

Estatery: Making Real Estate Transactions More Effective

Abstract

Estatery is an understudied web platform that strives to tackle persistent real estate market issues like out-of-date property listings, inefficient transactions, and the absence of data integrations and real-time updates over web structures. The platform implements modern technologies like Next.js, Node.js, React.js, and AWS so that property data can be adjusted in real time, improving overall service to buyers, sellers, and managers. The platform further improves user privacy and data security with advanced algorithms, an intuitive user interface, and accurate property search features. The platform's scalability allows for effective results during peak times, and the elimination of obsolete property listings reduces transaction times. These are vital improvements for stake holders as the platform offers more efficient work performance for property managers. Estatery's unique concepts have bridged some of the most fundamental gaps in the real estate world, improved the effectiveness of transactions, the exchange of relevant information, and user satisfaction. This innovative approach makes it easy to engage and creates room for innovative ideas in the real estate e-commerce industry.

Keywords: Real-time property updates, Next.js, Convex, real estate, AWS.

1. Introduction

1.1 General Overview

Estatery was conceived out of the need for a more efficient process of buying and selling properties within the real estate domain. Many existing services have fundamental issues such as having outdated information, limited searching ability, and no customization. 'Estatery' hopes to provide solutions to these issues by enabling automated property searches and listings in real time. The system is developed with modern web technologies. The front-end is built using the Next.js framework while the Convex platform is utilized on the backend for dynamic updates ensuring low loading times and user interface responsiveness.

With the contemporary real estate industry primed to converge with the digital world full throttle, Estatery moves in the right direction by introducing automated buyers, sellers, and property managers interactions. This not only stops the system from giving outdated or wrong information, but also guarantees that the data exposed to users remains

relevant. Among other things, the undocumented goals of the platform includes making a user friendly interface, secure authentication, and search parameters that include the location, pricing, and class of the property.

With the use of modern technologies such as React and TypeScript, Estatery`s powerful interactive features like dynamic dashboards and responsive webpages are tailored to work on all devices. The platform is designed to process a large number of users and data requests at the same time, which is ideal for modern users. Additionally, Estatery allows for future development such as incorporating AI and Machine learning, improving personalization and predictive analytics of the real estate industry.

1.2 Rationale for Research

Current today`s world is constantly evolving, and with that comes rapid access to accurate information, even in the real estate sector. Conventional real estate websites and applications are not user-friendly as they include older listings that users end up not wanting. The requirement for a platform that reconciles this gap by enabling data synchronization in real time is greater than ever. To meet this expectation, Estatery offers comprehensive services and instant updates on property listings to facilitate quicker user decision-making. Moreover, most existing platforms do not offer individual user experiences, which makes the property hunting process tedious. Estatery has unique advanced search features which empower users to search for properties with specific filters that enhance the experience to a whole new level.

1.3 Objectives of the Research

The specific goals of Estatery are listed below:

- To eliminate the problems that arise from obsolete information regarding properties by providing users with up-to-date listings of real estate that they can react to in real-time.
- To allow users to personalize their search queries by optimizing the search engine through adding more filters such as location, price, and the type of property.
- To gain the confidence and interest of the users through accurate and current property information, aiding the decision-making process.
- To protect the users by providing safe transactions through advanced security protocols that secure the user's information and allow safe dealings with property

buyers, renters, and owners