DOCUMENTATION FOR AUCTION PROJECT

Team-1

Version 1.00

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 to allow users to set up their products for auctions and bidders to register and bid for various products available for bidding.

An online auction is an auction which is held over the internet. It is a popular method for buying and selling products and services. Online Auction System's helps to customer to sell and buy product in best price. It is developed with the objective of making the system reliable, easier and fast. This application is used to sell the anything on the website from house. This application is used to sell the anything on the website from house. It developed with the objective of making the system reliable, easier and fast. The application is made as simple as surfing a website. There by non-technical persons can also interact with the processing on the application easily in this system contains mostly 3 Modules: -

- 1.Login Module: in this Login Module Help us to Both Seller and Buyer for User Authentication Purpose.
- 2.Biding Module: Seller and Buyer once enter the UI section then display all Item Price and Current Price for the Product

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Introduction to the System:

The purpose of this project is to build an "on-line auction management system", a place for buyers and sellers to come together and trade almost anything. In fact, 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, a description, possibly a photo (of the related item) uploaded by users and an end period: users cannot place bids when the auction interval (start - end period) ends, but in case there were no offers for an item, 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 (auctions regarding cars, books, music stuff etc.). 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: for example, administrators can change the data stored in the database without connecting directly to it but using their own browser.

ENVIRONEMT SETTINGS

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: Visual Studio Code

Client-Side Technologies: HTML, CSS, JavaScript, Bootstrap

Server-Side Technologies: Python

Data Base Server: SQLite

Operating System: Microsoft Windows/Linux

Version Control Tool: -GitHub

Unit-Testing Tool: Junit

Hardware Requirements:

• Processor: Intel (or) Higher

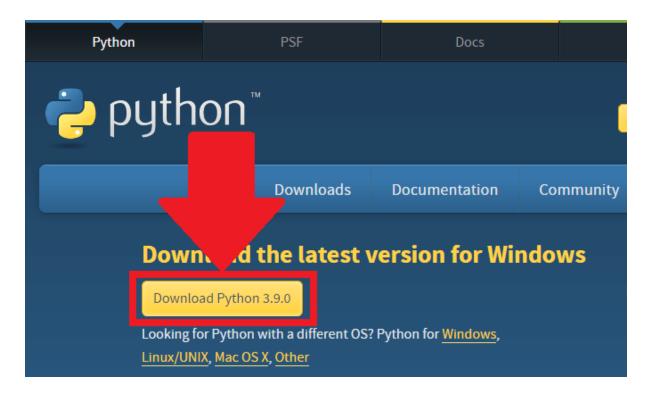
• Ram: 8GB (or) Higher

Hard disk: 1TB (or) Higher

Steps to Download and Install Python 3.9 on Windows

Step 1: Download Python 3.9

To start, go to <u>python.org/downloads</u> and then click on the button to download the latest version of Python:



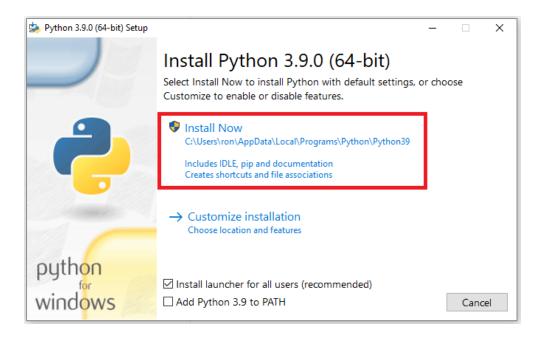
Step 2: Run the .exe file

Next, run the .exe file that you just downloaded:



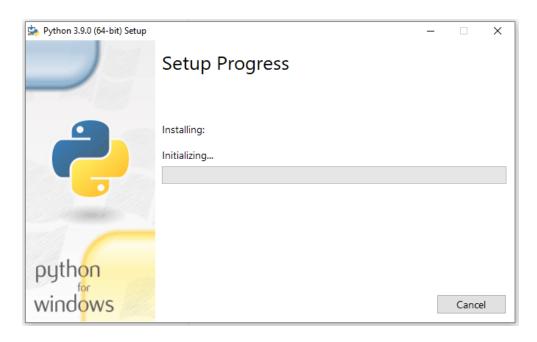
Step 3: Install Python 3.9

You can now start the installation of Python by clicking on **Install Now**:

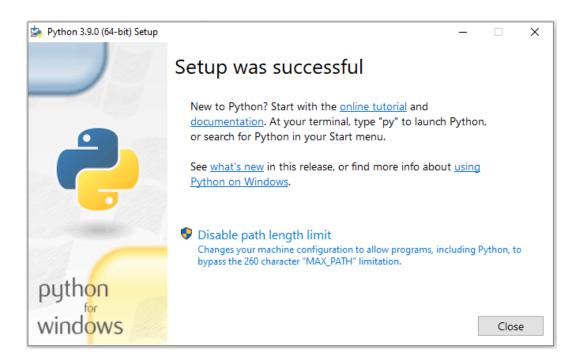


Important: You want to be sure to check the box that says **Add Python 3.x to PATH** as shown to ensure that the interpreter will be placed in your execution path.

Your installation should now begin:



After a short period of time, your setup would be completed:



How to Setup Virtual Environment: -

Open Command Prompt: -

Type the Command: -

Pip install virtualenv

Why do we need a virtual environment?

virtualenv allows you to avoid installing Python packages globally by making an isolated python environment. That means it will install packages just in your desire project folder. After activating you can install your packages using pip.

How to Activate virtual Environment in Folder: -

Type the Command: -

E:\auction>.env\Scripts\activate

Using this Command make a Directory to the Folder.

How to Install Django Framework: -

(venv) E:\auction>pip install django

Using the Command install the Django Framework, Help of pip.

What is Django?

Django is a high-level Python web framework that **enables rapid development of secure and maintainable websites**. Django is an extremely popular and fully featured server-side web framework, **written in Python**. This module shows you why Django is one of the most popular web server frameworks,

How to install Django command.

Using pip command install Django: -

C:/>pip install django

Django Project Create: -

C:/>django-admin startproject auction

Run Server in Command: -

(Env)C:/>py manage.py runserver

How to Open Folder in Visual Studio Code: -

- 1. Open Visual Studio Code
- 2. Click on Open Folder Options
- 3. Then Run the Server

```
EXPLORER ... 🕏 settings.py 🕏 manage.py 🗙
       > bidding 1 #!/usr/bin/env python
> accounts 2 """Django's command-line utility for administrative tasks."""
> assets 3 import os
> bidding 4 import sys
                                   def main():
    os.environ.setdefault('DJANGO_SETTINGS_MODULE', 'bidding.settings')
    try:
    from django.core.management import execute_from_command_line
    except ImportError as exc:
    raise ImportError(
    "Couldn't import Django. Are you sure it's installed and "
    "available on your PYTHONPATH environment variable? Did you "
    "forget to activate a virtual environment?"
    ) from exc
    execute_from_command_line(sys.argv)
          > static
          ∨ templates
           ♦ biditem.html
            ♦ home.html
Iog.html
           .og.ntml
◇ login.html
                                                       if <u>__name__</u> == '__main__':
            loginbase.html
            register.html
          db.sqlite3
           manage.py

    ■ Requirements.txt

          gitignore

 README.md
```

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.

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 boundaries 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.

Proposed System:

The slogan of our website is AAA, 'Anyone, Anytime, Anywhere'. That what it really is? The proposed system is online auction house so the seller and bidder don't need to go anywhere, instead they can take part in the auction just sitting in the comfort of their living room, be it during the day or night.

In this Project Development I have Focus on two Main Terminologies: -

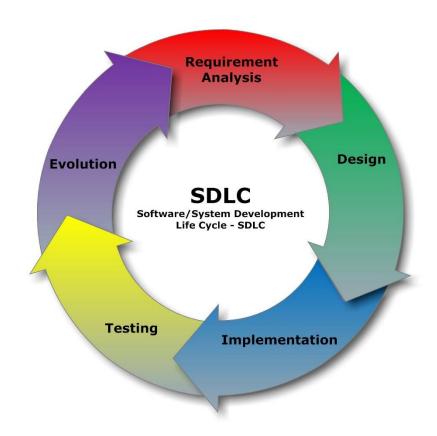
- 1.Project Planning
- 2. Software Development life Cycle

Project Planning

Project planning is the process of defining the project scope, objectives, and steps needed to get the work done. It's one of the most important processes in project management. The output of the project planning process is a project management plan.



SDLC (Software Development Life Cycle)



Requirement Analysis: -

a. Functional Requirement

Functional requirements for the online auction management system have been developed to make sure that the functionalities and functional aspects of the system are met.

b.Non-Functional Requirements

Interactive and Good Performance:

The website for online auction management system shall have the following abilities and capabilities.

- The responsiveness of the website shall be high and the website shall behave as per the user action.
- The user shall be acknowledged in the form of visual changes or feedback on the site to enhance the interaction

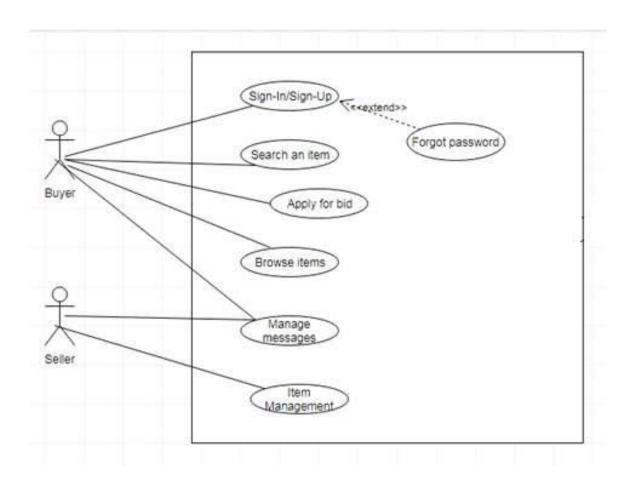
- The response time and throughput time on the site shall be minimal
- Consistency on the website shall be maintained across all the web pages
 The layout of the site shall be kept simple and must be self-explanatory

Design: -

UML Analysis: -

Use Cases

The purpose of the Use-Case model in Figure -1 is to demonstrate how the whole Bidding system interacts with the actors and sub-systems that are a part of it. The Use-Case diagram consists of a system boundary that is represented by the rectangle in the figure. The idea behind the system boundary is that it separates the actors and services in the outside environment from the services provided by the system. Actors are the entities that interact with the system. In the bidding system we have the User, Administrator and Security as actors. As shown in the figure 1, the lines between the actors and the use-cases shows the association between them. Inside the bounded system we see lines connecting the different use-cases. This describes how these use cases are related to each other.



Use case: bid on item

Actors: User

Type: Primary

Description: The user places a bid on the item up for auction. The Auctioneer notifies the user when he/she becomes the highest bidder

and if they have won the auction when it is over.

Cross-reference: Bid placement

Includes: authorization

Extended by: none

Extends: none

Use case: login

Actors: User, Administrator

Type: Primary

Description: User enters username and password, which is verified by

Security.

Cross-reference: Sign up with auction site

Includes: Authorization

Extended by: none

Extends: none

Implementation and System Testing

After all phase have been perfectly done, the system will be implemented to the server and the system can be used.

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. Our Project went through two levels of testing

- 1. Unit testing
- 2. Integration testing

UNIT TESTING

Unit testing is commenced when a unit has been created and effectively reviewed. In order to test a single module, we need to provide a complete environment i.e., besides the section we would require

- > The procedures belonging to other units that the unit under test calls
- Non local data structures that module accesses
- ➤ A procedure to call the functions of the unit under test with appropriate parameters

1. Test for the admin module

- > Testing admin login form-This form is used for log in of administrator of the system. In this form we enter the username and password if both are correct administration page will open otherwise if any of data is wrong it will get redirected back to the login page and again ask the details.
- **Report Generation:** admin can generate report from the main database.

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.

- Online Auction System will give new approach and dimension to auction system.
- It will encourage both buyers and sellers to participate in auction process.
- Remove geographical boundaries, location constraint and time constraint.

Screen shot

