	nvarchar(50)	Not null	Buyer name
address	nvarchar(50)	Not null	Buyer address
pincode	numeric(6,0)	Not null	Pin code
phone_no	nchar(10)	Not null	Phone number of user
landmark	nvarchar(50)	Not null	Land mark place
user_id	int	Not null	Foreign key

Figure 2.15: Buyer details table

Credit details table

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Credit details id
credits	int	Not null	Credits number
updated_at	nvarchar(50)	Not null	Updated date
user_id	int	Not null	Foreign key

Figure 2.16: Credit details table

Credit purchase

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Credit purchase id
purchase_date	nvarchar(50)	Allow null	Purchased date
amount	decimal(10,2)	Allow null	Amount
credits	int	Allow null	credits
user_id	int	Allow null	Foreign key

Figure 2.17: Credit purchase table

Bid on product

FIELDS	DATATYPE	CONSTRAINT	DESCRIPTION
id	int	Primary key	Bid details id
product_id	int	Not null	Foreign key
user_id	int	Not null	Foreign key
credits	int	Not null	credits
biddatetime	nvarchar(50)	Not null	Bid time
bid_no	int	Not null	Bid number
Total price increase	int	Not null	Increased price

Figure 2.18: Bid on product table

2.4 Tools and Platform

2.4.1 Overview of Frond End Tool

Visual Basic .NET, Visual C++ .NET, and Visual C# .NET all use the same integrated development environment (IDE), which allows them to share tools and facilitates in the creation of mixed-language solutions. Visual C#, pronounced C sharp, is a new object-oriented programming language that is an evolution of C and C++, providing a simple and type-safe language for developing applications.

Introduction to Microsoft.Net

Microsoft .Net is the umbrella term for the Microsoft's Strategy of to move from a client centric model to a network centric model. It can be best described as the initiative that will allow the Internet to be the basis of a new operating system. It is free from the constraints of hardware by making user data available from the Internet. It is important to developer because it will change the way. They develop applications by allowing them to hook on web services. The vision of .NET is globally distributed system that use XML as the universal glue to allow functions running on different computers across the world to come together in a single application. In

this vision, systems from servers to wireless palmtops, will share the same general platform, with versions of .NET available for all of them, and with each of them able to collaborate with others.

The .NET Platform

The .NET platform is the developer's perspective in the view of .NET as an amalgam of a set of services, specification, guidelines and tools for incorporating the .NET vision. It includes the .NET infrastructure and tools to build and operate a new generation of smart Internet devices. As of the developer .NET platform is something that helps to put the .NET vision into a reality and hence helps the developers in providing the user with the .NET experience.

The .NET Products

The .NET products will include a whole range of tools and servers that rely on XML as a language to describe data and SOAP (Simple Object Access Protocols) as protocol for transmission of data between products. This includes Microsoft Windows.NET, MSN.NET, Personal subscription services, Microsoft Visual Studio.NET and Microsoft .NET for .NET.

The .NET Framework

The .NET framework is an environment for building, deploying and running web services and other applications. Microsoft .NET framework is a standard that aims at integrating web application and services development to enable deployment and maintenance of HTTP and XML. It goes beyond development to enable deployment and maintenance of application and services along with handling their scalability and reliability.

The .NET Services

The .NET services will include all the web services and other corporate services provided by the third party vendors. A vast range of partners and developers will have the opportunity to produce corporate and vertical services built on the .NET platform.

Common Language Runtime

The .NET framework provides a runtime environment called the Common Language Runtime, which manages the execution of code and provides services that make the deployment process easier. Compilers and tools expose the runtime's functionality and enable you to write code that benefits from this managed execution environment. The Common Language Runtime makes it easy to design components and applications whose objects interact across language. Objects written in different languages can communicate with each other and their behaviors can be tightly integrated.

2.4.2 Overview of Back End Tool

SQL server is a client/server relational database management system (RDBMS) that uses transact-SQL to send request between a client and SQL server.

Microsoft SQL Server 2014 is the most advanced, trusted, and scalable data platform released to date. Building on the success of the original SQL Server 2014 release, SQL Server 2014 has made an impact on organizations worldwide with its groundbreaking capabilities, empowering end users through self-services business intelligent(BI), bolstering efficiency and collaboration between database administrators(DBAs) and application developers, and scaling to accommodate the most demanding data workloads.

Client/server Architecture

SQL server is designed to be a client/server system. Client/server systems are constructed so that the database can reside on a central computer, known as a server, and be shared among several users. When users want to access the data in SQL server, they run an application on their local computer, known as a client that connects over a network to the server running SQL server. SQL server can work with thousands of client applications simultaneously. The server has features to prevent the logical problems that occur if a user tries to read or modify data currently being used by others.

Chapter 3

SYSTEM TESTING

3.1 Testing methodologies and strategies

Software testing is an integral part of to ensure software quality, some software organizations are reluctant to include testing in their software cycle, because they are afraid of the high cost associated with the software testing .There are several factors that attribute the cost of software testing. Creating and maintaining large number of test cases is a time consuming process. Furthermore, it requires skilled and experienced testers to develop great quality test cases.

Even with the wide availability of automation tools for testing, the degree of automation mostly remains at the automated test script level and generally significant amount of human intervention is required in testing. In addition data collected, as testing is conducted provides a good indication of software quality as a whole. The debugging process is the most unpredictable part of testing process. Testing begins at the module level and work towards the integration of entire computer based system. No testing is completed without verification and validation part.

The goal of verification and validation activities are to access and improve the quality of work products generated during the development and modification of the software. Testing plays a vital role in determining the reliability and efficiency of the software and hence is very important stage in software development. Tests are to be conducted on the software to evaluate its performance under a number of conditions. Ideally, it should do so at the level of each module and also when all of them are integrated to form the completed system.

In the project "TECBIDDER" the testing has been successfully handled with the modules. The test data was given to each and every module in all respect and got the desired output. Each module that has been tested is found working properly

3.1.1 Unit Testing

Here we test each module individually and integrated the overall system. Unit testing focuses verification efforts even in the smallest unit of software design in each module. This is known as "module testing".

Testing in Login Page

It will test the user enter valid username and password.

Testing in Bid On Product page

It will test the user has credits to bid on product. Here unit test is performed for each and every details entered into system.

Testing in Add Product page

The unit testing is performed to determine if there are any issues with the web page. It will test that if the product description is added correctly and provide necessary details by seller. This page mainly deals with the auction for sale.

Testing in Payment page

The Payment module plays an important role in this system hence it is important to test this module seriously. It will test that if the user enter valid credit card number and cvv.

3.1.2 Validation Testing

The process of evaluating software during the development process or at the end of the development process to determine whether it satisfies specified business requirements. Validation Testing ensures that the product actually meets the client's needs.

Testing in Login Page

1. Test Case 1 : User Click LOGIN button without enter username and password
Result : Message like "Please fillout this field" should be appear.
2. Test Case 2 : User enter valid Username and invalid password
Result : Message like "Check your credentials" should appear
3. Test Case 3 : user enter valid username and password
Result : Page should be navigate to home page

Testing in Bid On Product page

1. Test Case 1 : Buyer logged in and click BID NOW button without enough credits.
Result : Message like "You Don't have enough credits" Please buy some credits! should be appear.
2. Test Case 2 : Buyer logged in and click BID NOW button with enough credits.
Result : Message like "Do you want to bid on this product" should be appear.

Testing in Payment page

1. Test Case 1 : Buyer enter invalid card number
Result : Page should not respond
2. Test Case 2 : Buyer Click Pay button with enter necessary fields
Result : Page Should navigate to home page for bid product.

Testing in Add Product page

1. Test Case 1 : Seller click Add product button without enter product description.
Result : Message like "Please fillout this field" should be appear
2. Test Case 2 : Seller click Add product button by provide necessary fields.
Result : Page should Naviagte to home page

3.1.3 User Acceptance Testing

User acceptance testing is a test conducted to determine if the requirements of a specification or contract are met. It may involve black-box testing performed on a system prior to its delivery. This testing is done by the end user of the system to check and verify the all the functionalities of the system is properly working as per the requirements of the user. The user can test each and every functionalities of the system from the starting one by one to ensure the accuracy and correctness of the system. The user acceptance testing is very important to a system.

3.1.4 Integration Testing

Data can be lost across an interface, one module can have an adverse effect on the other sub-functions, when combined they may not perform the desired functions. Integrated testing is the systematic testing to uncover the errors within the interface. This testing is done with simple data and the developed system has run successfully with this simple data. The need for integrated system is to find the overall system performance. The Modules of this project are connected and tested.

After splitting the programs into units, the units were tested together to see the defects between each module and function. It is testing to one or more modules or functions together

with the intent of finding interface defects between the modules or functions. Testing completed as part of unit or functional testing, integration testing can involve putting together groups of modules and functions with the goal of completing and verifying meets the system requirements.

3.1.5 System Testing

When a system is developed it is hoped that it perform properly. System testing is the process of checking if the developed system is working according to the original objectives and requirements. In this I have done system testing for ensuring whether the software is friendly to the user. Also we have checked that when we are giving the correct input whether the output is correct or not. Also we have tested how the system will react to the incorrect inputs. In our organization there is a separate testing team available for testing. Before release of client product they will lock the work and test for any error and report it.

Chapter 4

SYSTEM IMPLEMENTATIONS

Implementation is the stage where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and in giving confidence on the new system for the users that it will work efficiently and effectively.

The system can be implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover and an evaluation of change over methods a part from planning. Two major tasks of preparing the implementation are education and training of the users and testing of the system.

The more complex the system being implemented, the more involved will be the systems analysis and design effort required just for implementation.

The implementation phase comprises of several activities. The required hardware and software acquisition is carried out. The system may require some software to be developed. For this, programs are written and tested. The user then changes over to his new fully tested system and the old system is discontinued.

4.1 Implementation Plan

The proposed system is planned to be implemented to provide a platform for the customer to buy the products by bidding in a competitive manner and remove to ensure customer satisfaction. The proposed system gives an opportunity to those people who can't afford to purchase costly branded products, they can try our risk free auctions to win their desired products.

Chapter 5

CONCLUSION

The introduction of Tecbidder can greatly benefit the customers by making it very easy for them to do online purchase in new and interesting manner. It is not just providing an E-commerce website but also give additional benefits for the user.

The analysis as of now is that compared to other E-commerce websites our system can genuinely improve the reliability of the service while also provide additional features for the user. It provide an ethical bidding environment for our customers also provide accurate product and pricing information. Tecbidder not just providing an E-commerce site. It gives an opportunity to those people who can't afford to purchase costly branded products, they can try our risk free auctions to win their desired products like Smartphones, Laptop, Tablets branded watches.

Chapter 6

REFERENCES

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- iii. “Programming Microsoft ASP.NET 3.5 edition by dino Esposito

Websites

- i. https://www.youtube.com/watch?v=zFYoskhjt0Q&list=PLN_YHffrgw4kwVV7gOaC9VLeAipd6
- ii. <https://www.youtube.com/watch?v=J7aStGi3hE8>
- iii. <http://servicevet.vet/>

Chapter 7

APPENDICES

7.1 Screen Shots of Input and Output design

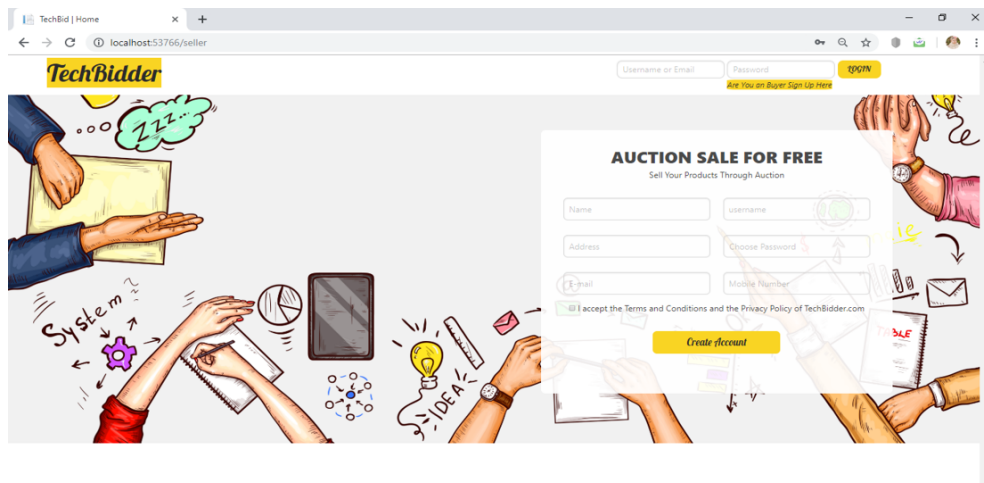


Figure 7.1: Seller Login

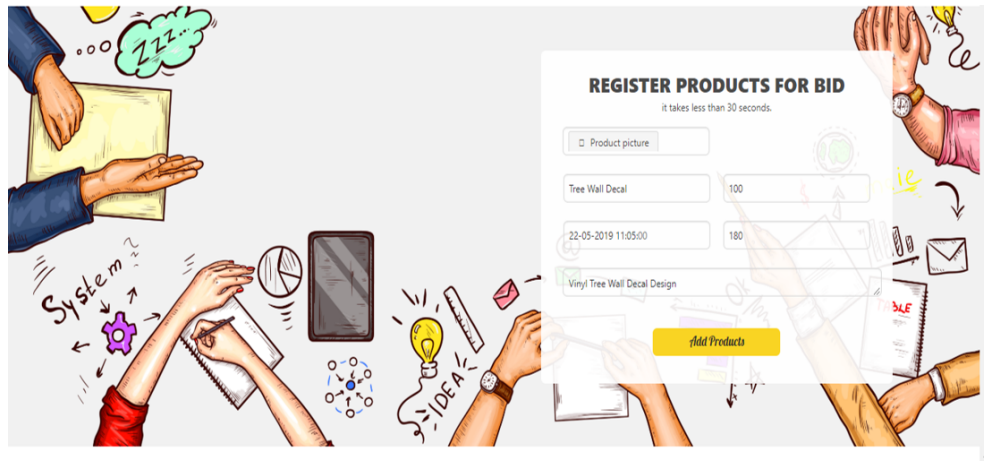


Figure 7.2: Add Product

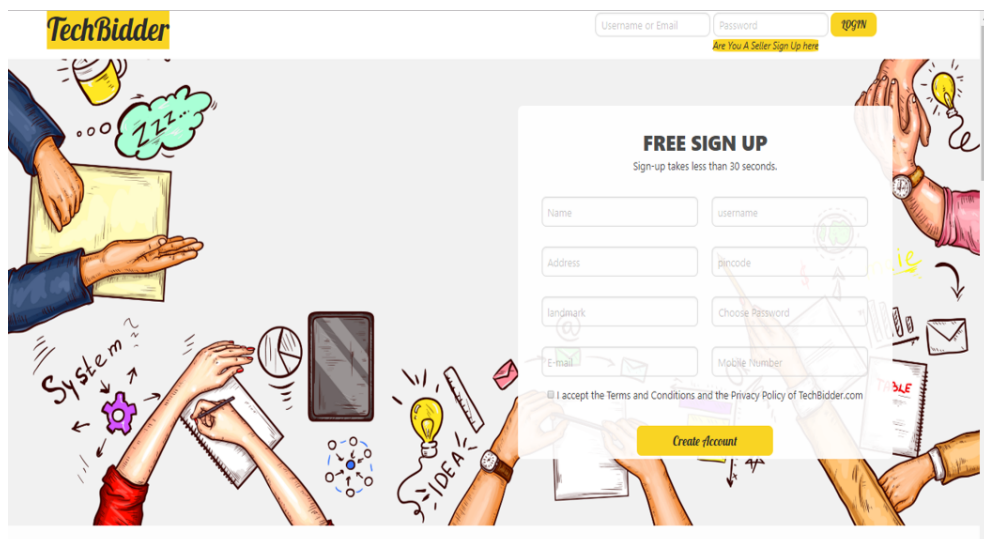


Figure 7.3: Buyer Login

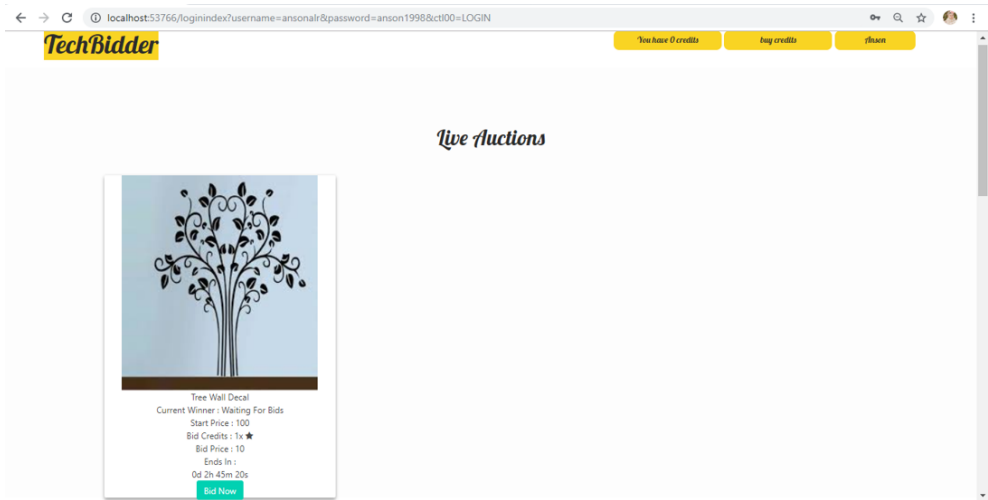


Figure 7.4: Live Auction

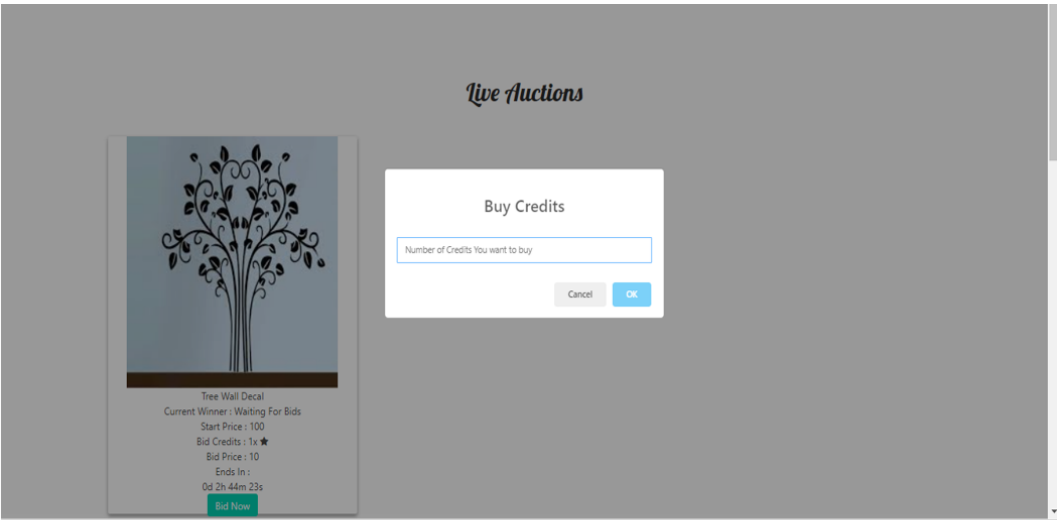


Figure 7.5: Buy Credits

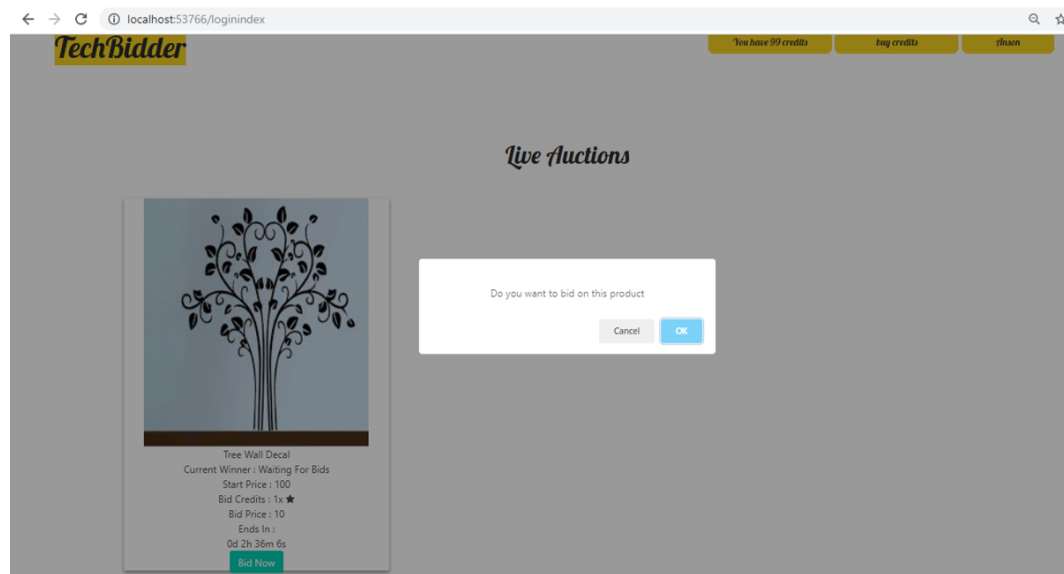


Figure 7.6: Bid On Product

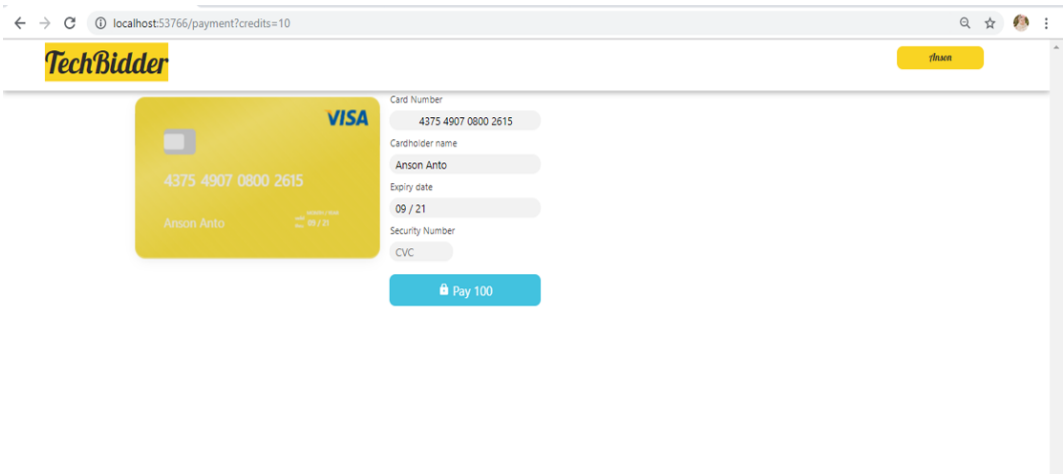


Figure 7.7: Payment

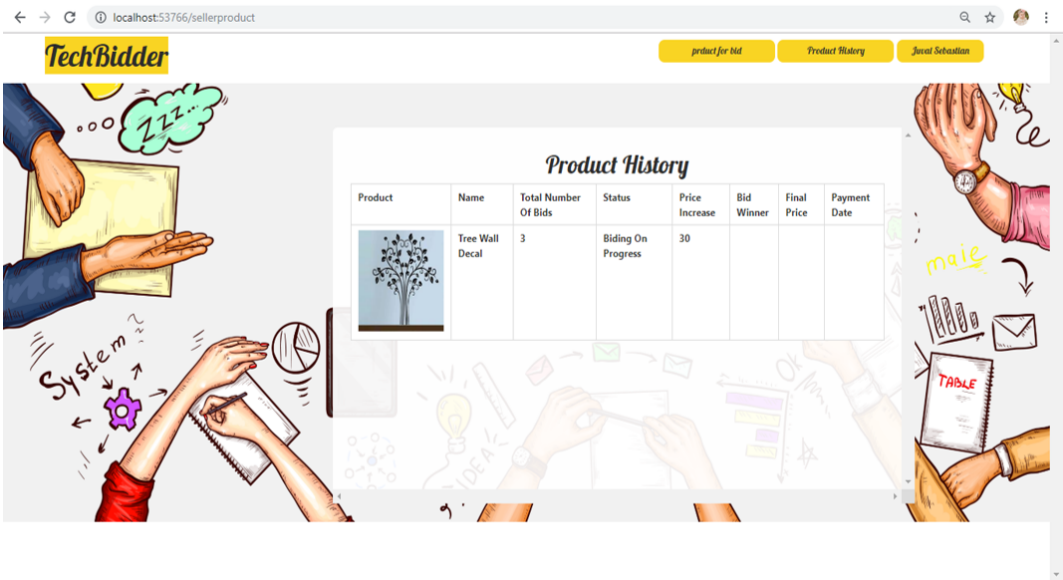


Figure 7.8: Product History

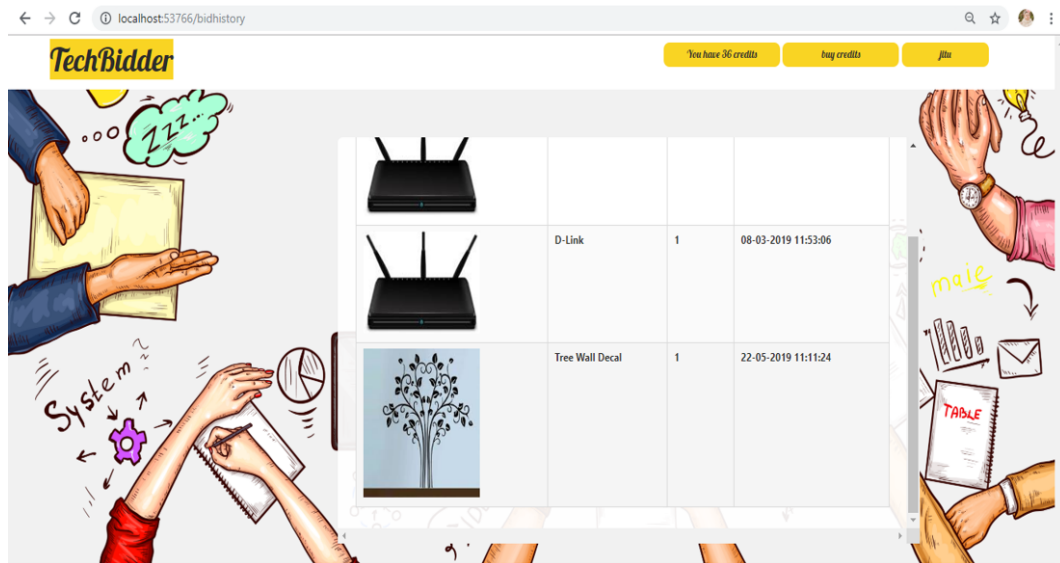


Figure 7.9: Bid History

7.2 Sample Source code

addproducts.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;
using System.IO;
namespace TechBid
{
    public partial class addproducts : System.Web.UI.Page
    {
        SqlConnection con;
        protected void Page_Load(object sender, EventArgs e)
        {
            if ((Session["id"] == null && Session["role"] == null) || int.Parse(Ses
            {
                Response.Redirect("index.aspx");
            }
        }

        public void connection()
```

```

{

con = new SqlConnection(@" Data Source=(LocalDB)\MSSQLLocalDB;AttachDbF
con.Open();

}

public void insertProducts(object sender, EventArgs e)
{

String name = Request.Form["name"];
String price = Request.Form["price"];
DateTime bidstarttime =Convert.ToDateTime(Request.Form["biddatetime"].T
//Response.Write(bidstarttime);
String bidtime = Request.Form["bidtime"];
String description = Request.Form["description"];
DateTime bidentime = bidstarttime.AddMinutes(int.Parse(bidtime));
String filePath="";
HttpPostedFile postedFile = Request.Files["productimage"];

//String imagename = name.Replace(" ", string.Empty) + bidstarttime.ToS
if (postedFile != null && postedFile.ContentLength > 0)
{
if (!Directory.Exists(Server.MapPath("./Uploads/")))
{

Directory.CreateDirectory(Server.MapPath("./Uploads/"));
}
filePath = Server.MapPath("./Uploads/") + Path.GetFileName(postedFile.F
postedFile.SaveAs(filePath);
}
else
{
Response.Write("no imge");
}

String query= "insert into product_details (name,description,price,bid
//String query = "insert into product_details (name,description,price,
connection());
SqlCommand insertproduct = new SqlCommand(query, con);
try
{
int cmd=insertproduct.ExecuteNonQuery();
con.Close();
}

```

```
Response.Write(cmd);  
}  
catch(Exception ex)  
{  
    con.Close();  
    Response.Write("addproducts.aspx");  
}  
con.Close();  
Response.Redirect("sellerindex.aspx");  
  
}  
}  
}
```


adminbid.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;

namespace TechBid
{
    public partial class adminbid : System.Web.UI.Page
    {
        SqlConnection con;
        public List<ProductDetails> bids = new List<ProductDetails>();
        protected void Page_Load(object sender, EventArgs e)
        {
            if ((Session["id"] == null && Session["role"] == null) || int.Parse(Ses
            {
                Response.Redirect("index.aspx");
            }
            userbidhistory();
        }
        public void connection()
        {
            con = new SqlConnection(@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbFi
            con.Open();

        }
        public void userbidhistory()
        {
            string query = "select product_details.name,product_details.photo,bid_o
            connection();
            SqlCommand command = new SqlCommand(query, con);
            SqlDataReader reader = command.ExecuteReader();
            if (reader.HasRows)
            {
                while (reader.Read())
                {
                    var bid = new ProductDetails();
                    bid.Name = reader["name"].ToString();
                    bid.Photo = reader["photo"].ToString();
                }
            }
        }
    }
}
```

```
bid.winuser = reader["bidder"].ToString();
bid.Credits = int.Parse(reader["credits"].ToString());
bid.Start_time = reader["biddatetime"].ToString();
bids.Add(bid);
}
}
con.Close();
}
}
```

adminbuyer.aspx.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;

namespace TechBid
{
    public partial class adminbuyer : System.Web.UI.Page
    {
        SqlConnection con;
        public List<ProductDetails> buyers = new List<ProductDetails>();

        protected void Page_Load(object sender, EventArgs e)
        {
            if ((Session["id"] == null && Session["role"] == null) || int.Parse(Ses
            {
                Response.Redirect("index.aspx");
            }
            buyerhistory();
        }
        public void connection()
        {
            con = new SqlConnection(@"Data Source=(LocalDB)\MSSQLLocalDB;AttachDbF
            con.Open();

        }
        public void buyerhistory()
        {
            connection();
            String query = "select users.*,buyer_details.* from users inner join bu
            SqlCommand cmd = new SqlCommand(query, con);
            SqlDataReader reader = cmd.ExecuteReader();
            if (reader.HasRows)
            {
                while (reader.Read())
                {
```

```
var product = new ProductDetails();
product.Name = reader["name"].ToString();
product.Description = reader["email"].ToString();
product.Photo = reader["address"].ToString();
product.winprice = reader["phone_no"].ToString();

query = "select count(*) from solded_products where buyer_id='" + reader["buyer_id"].ToString() + "'";
cmd = new SqlCommand(query, con);
product.Credits = int.Parse(cmd.ExecuteScalar().ToString());

query = "select count(*) from bid_on_product where user_id='" + reader["user_id"].ToString() + "'";
cmd = new SqlCommand(query, con);
product.PriceIncrease = int.Parse(cmd.ExecuteScalar().ToString());

query = "select Sum(credits) from credit_purchase where user_id='" + reader["user_id"].ToString() + "'";
cmd = new SqlCommand(query, con);
product.Price = cmd.ExecuteScalar().ToString();

query = "select count(*) from payment inner join solded_products on payment.product_id = solded_products.product_id";
cmd = new SqlCommand(query, con);
product.winuser = cmd.ExecuteScalar().ToString();

buyers.Add(product);

}

}

}
}
}
```