# Contents:

- Introduction
- Problem Definition
- System environment
- Software requirement
- Hardware requirements
- System Analysis
  - Purpose
  - Project Scope
  - Existing System
  - Proposed System
  - System Overview

#### Introduction:

In this chapter we mentioned the software and hardware requirements, which are necessary for successfully running this system. The major element in building systems is selecting compatible hardware and software. The system analyst has to determine what software package is best for the "Online Auction System" and, where software is not an issue, the kind of hardware and peripherals needed for the final conversion.

#### **Abstract**

An online auction project that holds online auctions of various products on a website and serves sellers and bidders accordingly. The system is designed for allow users to set up their products for auctions and bidders to register and bid for various products available for bidding.

## **Introduction to the System:**

The purpose of this project is to build an "online auction system", for buyers and sellers to come together and trade almost anything. That's why the system consists in a web-portal where registered users can propose new auctions, place bids in order to buy the items on auction. Auctions have a name, description, a photo uploaded by users and an end period, users cannot place bids when the auction interval ends. There is the possibility to extend the interval. Moreover, administrators have the possibility to accept or refuse auctions proposed by users, to view information about users and items and to create, modify and delete the categories of auctions. The system is realized with 3-tier architecture: a relational database that store the information regarding items, users, auctions and categories of auction; an application server that cares about the business logic of the system and the presentation layer that consists in the web browser where users can interact with the system. With such architecture, the database is never directly accessed.

#### **Problem Definition:**

The problem with public auction is that the participation of the general public is very limited. The aim of the project is to socialize the auction so that people from far & wide and even across the continent can participate in it. The "Online Aution" site is developed with a vision to wipe out the inherent problems of "Conventional Auction House". The salient features of the site are as follows:

- 1. Paperless Auction System
- 2. It's accessible to everyone, at any time no matter where they are.
- 3. Reliable user validation & checking.
- 4. Easy online settlement.

"Online Auction" is designed in such a way that it is as user friendly as possible. So any aspiring bidder or seller can visit the site and engage in bidding with least effort.

#### **System Environment:**

After analysis, some resources are required to convert the abstract system into the real one.

The hardware and software selection begins with requirement analysis, followed by a request for proposal and vendor evaluation.

Software and real system are identified. According to the provided functional specification all the technologies and its capacities are identified. Basic functions and procedures and methodologies are prepared to implement. Some of the Basic requirements such as hardware and software are described as follows: -

### Hardware and Software Specification

# **Software Requirements:**

- Technology: Python Django
- IDE: Pycharm/Atom
- Client-Side Technologies: HTML, CSS, JavaScript, Bootstrap
- Server-Side Technologies: Python
- Data Base Server: Sqlite
- Operating System: Microsoft Windows/Linux

# **Hardware Requirements:**

- Processor: Pentium-III (or) Higher
- Ram: 64MB (or) Higher
- Hard disk: 80GB (or) Higher

## Purpose:

The purpose is to develop a user-friendly auctioning site where product can be auctioned and provide value-added services to the bidders and the sellers.

Secure registration for all users including a personal profile.

Another purpose for developing this application is to generate the report automatically.

# **Project Scope:**

Online bids take place at any time, 24/7. In a word, a market that never sleeps.

There are literally no geographical bounderies with online auctions.

Items are listed and allowing buyers to research and decide properly before bidding.

Once provided an internet access, sellers and bidders can take part at the auction from everywhere.

### **System Overview:**

The key features required in the system are as follows:

- Bidder Login: Here the buyer or the product bidder can see a list of products up for bidding and place his/her bid on the product.
- Seller Login: This is the seller module where the seller posts a product up for auctions.
- Admin Login: This module is for the administrator who may delete fake or unwanted ads.
- Report generation: Admin gets a report whenever wanted stating various products up for bidding and various users registered on the website.

#### Implementation State: -

#### Python: -

Python is a widely used general-purpose, high level programming language. Python is a programming language that lets you work quickly and integrate systems more efficiently.

#### HTML: -

HTML (Hypertext Markup Language) is the set of markup symbols or codes inserted in a file intended for display on a World Wide Web browser page.

# CASCADING STYLE SHEET (CSS): -

Cascading Style Sheets (CSS) are a collection of rules we use to define and modify web pages. CSS are similar to styles in Word. CSS allow Web designers to have much more control over their pages look and layout. For instance, you could create a style that defines the body text to be Verdana.

# Javascript: -

JavaScript is a programming language commonly used in web development. It was originally developed by Netscape as a means to add dynamic and interactive elements to websites. The source of

the webpage. It can also be referenced in a separate .JS file, which may also be viewed in a browser

# Django: -

Django is a web application framework written in Python programming language. It is based on MVT (Model View Template) design pattern. The Django is very demanding due to its rapid development feature.

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#### Implementation and System Testing

### System Testing

The goal of the system testing process was to determine all faults in our project. The program was subjected to a set of test inputs and many explanations were made and based on these explanations it will be decided whether the program behaves as expected or not. This Project go through two levels of testing

- 1. Unit testing
- 2. Integration testing

#### 1. UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed. In order to test a single module, that's need to provide a complete environment.

#### 2. INTEGRATION TESTING

In the Integration testing we test various combination of the project module by providing the input. The primary objective is to test the module interfaces in order to confirm that no errors are occurring when one module invokes the other module.

#### **FUTURE SCOPE**

This web application involves almost all the basic features of the online auction system. The future implementation will be online help for the users and chatting with website administrator.

## **CONCLUSION**

The project entitled "Online Auction System" is developed using HTML, CSS and Bootstrap as front end and Python Django and Sqlite database in back end to computerize the process of auction i.e., selling and buying product. This project covers only the basic features required.