Industry Healthcare

Location USA

VALUEADD SOFTTECH & SYSTEMS PVT. LTD.

Objective

Modernized the in-house plan and benefit management system from legacy code to improve the handling of clients, members, and claims while enhancing system performance and usability.

CASE STUDY

Scope

- Develop microservices-based applications for plan, client, eligibility, and claims management.
- Introduce hierarchical UI for member classification.
- Replace complex Excel-based plan management with integrated UI.
- Implement a multi-threaded claims processing engine for performance.

Value Added

- Modernized Plan Management with a user-friendly interface.
- Improved data structuring for consistency and efficiency.
- Leveraged modern tech for faster delivery and scalability.
- Enhanced user efficiency and satisfaction.
- Improved system performance for a smoother experience.

Solution

- Adopted microservices architecture for scalability and maintenance ease.
- Designed novel UI for intuitive member classification using tree and grid structures.
- Replaced Excel-based plan management with streamlined UI.
- Improved claims processing with multi-threading for speed.

Frameworks & Tools

spring

Redux

Java

Selenium Webdriver

redis

Microsoft SQL Server

Jest

JPA Java Persistence API

QUARTZ

React JS

Industry Healthcare
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VALUEADD SOFTTECH & SYSTEMS PVT. LTD.

Objective

To build and deploy multiple applications as microservices in a Docker-based environment over VMware ESXi, focusing on infrastructure automation, application monitoring, and the introduction of DevOps practices

CASE STUDY

Scope

- Assess requirements and provide architectural design for a Docker-based microservices environment.
- Automate infrastructure and application deployment processes, incorporating custom auto-versioning and application monitoring.

Value Added

- Implemented DevOps practices to boost operational agility and deployment efficiency.
- Developed an environment dashboard for enhanced visibility and control of deployment phases and versions.
- Delivered a cloud-agnostic solution allowing flexibility across any ISP for future scalability.
- Achieved cost savings by transitioning from Windows to Linux servers, reducing licensing and operational expenses.
- Provided comprehensive training and handover to client teams for effective management and scaling of infrastructure.

Solution

- Created a Docker-based environment on VMware ESXi to host microservices, ensuring high scalability and efficiency.
- Built applications into Docker images, enhancing infrastructure automation.
- Implemented Bamboo jobs to automate the deployment process and manage multiple environments effectively.
- Established comprehensive application monitoring to ensure optimal performance and reliability.

Frameworks & Tools

docker
Bamboo
solarwinds
QUARTZ
Red Hat Enterprise Linux
sonarqube

Industry Healthcare

Location India

VALUEADD SOFTTECH & SYSTEMS PVT. LTD.

Objective

The project aimed to fine-tune the client's data model and event streaming architecture to improve the efficiency and scalability of their systems.

CASE STUDY

Scope

- Address key challenges in data model design and event streaming architecture that were impacting the platform's performance and scalability.
- Provide expert guidance to overcome these hurdles and deliver a seamless solution.

Value Added

- Provided expert guidance and support, enabling the client's architecture team to enhance their MongoDB database model and RabbitMQ event streaming setup.
- Through strategic modifications and optimizations, significantly improved the performance, scalability, and reliability of client's systems.
- Leveraged extensive expertise in database design and event-driven architecture to implement industry best practices, resulting in a robust architecture ready for future scaling.

Solution

- Collaborated closely with client's architecture team to fine-tune their MongoDB database model and optimize their RabbitMQ event streaming setup.
- Conducted a thorough analysis of client's existing data model and event streaming architecture to identify bottlenecks and inefficiencies.
- Implemented targeted optimizations based on best practices in database design and event-driven architecture to enhance performance, scalability, and reliability.

Frameworks & Tools

RabbitMQ

mongoDB

Industry Healthcare
Location USA

VALUEADD SOFTTECH & SYSTEMS PVT. LTD.

Objective

To build an online platform that connects world-class US doctors with patients around the world, using technology in a secure and convenient way

CASE STUDY

Scope

- Implement B2C requirements for managing doctor and patient interactions
- Conduct end-to-end development and implementation of the solution.
- Manage project planning and Agile execution
- Ensure HIPAA compliance for patient reports and health data management.

Value Added

- New features like referrals and real-time chat were introduced to enhance patient and doctor interaction.
- Real-time note-taking capabilities during consultations were added to improve the platform's utility and efficiency
- An optimized solution for managing appointment calendars was developed to simplify scheduling and rescheduling.

Solution

- Developed a comprehensive B2C solution for patient and doctor onboarding, profile management, appointment management, and communication management.
- Designed, developed, and deployed the solution on AWS.
- Implemented data encryption and enhanced API security to protect sensitive health information.
- Integrated third-party services, including Stripe for payment processing and WebRTC for secure video calling.

Frameworks & Tools

node.js
amazon web services
Express
mongoDB
git
Bootstrap
ANGULARJS by Google
CSS
HTML
Jenkins

Industry Healthcare
Location Australia

VALUEADD SOFTTECH & SYSTEMS PVT. LTD.

Objective

To design, architect, implement, and automate a highly resilient and scalable CI/CD pipeline for AI-enabled products in the Healthcare domain with all compliance

CASE STUDY

Scope

- Comprehend the product architecture and document deployment steps.
- Identify suitable Amazon Web Services for deployment and migrate to the appropriate DevOps tools
- Design and implement a resilient CI/CD pipeline using the selected tools
- Provide secure web hosting solutions.
- Conduct training and handover to the client's team.

Value Added

- The CI/CD pipeline was aligned with healthcare compliance requirements to boost security and reliability.
- Automation of pipeline processes cut down on manual errors and sped up deployments
- A customized dashboard was implemented to give management real-time system status and alerts, improving decision-making

Solution

- Strategized code management with auto-versioning features.
- Built automated CI/CD pipeline orchestration using various Jenkins plugins.
- Developed custom scripts for automating the installation and configuration of the Django framework and service management using Supervisor.
- Maintained environment state and provisioned new environments using Saltstack.
- Delivered a clean handover with industry-standard documentation and extensive WebEx recordings.
- Created a customized environment monitoring dashboard with email notifications and alerts for transparent management oversight.

Frameworks & Tools

Bitbucket
SALTSTACK
amazon web services™
Jenkins
NGINX

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Location USA

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Objective

To build a PBM (Pharmacy Benefit Manager) Claim Adjudication System that would adjudicate the prescription claims submitted by pharmacies through pharmacy exchanges.

CASE STUDY

Scope

- Develop a rule engine to process claims and determine outcomes—either accepted or rejected, with reasons provided for rejections
- Design a messaging queue to manage the flow of claim messages in and out of the system
- Build a user interface for claims management.

Value Added

- A claims processing engine was engineered to efficiently handle high volumes of data
- A comparative analysis was provided to select the optimal framework and tools for the rules engine.
- System architecture flexibility was enabled through API exposure, facilitating future integrations and expansions
- Scalability and maintainability were ensured with a modular design approach.

Solution

- Implemented end-to-end solutions including automated deployment on AWS.
- Developed a cache implementation for performance management.
- Established CI/CD for DevOps automation. Created a messaging queue to manage the flow of claims messages.
- Designed a performance-intensive claims processing engine.
- Provided comparative analysis of frameworks and tools for the rules engine to make informed technology decisions.
- Developed extensible APIs and designed the solution with a modular approach.

Frameworks & Tools

Drools
RabbitMQ
redis
mongoDB
UNIX® An Open Group Standard
Java
MariaDB
Microsoft Azure