

Objective

Develop a full safety compliance system for construction sites, with mobile and web apps, to effectively ensure, monitor, and report safety measures in commercial and residential projects.



CASE STUDY

Scope

- Develop a mobile application for safety engineers, managers, and auditors to capture and record safety norms at construction sites.
- Create a web application for managers to generate MIS reports and for admins to configure system settings, manage user roles, and update safety parameters.

Solution

- Developed cross-platform mobile apps (Android & iOS) for on-site safety compliance data capture.
- Gathered user requirements for engineers, managers, and visitors, enhancing functionality.
- Regularly updated technology and software to align with changing business needs.
- Created a web module for project management, checklist creation, work permits, training, labor details, and contractor management.
- Integrated a comprehensive MIS reporting system for senior management to oversee multiple projects and access detailed insights.
- Developed Facial Recognition feature to track headcount. Along with Safety Dashboard with leading and lagging indicators.

Value Added

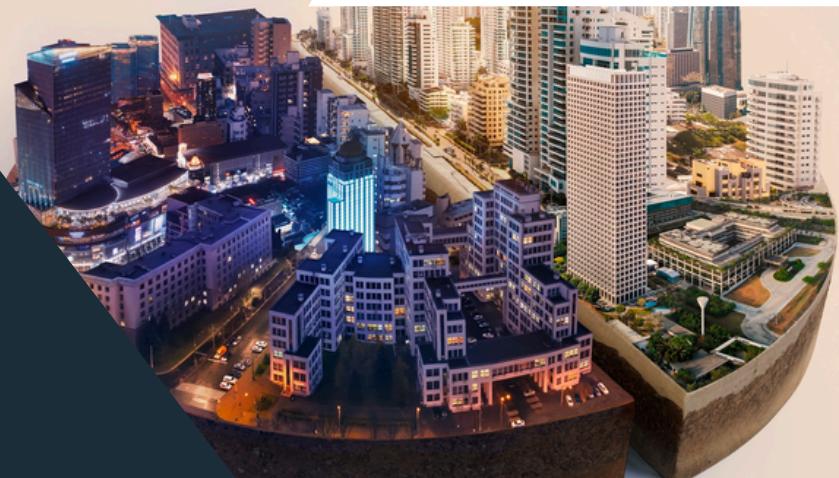
- Digitized safety processes, boosting efficiency and accuracy in compliance recording.
- Implemented a robust system for training, visitor tracking, and incident recording.
- Streamlined site management tasks with intuitive interfaces for checklists and work permits.
- Facilitated detailed MIS reports for informed decision-making on safety compliance.
- Enhanced accountability and compliance visibility with documented evidence of safety measures.

Frameworks & Tools



Objective

Boost operational efficiency by automating real estate workflows with GenAI. Allow admins to define tasks and generate forms via web, which agents can then execute via mobile. Enable fast, accurate content and communication generation using AI.



CASE STUDY

Scope

- Develop a GenAI-enabled mobile and web application for real estate agents and administrators.
- Empower agents to automate routine real estate tasks—like listing creation, offer summaries, and content generation—directly from their mobile devices.
- Build a web admin portal to manage agent access, create task flows, and design dynamic forms using prompt variables.

Solution

- ✓ Built a Progressive Web Application using Flutter for agents to maintain user experience across platforms.
- ✓ Developed a React/NextJS based web admin portal with role-based access control.
- ✓ Integrated AI workflows for dynamic content and process automation.
- ✓ Enabled prompt customization with flexible input types (text, dropdown, number, etc.).
- ✓ Implemented email OTP verification for agent onboarding and registration approvals.
- ✓ Set up centralized prompt history and response tracking.
- ✓ Delivered robust backend using NestJS, Node.js, PostgreSQL, and JWT-based authentication.

Value Added

- Enabled real estate agents to automate repetitive tasks, saving time and reducing manual errors.
- Improved agent onboarding and user control with a secure verification and approval process.
- Delivered a scalable, cloud-ready architecture ensuring smooth mobile and web experiences through progressive web applications.
- Enhanced collaboration across the real estate transaction process using GenAI.

Frameworks & Tools



Objective

Streamline real estate operations in the U.S. through GenAI-assisted task creation and management. Enable faster agent-client interactions and minimize manual documentation by using dynamic form-based tasks. Provide role-based access, preview functionality, and task drafting to enhance admin control.



CASE STUDY

Scope

- Build an AI-powered mobile and web application to help real estate agents automate daily tasks like listings, offer summaries, and blog creation.
- Enable admin users to design, preview, and manage tasks using prompts.
- Support real-time GenAI responses using agent inputs and provide a centralized platform for task history and agent management.

Solution

- Developed cross-platform apps using Flutter for agents and NextJS/React for admin users.
- Integrated ChatGPT to automate listing descriptions, offer comparisons, and real estate document generation.
- Enabled task preview and "Save as Draft" functionality for prompt accuracy.
- Created customizable prompts with variable inputs like text, dropdowns, and radio buttons.
- Implemented prompt/task history tracking and cost usage view for company admins.
- Added push notifications, email OTP verification, and agent access approval workflows.
- Highlighted prompt variables and used a rich-text editor for better admin experience.

Value Added

- Reduced task turnaround time for agents by automating repetitive documentation.
- Gave admins full control with live preview and draft management features.
- Enabled usage monitoring and analytics for GenAI consumption.
- Future-ready platform with phased enhancements and integration capability.

Frameworks & Tools

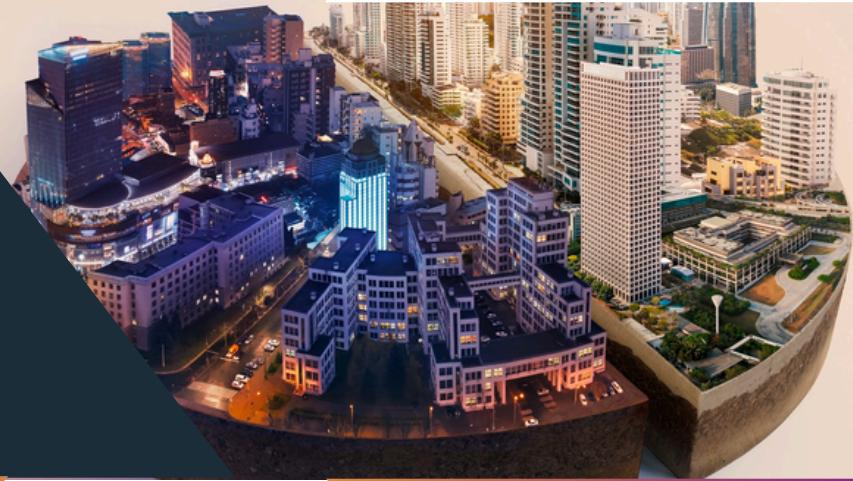


PostgreSQL



Objective

Develop a post-sales CRM platform for a Top Real Estate Brand to enhance collaboration between the internal team, property owners, and tenants, and to improve post-sales customer engagement and support.



CASE STUDY

Scope

- Research and map out customer touchpoints post-property sales to design a CRM application tailored to these interactions.
- Conduct end-to-end product development from initial understanding to full deployment of the CRM system.

Value Added

- Implemented detailed post-sales process stages for targeted customer support and engagement at each phase of the customer lifecycle.
- Transitioned from on-premises to cloud setup, enhancing system scalability and reliability.
- Strategically allocated features for optimal mobile and web app performance, ultimately enhancing user experience.
- Saved development time and costs by avoiding duplication of work and focusing on platform-specific functionalities.

Solution

-  Collaborated closely with the client's real estate team to thoroughly understand post-sales activities and map the customer journey across three stages: Booking to Possession, Possession, and Warranty Period.
-  Developed comprehensive flows and wireframes, followed by UI/UX design, system architecture development, and system implementation.
-  Migrated from on-premises infrastructure to cloud computing with AWS to enhance scalability and performance.
-  Optimized development by differentiating functionalities between mobile (Flutter) and web platforms (AngularJS, React), which streamlined operations and reduced development time and costs.

Frameworks & Tools



Objective

Community Application for the customers of real estate developer



CASE STUDY

Scope

- Brainstorm and evolve the concept of a community application.
- Design and develop a mobile application (B2C) and a web application for marketing administration.
- Provide content management services.
- Implement automated email systems for marketing and customer relations.

Solution

- ✓ Developed a React Native-based mobile application to enable community members to stay connected and share thoughts, thereby enhancing their happiness and engagement
- ✓ Equipped the PSCL marketing team with tools to send marketing brochures and mobile-based notifications & content to PSCL customers efficiently.

Value Added

- Implemented FCM for real-time push notifications, significantly increasing user return rate to the app with purposeful interactions.
- Provided robust tools for content management and marketing communications, streamlining the process and improving reach and impact.

Frameworks & Tools



Objective

Develop ASAP (Apartment, Society Activity Portal) - an innovative management software streamlining operations for property managers and residents. Automates tasks enhances communication, and provides robust financial tools, revolutionizing apartment, and society management.



CASE STUDY

Scope

- Address the manual and time-consuming nature of managing day-to-day operations in apartment complexes and societies.
- Automate processes such as maintenance requests, rent collection, lease management, and financial reporting to reduce inefficiencies and errors.

Value Added

- ASAP resulted in significant cost savings for society management committees, with a 70% reduction in manual administrative tasks, increasing operational efficiency.
- Enhanced communication and streamlined operations led to higher resident satisfaction. The user-friendly interface and robust functionality boosted productivity.
- The software improved data analysis, aiding informed decision-making for committee members. Its scalability ensures long-term value, with room for future enhancements and customization.

Solution

- Developed ASAP, a comprehensive apartment management software solution tailored to the specific needs of property managers and residents.
- Utilized web development frameworks, database management systems, and cloud computing to offer a user-friendly interface and robust functionality.
- Key features included a comprehensive role-based system, maintenance tracking, lease management, resident management, financial reporting, and regulatory compliance tools.
- Integrated ASAP with Tally ERP 9 for the seamless financial management of society books.

Frameworks & Tools



Objective

Develop a centralized agent onboarding software solution for California Concierge, managing multiple real estate agents and market centers. The system needed to accommodate various roles within the organization's hierarchy.



CASE STUDY

Scope

- Build a web platform that facilitates agent onboarding by integrating processes across multiple roles and responsibilities.

Value Added

- Delivered the application on time while maintaining exceptional quality and ensuring high user satisfaction.
- Showcased strong professionalism and clear communication throughout the project.
- Efficiently managed scope changes, handling change requests with precision and flexibility beyond the initial scope.

Solution

-  VAST conducted research, analysis, design, development, and testing of the web application.
-  Delivered a comprehensive software solution tailored to meet the specific needs of the client, ensuring efficient onboarding processes.

Frameworks & Tools





Objective

Agent Transaction Control application aims to streamline real estate transactions by automating workflows and notifications, reducing manual effort, and enhancing efficiency. The system will offer role-based access for sellers, buyers, agents, and a Transaction Controller, ensuring a user-friendly and seamless transaction experience.



CASE STUDY

Scope

- Develop a web platform with role-based access control for all user roles.
- Automate workflows for property listing, seller onboarding, buyer identification, and agent collaboration.
- Centralized repository for transaction documents and a marketplace for third-party integrations.
- Include features like online messaging, transaction monitoring, and automated notifications.

Value Added

- Conducted thorough competitor research and proposed automated solutions to enhance user experience and drive business growth.
- Impressed the client with wireframes and prototype designs during the design phase.
- Introduced modern features such as an agent dashboard, online messaging, and review/approval functionality, which serve as key selling points.

Solution



The VAST team, consisting of UI/UX designers, Business Analysts, Developers, Testers, and Project Managers, is actively involved in analyzing, designing, developing, and testing the software application.



The project is currently in the development phase, with a focus on fulfilling client expectations by automating transaction workflows and enhancing user experience.

Frameworks & Tools



Vue.js



SurveyJS



Objective

VAST collaborated with an Indian real estate leader, crafting a solution for developers. Goals included workflow streamlining, resident management enhancement, and a service provider marketplace creation. Expertise in real estate and tech-enabled VAST to aid clients in launching an industry-revolutionizing platform in India.



CASE STUDY

Scope

- Address challenges for property developers, residents, and service providers in real estate.
- Streamline workflows and enhance operational efficiency.
- Improve customer satisfaction across the real estate ecosystem.
- Foster community engagement within real estate operations.

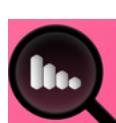
Solution

- Streamlined property developers' workflows by enhancing sales, marketing, and support activities.
- Empowered residents with efficient property management tools, fostering community engagement.
- Created a service marketplace for providers to publish services, improving convenience for residents.
- Leveraged technologies like ReactNative, Nest.js, and Microservices for scalability and performance.

Value Added

- Domain expertise:** VAST's deep experience in real estate brought valuable insights and guidance to clients throughout the project.
- Architecture consulting:** VAST helped define the product architecture and technology stack, ensuring scalability and future-proofing.
- Deployment strategy:** VAST assisted in defining a seamless deployment strategy, enabling scalability and reliability.
- Software development best practices:** VAST implemented containerization and code quality assurance, ensuring a robust and maintainable solution.

Frameworks & Tools



Objective

The objective of the project was to deliver a computer vision–driven solution for safety compliance, healthcare monitoring, and industrial inspections using smart glasses. It brought AI-powered video analysis directly to the field through the integration of wearable and mobile technologies.

CASE STUDY

Scope

- Detects essential PPE gear, including helmets, masks, gloves, and safety vests.
- Analyses posture and movement patterns to identify indicators such as discomfort or restlessness without relying on facial recognition.
- Enables hands-free vehicle and asset inspections through smart glasses.
- Supports both offline AI processing for safety-critical use cases and cloud-assisted workflows for deeper analysis.

Solution

- ✓ Vuzix smart glasses became the frontline companion, enabling hands-free video capture and real-time visualization without disrupting work.
- ✓ The mobile app, built with Kotlin and MVVM, acted as the brain managing devices, streams, AI inference, and secure data flow.
- ✓ AI models ran directly on the device using TensorFlow Lite, ensuring low latency and offline reliability.
- ✓ For deeper insights, such as emotion analysis and vehicle inspection, captured videos flowed to backend systems for frame-by-frame processing.
- ✓ A hybrid AI architecture balanced speed, accuracy, privacy, and scalability, adapting intelligently to each real-world use case.



Value Added

- Real-time decision making with low latency.
- Offline capability for safety-critical environments.
- Hands-free workflows improve operator efficiency.
- Privacy-friendly design (no facial recognition where not required).
- Scalable architecture adaptable across industries and use cases.
- Reduced manual effort and improved accuracy in compliance and inspection.
- Reusable framework enabling faster rollout of new AI use cases.

Frameworks & Tools

