

Construction Website

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Abstract: *The beginning of since the introduction of the vehicle and the elevator, the internet has had a significant impact on every area of our lives. It established a global community where people could communicate and look for new knowledge.*

The project involves creating a website for a real estate company that offers details on properties for rent and sale. Phases of development and review. The project's development is planned using the technique.

A test has been carried out to determine how well the website solves the issues. The test indicates that the participants are open to trying this type of service and concur that the Internet may help the real estate sector. Designing a website for the real estate sector, analyzing the potential and applicability of e-commerce in the sector, and assessing the potential of e-commerce in the sector are the project's goals.

The System Development Life Cycle (SDLC) served as the foundation for the creation of the website. It is divided into four stages: analysis, design, development, and evaluation. The project's development is planned using the technique.

A test has been carried out to determine how well the website solves the issues. Based on the results of the test, it appears that the participants are open to trying this type of service and concur that the real estate sector may profit from the Internet. In order to draw a conclusion, we must first comprehend the technological drivers..

Keywords: Construction, Buy, Sell, Property, Real estate

I. INTRODUCTION

The goal of the project is to create an e-commerce website for the real estate sector. The goal of this project is to motivate internet users to fully utilize e-commerce. Potential clients who wish to purchase, sell, or even rent a home can communicate with the actual estate agent over the internet. The website allows the real estate agent to list available homes. Buyers of real estate may look for information about communities and prices. Users can browse the images of the current homes that are for sale and rent in the interim.

Customers and the real estate firm will be able to collaborate with each other thanks to the project's availability of web features.

The Internet offers inexpensive transaction costs, effective online marketing, and customer service and support. Additionally, the website will offer visual and virtual reality features in order to improve the online experience of users in locating suitable homes.

As of this now, no Malaysian real estate company has virtual reality capabilities on their website. Typically, they don't include any images—just a description of the property. Customers are unable to view the property as a result. The website's owner is not making the most of the Internet's graphic potential to promote their goods. Additionally, the Internet allowed customers to test out the product without physically visiting the store.

E-commerce and the Internet differ from real estate business operations in a number of ways. By enabling global contact at any time and at a very cheap cost, it offers a new channel of communication between buyers and sellers.

The transition from current media to the World Wide Web (WWW) is a new way to disseminate information, comparable to the transition from newspapers to radio and then to television. A major component of the WWW is the availability of information, but the interactive character of the information provider is more significant.



The real estate industry may benefit from being able to act as both a producer and a consumer for its services. New methods of inventory control and, eventually, new strategies for manufacturing and service delivery are made possible by network connections.

Furthermore, once the system is operational, it will provide significant economies of scale with high initial costs and extremely low marginal costs.

II. BODY OF PAPER

Objectives :

1. To design a website for real estate industry
2. To analyze the potential and suitability of E-Commerce in the real estate industry
3. Evaluating the potential of E-Commerce in the real estate industry.

Provision of information:

This is the most fundamental stage of Internet creation. It essentially constitutes the core of individual business websites, and the online distribution of market data has emerged as a crucial offering for a wide range of online data providers, including government organizations, trade associations, and consulting firms. Despite being fundamental, data provision is crucial. There is fierce competition among data providers, which has led to industry consolidation. The game will be won by those with the most often updated products, the quickest access, the most capital expansion and purchase of rivals, and a wide network of industry connections.

Provision of analysis:

This is the second tier of online product offering. It covers a wide range of topics, including construction management tools, accounting, tax planning, asset and property management support, appraisal procedures, and specialized statistical analysis software.

The industry player may fully benefit from the aforementioned by offering value-added services to the greatest number of users, being well-capitalized, and having the strongest infrastructure to support the product, which must include a strong user support network.

Facilitation of real estate transaction online:

This will change the location, making it virtual rather than physical, but it won't change the marketplace for conducting business. It could entail any procedure, from filling out application forms online and presenting contracts to being accepted and online ownership transfer.

Online real time auctions of real estate interests:

The creation of a real-time online auction transaction system will drastically alter the current market roles and fundamentally alter the marketplace.

Develop multiple search method: As the current website is only providing search method based on a single attribute, for future expansion the website should be able to provide search result based on multiple criteria. For example, users can key in the type of the house, price range, and the number of bedrooms. The database will generate the result based on the data key in by the users.

Predictive Model Development: Utilizing the capabilities of machine learning, we begin to develop our predictive model. By utilizing these tools, we carefully train our model on a dataset that has been enriched to ensure it accurately reflects the complexities of the real estate market.

Within the domain of regressions, we explore statistical models that clarify the connections among different variables, providing understanding of the effects of particular characteristics on housing prices.

Moreover, incorporating machine learning into our predictive model adds a continuous layer. We improve the model's predictive accuracy in the dynamic real estate industry by utilizing algorithms that are intended to learn and adjust based on data similarities.



In refining our model, we focus on fields with a significant impact on predictions, guaranteeing that the model is both accurate and pertinent to the specific traits of the real estate market being examined. This approach, based on iteration, strengthens the robustness of our forecasting model, preparing it to handle complexities and provide accurate estimates. At the same time, we subject our predictive model to thorough testing and comparison with the current dataset. This essential measure comprises checking the model's predictions against real data to assess how effective it is, while also improving it through iteration so that its accuracy increases. Our predictive model for estimating housing prices is backed by systematic testing based on statistical rigor and machine learning principles, ensuring its reliability and applicability with a high degree of confidence.

III. METHODOLOGY

The techniques and tenets employed in project development are known as methodology. Analysis, design, development, evaluation, and testing are only a few of the many tasks that comprise the system development methodology's lifecycles. The lifecycles of system development are 'process' models that delineate established procedures for effectively accomplishing intricate tasks. It serves as a guide to assist system developers in completing the project. The framework used to organize, schedule, and manage the system development process is known as system development methodology.

There are numerous approaches to system development that are employed while creating a system. We employ a standard in this project that is based on the System Development Life Cycle (SDLC). The SDLC approach may include tasks that are suitable for a specific project. It can be applied to new systems, automated systems, manual systems, or improvements to already-existing systems. The two guiding concepts of the SDLC are the division of projects into phases and the use of written documentation and permissions to keep things under control. The cycle's actual phases vary depending on the author or institution.

The author's approach for this project is based on the standard stages of an SDLC, which include requirements development, system design, coding, unit testing, integration, initial investigation, feasibility research, and system testing and implementation.

Data Privacy:

When collecting and using data from external sources, it is crucial to adhere to data privacy regulations and ethical standards regarding data use.

Analysis Phase:

This stage focuses on determining and evaluating the project's needs and issues. The aforementioned activities are completed at this phase using a variety of techniques.

Requirement Specification:

The statement of the requirements serves as a solid basis for the technical resolution of the issue. It includes a comprehensive set of specifications that will be utilized to create a technological solution. The functional test strategy will be created during this assignment to make sure the system requirements are fulfilled.

Design Phase:

Converting project requirements into functional and visual realities is the aim of the design phase.

There are two sections to the project's design. The first step involves creating the architectural and conceptual design as well as identifying the design tools. The design's testing and hypothesis-building are covered in the second section.

The Impact of Technology and Internet to Real Estate:

Possibly the most significant technical advancement to affect real estate since the development of the automobile and the elevator is the Internet revolution. The real estate market can access four distinct product levels from it: information,



analysis, online real-time auctions of real estate interests and the ease of real estate transactions. They all have varying degrees of influence.

Development Phase:

We will enter the production mode at this phase, where the architecture and interfaces of the application are being developed.

Development Subsystem:

The project is developed in segments. This will enable the developer to concentrate thoroughly on each component of the system. The section is split based on the various functions it serves, like selling a house and buying a house.

Evaluation Phase: In this last phase, the system will be operated and a user usability test will be performed to obtain users' assessment.

Layout Design: The layout result displayed the important sections of the website, which are as follows:

- Main Page
- Buy Page
- Sell and Rent Form
- Search Page
- Search Result Page
- Confirmation of Submitted Page
- Virtual Home Page
- Booking Pages

In this section, the author will explain how the website functions and interacts with users.

Data handling:

In order to increase the dataset's quality, organization, and consistency, this area is devoted to its methodical improvement. The techniques put in place concentrate on producing a dataset that is more dependable and structured, establishing the foundation for later phases of the data science pipeline that involve analysis and modeling. The main goal is to create a polished dataset that guarantees the accuracy of forecasts made later. We thought it crucial to include the code snippet that goes with each step we took throughout this phase so you can understand how the action was explained and carried out. In order to streamline the dataset and concentrate on the aspects that were pertinent to the analysis, the method started with a deliberate selection of variables, excluding those that were thought to be unnecessary.

For example, variables such as "description" and "thumbnail" were left out because they don't information that has a direct impact on the property. Similar to this, factors like "has3dTour" or "has360" were thought to be unimportant for pricing analysis and mainly used to increase the appeal of advertisements. Furthermore, because they were constant across the dataset, some variables, such as "municipality," "country," and "province," were deemed non-influential.

IV. CONCLUSION

In summary, the study on construction websites emphasizes how crucial a well-thought-out and intuitive online presence is to the contemporary construction sector. In addition to being a digital brochure, a construction website is an essential tool for demonstrating a business's experience, gaining the trust of prospective customers, and promoting communication between suppliers, clients, and contractors. According to the survey, an efficient website should incorporate the most recent information about projects, services, and client testimonials, as well as prioritize mobile responsiveness and easy navigation. Additionally, content management and search engine optimization (SEO) are essential for making sure the website remains relevant in a market that is becoming more and more competitive and ranks highly in search results. In order to further improve client engagement and happiness, construction companies need to adopt cutting-edge digital solutions like virtual tours, 3D models, and real-time project tracking as technology



develops. In the end, a strong online presence prepares construction companies for long-term growth in a sector that depends more and more on digital tools and online marketing tactics. It also draws in new customers.

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