Security IoT

Company

The goal of this project was to create a consumer security solution that integrates various devices within a network to ensure safety and security. Our team was tasked with building the infrastructure to support device connectivity, asset management, and video streaming capabilities using a scalable microservices architecture and machine learning. The aim was to deliver a robust, secure, and user-friendly system that could adapt and expand as needed for consumers.

Location

United States

Industry

Warranty Provider

Services

Machine Learning

IoT   Security

At a glance

With the increasing demand for integrated security solutions, the need for a system capable of efficiently managing diverse devices and large volumes of data became apparent. The envisioned solution addresses this need by incorporating various security components all controlled through a mobile application. The primary goal was to create a comprehensive infrastructure that ensures security, while providing a seamless and intuitive user experience.

Solution

- We built a security system with real-time alerts, video streaming, and scalable device integration using microservices architecture and AWS for secure data management.

Outcome

- This innovative and reliable solution is designed for high user adoption and satisfaction, setting a new standard in the security industry.
- By focusing on device connectivity, efficient handling of critical security events, asset management using AWS, video streaming capabilities, and a scalable event-driven microservices architecture, Valere delivered a leading-edge security solution.

Challenge

Developing this security solution presented several technical challenges:

- Device Integration: Integrating a wide range of devices into a cohesive system required ensuring reliable and secure communication between components.
- Asset Management: Effective asset management necessitated the use of AWS for data storage and stringent security measures to protect data integrity and confidentiality.
- Scalable Architecture: Designing a scalable architecture using microservices was essential to allow for the easy addition of new devices and functionalities as the system evolved.
- Security Protocols: Implementing robust security protocols to safeguard the system from potential breaches while ensuring user data privacy and confidentiality was critical.
- Real-Time Video Streaming: Providing real-time video streaming capabilities and efficiently handling critical security events were vital to meet user expectations for a comprehensive security solution using Machine Learning and development operations.

Actions

- Our approach involved developing a scalable and reliable infrastructure using microservices to enable seamless integration and communication between various security devices and the central hub. Leveraging AWS, we ensured efficient data management and stringent security measures to protect data integrity and confidentiality.

10,000
DEV. HOURS

+2M
CUSTOMERS

+200M
COMPANY ANNUAL REVENUE

Results

- Real-Time Alerts and Updates: Functionality to provide consumers with real-time alerts, live video feeds, and system status updates.
- Scalable Design: The system's scalable design, driven by an event-based microservices architecture, facilitates the easy integration of additional devices and functionalities, allowing it to adapt to evolving consumer needs and technological advancements.
- User Experience: By focusing on device connectivity, efficient handling of critical security events, and an intuitive user interface, we aimed to create a solution that increased the sense of security and peace of mind among users.

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> After working on this major priority with this client, the client decided to provide Valere with multiple additional engagements in addition to the security project. Valere is now augmenting this client on their other technical initiatives and applications that leverage mobile, web, machine learning, and salesforce development.
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> -Guy Pistone
> CEO Valere

Related Cases
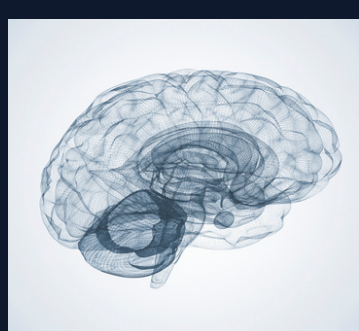
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