

PLATFORM FOR E-AUCTION

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ABSTRACT

In the current pandemic condition many of the business moves towards the online platform. The main aim of the design is to move the offline auction to the online platform. This paper is based on an online Auction Platform. Like other products in the market for eg. E-Bay, OLX etc. In this E-commerce website, registered customers can post their item for auctioning, can place higher bid (greater than the current bidding price) on items posted for auctioning, leave feedback and views on those listed items, and add listed goods to their "watchlist" in their personal dashboard.

Keywords: — Web Application, Auction, Server, User, Database, Model.

I. INTRODUCTION

We found that from the long time there is large use of website for the many purposes but we the time many of the developers and moves toward a web application as found the easy use and time efficient. A web application is an application programme which normally is kept on a distant server and may be accessed by users via the usage of web-browser software.

Django is used as an open-source Python framework to construct complex online applications. The web development framework is one of the most widely used. Therefore, instead of repeat processes, the developer must focus on the business logic. It contains several integrated functions. See some wonderful features of Django. It's fast, safe, reliable, and multifaceted to a big collection of documents. Follow the MVT approach of site mapping, RSS feeds, content management, user authentications, etc. written in Python. The maps on the site are automatically maintained. This is an online Auction Platform. Like other products in the market for eg. E-Bay. In this E-commerce website, registered customers can post their item for auctioning, can place higher bid (greater than the current bidding price) on items posted for auctioning, leave feedback and views on those listed items.

II. METHODOLOGY

Front End Technologies

HTML is an abbreviation for the Hyper Text Markup Language that is used for the production of web pages. We'll examine what the Markup Language and the Web page are meant for Hypertext. Hyper Text means only "Text in Text." There is a connection between a text and a hypertext. You have clicked on a hypertext, when you click on a link leading to a new website. Hypertext is a means to connect one another to two or more HTML documents. Terms of reference: A language for the layout and formatting of a text document is the computing language. Language markup makes text more dynamic and interactive. The text may become graphics, tables, links and so on.

Web Page, the web page can be considered as a document which is usually created and converted into HTML by a web browsers. By providing a URL, you may identify a web page. The static or dynamic kind can be a Web page. We can develop static web pages with the aid of HTML alone. HTML is therefore a marking language used to create appealing, stylish web pages and that looks pleasant in a computer browser. There are a large number of H.T.M.L. tags in an H.T.M.L. page and each H.T.M.L. tag has distinctive content. It is really popular and easy to use. It can be understood and changed simply. It is quite easy to show HTML effectively, as it has many formatting tags. It is a language that allows users to construct web pages together with content in a flexible fashion. It makes it easier to create a link on the web-page by programmers (using html anchor tag) and improves the surfing interest of users.

Cascading Style Sheets stands for CSS. It is a sheet-style language used to define the appearance and format of a markup document. It gives HTML a supplementary function. Used with HTML, the style of user interfaces and web-page is changed. It may also be used in XML documents of any form, including simple XUL, SVG and XML documents. In most websites, CSS is used with HTML and JavaScript to develop web-based user interfaces and user interfaces for a variety of mobile applications. What CSS accomplishes is: you can add new appearances to your old HTML pages, modify the style and feel of your website with just a few modifications to CSS code.

C.S.S. is used in the creation of HTML Tags. C.S.S. is widely used as a web language, to create a web page, we usually use H.T.M.L., C.S.S. and JavaScript. CSS is also a commonly used language in Cascading Style sheet. It allows web developers to use HTML tags for styling.

Bootstrap is a very popular framework for constructing a responsive and mobile-friendly website for H.T.M.L., JavaScript and CSS. You may download and use it completely free of charge. A front end framework used to make web development easier and quicker. The design template for font, shapes, buttons, table, browsing, modalities,

picture carousel and much more are included. The JavaScript plug-ins can also be used. It makes it easier for you to design responsively.

JavaScript or JS is an object oriented light weight language used for web page scripting by various online sites. The HTML document is a fully interpreted computer language allowing interactivity dynamically on web pages. In 1995, it was launched to add software to Netscape Navigator's web pages. All other graphical web browsers have been embraced since then. Users may construct contemporary web applications with JavaScript so that they can interact without refreshing the page at all times. Js is used in the conventional website for various sorts of easiness and interaction..

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JavaScript does not have Java programming language compatibility, though. In periods when Java was becoming increasingly famous in the market, the name was proposed and given. Databases such as MongoDB and CouchDB are used for the scripting and queries of JavaScript as well as web browsers.

Django Templating Language, Django offers a practical approach to create dynamic HTML pages using its template system. We cannot enter python code in HTML file, as code is only interpreted by the browser's not the python interpreter. Python is a dynamic programming language. There are static components of the intended HTML output and an unique syntax outlining how dynamic material is introduced. The Django template utilises its own syntax for variable, terms, tags etc. A base or template file containing the context used for a web page is displayed.

Back End Technologies

Django is a web framework from Python which fosters speedy and clean, pragmatic development. Django helps you rapidly and with less code to develop better web apps. The following design philosophies are provided to Django. Loosely Coupled – Django strives to distinguish one part of its stack from the others. Less coding – There is less code, hence a fast development in turn. Do not repeat yourself (DRY) – All should be programmed in only one spot rather than again. The principle of rapid development Of Django is to do everything it makes development hyperfast. Django rigorously keeps its own code for clean design.

Django supports the style of MVC like the most contemporary frameworks. Let's first explore what the Model View Controller (MVC) is, and then look at the Model View-Template specificity (MVT) pattern of Django. MVC Models, We commonly talk about MVC model while talking about apps that provide UIs (web or desktop) and as the name implies, the MVC design consists of three components: model, display and controller.

A little difference is made in the Model View Template (MVT), DJANGO - MVT Pattern. The main difference in patterns is, Django itself is responsible for the controller and leaves us with the template. (the software code which manages the model-view interactions. The template is an HTML file containing the Django Template language (D.T.L.). The following graph depicts how each component of the M.V.T. model works to suit the user's demands. The developer provides a URL for the template, display and model, which is then mapped to Django for the user.

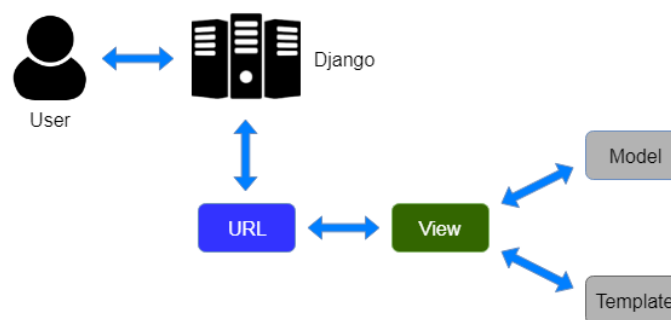


Figure 1: MVT Model

Model- it is class representing the table or relation in our DB and in which each class attribute is a table or collection field. App/models.py (in our case: Ecommerce/models.py) defines models.

View- it is the place where programmer place our application business logic. The view same as function used for the execution of certain business logic and the return of a user response. The HTML content of a webpage, redirect or 404 error might be this answer. Within the Django project's view.py file, all view functions are built.

Template- Django offers a practical approach to create dynamic H.T.M.L. pages using their template system. There are static components of the intended H.T.M.L. output and a unique syntax outlining how dynamic material is introduced.

III. MODELING AND ANALYSIS

The Data Base which we are using is SQLite. In this project's database following tables/models/relations are used:

- Listing
- Users
- Comments
- Bids
- Winner
- Watchlist

This is a Django based projects and it's working can be seen in this diagram:

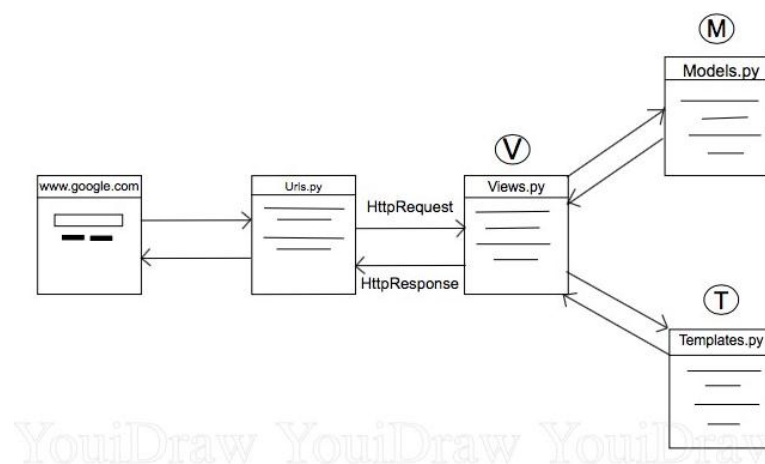


Figure 2: Working of Django

Development and Implementation Environment:

- **Processor:** Any recent processor or at least later than Intel Atom processor.
- **Space:** At least 2GB space is ideal.
- **Operating System:** MacOS, Windows (Win 7 or later), or any distribution of Linux.
- **Python:** Python 3.6.x or later
- Django
- **Data Base setup:** SQLite is by default comes with Django.
- **Web Server:** Django have inbuild run-server environment.

IV. RESULTS AND DISCUSSION

In this application all the users are having these functionalities:

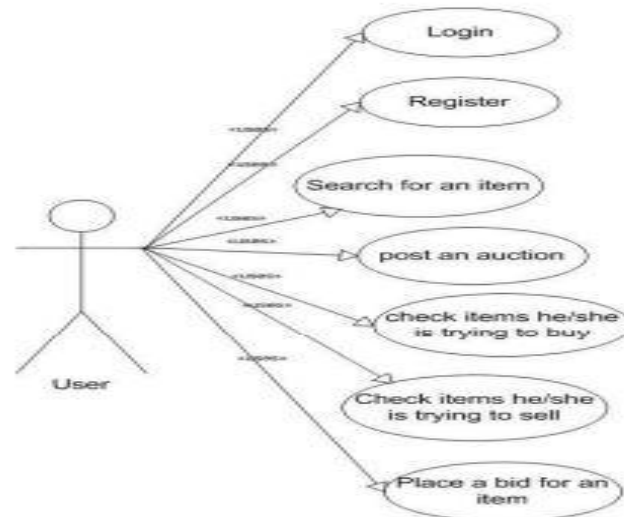


Figure 3: Functionalities to users

Register, Login, posting items for listing, Search, placing bids, checking listed items are basic functions/features for all users.

And for user as admin the following functionalities provided:

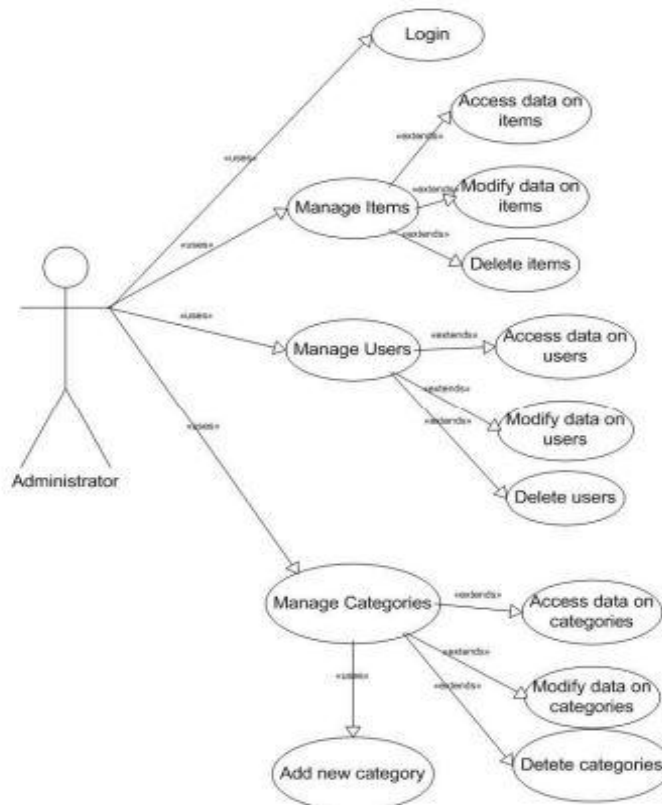


Figure 4: Functionalities to Admin

V. CONCLUSION

The above paper study concludes what we have achieved in relation to requirements, challenges we have encountered during system development, what we have learnt from the project's execution and suggested improvements to the online auction platform.

Implemented functionalities:

There are two panels, one for all users and another for Admin of the project. The functionalities provided in each panel are provided in result analysis section.

Knowledge Acquired:

While working on this project, learned about the various features of Django Frame Work, and many other front and back end technologies. Implemented inheritance using Django Templating Language. Used database and understood how to normalize the database relations in real world applications.

Future Work:

There is scope for improving it's security by providing few more functionalities like Capta Code, to avoid our application. For this there is a module of Django called Django-Simple-Captha.

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