

ROLE 1

Lead Airline Digital Solutions Architect

Principal-level architecture and technical delivery leadership for SAA's digital estate

Role purpose

The Lead Airline Digital Solutions Architect is accountable for the end-to-end architecture, technical integrity and delivery alignment of SAA's customer-facing and operational digital platforms. The resource must translate airline business outcomes into secure, resilient and supportable solutions across SAA, Amadeus and partner ecosystems while remaining sufficiently hands-on to guide implementation and resolve complex production issues.

Key responsibilities

- Own current-state, transition and target architecture for flysaa.com and related digital channels, including flight shopping, booking, payment, check-in, manage-booking, corporate travel, loyalty, mobile and operational applications.
- Lead solution design for integrations with Amadeus Altéa, RefX, airline web services, payment providers, loyalty platforms, Star Alliance services and other third-party or internal systems.
- Provide architecture and technical governance for Java/Spring Boot microservices, REST and SOAP APIs, middleware, web applications, mobile applications, caching, messaging and data integrations.
- Shape SAA's airline-retailing roadmap, including NDC shopping, Offer and Order concepts, dynamic offers, corporate distribution and progressive modernisation of legacy booking journeys.
- Define cloud and hybrid architecture for AWS-hosted applications, including EKS, containerisation, networking, load balancing, security controls, secrets, observability, scalability, resilience, backup and disaster recovery.
- Establish non-functional requirements covering availability, response time, throughput, data protection, auditability, accessibility, supportability and recovery objectives.
- Chair or participate in design authority reviews; produce solution architecture documents, interface specifications, architecture decision records, sequence diagrams and deployment views.
- Lead technical planning and delivery across internal teams, systems integrators, offshore developers, SaaS providers and airline technology vendors.
- Support technical due diligence, effort estimation, procurement evaluations, vendor challenge sessions and acceptance of third-party solution designs.
- Provide escalation leadership for critical incidents, cross-system defects and performance or integration failures, ensuring root-cause analysis and permanent corrective actions.

- Maintain architecture standards and ensure that security, privacy, PCI DSS, POPIA and SAA governance obligations are reflected in designs and implementation.
- Coach technical leads and engineers and ensure structured knowledge transfer to SAA personnel and appointed service providers.

Mandatory qualifications and experience

- A Bachelor's degree in Information Technology, Information Systems, Computer Science or a closely related discipline; an equivalent NQF Level 8 qualification may be considered.
- A minimum of 15 years' experience in enterprise software engineering, solution delivery or technology leadership.
- A minimum of 10 years' demonstrable experience in airline or travel technology, including direct delivery of airline digital commerce or passenger-service integrations.
- At least 5 years' experience performing solution architecture, enterprise architecture or technical design authority responsibilities for business-critical platforms.
- Demonstrable experience leading backend, API and middleware delivery for a large airline website or comparable airline digital platform.
- Demonstrable experience coordinating multidisciplinary and distributed delivery teams, including on-site, remote and vendor resources.
- Hands-on experience with airline shopping, booking, PNR servicing, payment, check-in, loyalty, ancillary, notification or baggage-related journeys.
- Proven experience integrating Amadeus Altéa and/or comparable passenger service systems using REST, SOAP, Self-Service or enterprise airline APIs.
- Demonstrable experience in the architecture of Java/Spring-based services, API-led integration, microservices and containerised workloads on AWS and Kubernetes/EKS.
- Experience with Agile delivery, DevOps practices, technical assurance, code-quality governance and production support. Scrum or Agile certification is advantageous.

Required domain and technical knowledge

- Airline retailing and distribution: schedules and availability, fares, flight shopping, offers, ancillaries, orders/bookings, ticketing, servicing and disruption considerations.
- Amadeus ecosystem: Altéa reservation concepts, RefX booking flows, airline web services and the practical constraints of redirect, deep-link and hosted booking journeys.
- IATA standards and industry direction: NDC message concepts, AirShopping, Offer and Order management, One Order and airline retailing modernisation.
- Architecture methods: domain and integration modelling, API design, security architecture, non-functional analysis, technology roadmaps, architecture decisions and technical risk management.

- Platforms and patterns: Java, Spring Boot, REST, SOAP, JSON/XML, microservices, AWS, EKS/Kubernetes, Docker, caching, event-driven integration, Liferay or comparable digital experience platforms, and React/Next.js or comparable front-end frameworks.
- Operational engineering: monitoring, logging, tracing, alerting, capacity planning, vulnerability remediation, incident command, root-cause analysis and disaster recovery.

Expected deliverables

- Approved solution architectures and implementation roadmaps for assigned initiatives.
- Architecture decision records, integration specifications, security and non-functional requirements, and traceable design approvals.
- Technical delivery plans, estimates, dependency maps and risk or issue escalations.
- Design assurance across SAA teams and third-party suppliers, including documented review outcomes and remediation actions.
- Production architecture support, major-incident participation and root-cause recommendations.
- Current architecture repository, system knowledge base and structured knowledge-transfer material.

ROLE 2

AWS Cloud-Native Java / EKS Engineer

Hands-on engineering, deployment and operational support for SAA's cloud-native integration services

Role purpose

The AWS Cloud-Native Java / EKS Engineer will design, build, deploy and support SAA's Java-based APIs, integration services and microservices on AWS. The resource must combine strong software-engineering discipline with hands-on Kubernetes and EKS capability and must be able to diagnose failures across application, container, cluster, network and external-integration layers.

Key responsibilities

- Design, develop, test and maintain Java and Spring Boot services supporting SAA digital channels and airline business processes.
- Build and maintain REST and SOAP integrations with Amadeus, airline partners, internal systems, payment, notification, loyalty and operational services.

- Containerise services using Docker and deploy, configure and operate workloads on Amazon EKS and Kubernetes.
- Create and maintain Helm charts, manifests, configuration, secrets, health probes, resource limits, autoscaling and deployment strategies.
- Implement and maintain CI/CD pipelines using SAA-approved source control, build, quality, security, container registry and deployment tooling.
- Apply secure coding, dependency management, vulnerability remediation, least-privilege access, encryption and secrets-management practices.
- Implement observability using structured logging, metrics, tracing, dashboards and alerts; support capacity planning and proactive reliability improvements.
- Troubleshoot production issues across JVM, application, database, API, DNS, TLS, network, load-balancer, ingress, pod and cluster layers.
- Participate in code reviews, automated testing, static analysis, performance testing, release planning and technical documentation.
- Provide on-call or scheduled production support where required and contribute to incident reports, root-cause analysis and permanent fixes.
- Collaborate with architects, mobile and web developers, cloud/platform teams, security teams and external airline technology vendors.
- Transfer implementation and operational knowledge to SAA technical personnel and maintain runbooks and support documentation.

Mandatory qualifications and experience

- A Bachelor's degree in Computer Science, Information Technology, Software Engineering or a related discipline, or a relevant tertiary qualification supported by equivalent professional experience.
- A current AWS certification relevant to solution architecture, development or operations. Evidence of certification must be submitted with the bid.
- A minimum of 5 years' professional Java software-development experience in enterprise or high-availability transactional environments.
- Strong production experience with Java, Spring Boot, REST APIs, SOAP services, JSON/XML, JPA/Hibernate and relational databases.
- Demonstrable hands-on experience deploying and supporting production workloads on AWS, Amazon EKS and Kubernetes.
- Demonstrable experience with Docker, Helm, container registries, CI/CD pipelines and automated deployment practices.
- Experience with AWS services relevant to the SAA estate, including EKS, EC2, ECR, IAM, Secrets Manager, CloudWatch, load balancing, networking and security controls.
- Experience in monitoring, production troubleshooting, incident response, performance analysis and root-cause resolution for distributed services.

- Experience integrating with external enterprise platforms using authenticated, high-volume and business-critical interfaces.
- Prior airline, travel, loyalty, e-commerce or similarly regulated high-availability transactional experience is required; direct airline integration experience is preferred.

Required technical competencies

- Java language fundamentals, concurrency, JVM diagnostics, memory and performance tuning, exception handling and resilient integration patterns.
- Spring Boot, Spring MVC, validation, security, configuration, scheduling, data access and service-to-service communication.
- API engineering including contract design, versioning, idempotency, authentication, error handling, timeouts, retries, circuit breakers and audit logging.
- Kubernetes/EKS workload design including deployments, services, ingress, probes, resource management, autoscaling, rolling releases and pod-level diagnostics.
- AWS security and operations including IAM, VPC/network concepts, certificates, secrets, logging, monitoring, alerting and infrastructure governance.
- Engineering quality including unit and integration testing, mocking, code review, static analysis, dependency scanning, build automation and release traceability.

Expected deliverables

- Production-ready Java services and APIs meeting agreed functional and non-functional requirements.
- Version-controlled source code, automated tests, code-review evidence and technical documentation.
- Container images, Helm charts or Kubernetes manifests, configuration and repeatable deployment pipelines.
- Monitoring dashboards, alerts, operational runbooks and documented support procedures.
- Release notes, implementation evidence and rollback procedures for production deployments.
- Incident analysis, defect remediation, performance improvements and knowledge-transfer outputs.

ROLE 3

Senior Mobile and Digital Applications Developer

Cross-platform mobile, React digital channels and Java integration services

Seniority	Senior mobile / full-stack developer
Engagement	Full-time named resource with release and production-support participation
Primary stack	React Native, React, JavaScript/TypeScript, Java and Spring Boot
Primary outcome	Reliable iOS, Android and responsive digital journeys integrated with SAA services

Role purpose

The Senior Mobile and Digital Applications Developer will design, develop, release and support SAA mobile and responsive digital applications together with the Java services required to integrate them into the airline ecosystem. The resource must be able to work across native iOS and Android, React/React Native user experiences and Java/Spring Boot APIs, with a strong understanding of secure mobile delivery, offline behaviour and airline customer journeys.

Key responsibilities

- Develop and maintain cross-platform iOS and Android applications with React Native, and responsive web experiences with React and TypeScript.
- Develop or enhance supporting Java/Spring Boot services and integrate mobile and web clients with SAA APIs and third-party airline platforms.
- Implement customer and employee journeys such as authentication, profile, loyalty, flight search, booking handoff, check-in, manage booking, notifications, baggage tracking and operational workflows.
- Integrate with airline, loyalty and enterprise services using REST and SOAP APIs, secure tokens, deep links, push notifications and approved mobile SDKs.
- Implement secure local storage, session management, caching, offline-first behaviour, retry and synchronisation patterns suited to unreliable mobile connectivity.
- Build reusable components, design-system patterns and accessible responsive interfaces consistent with SAA brand and user-experience standards.
- Integrate device capabilities where required, including camera, barcode or QR scanning, file handling, biometrics, notifications and secure credential storage.
- Manage mobile build configuration, environment settings, signing, certificates, provisioning profiles and controlled releases to Apple App Store and Google Play.

- Write unit, component and integration tests; participate in code review, defect triage, performance optimisation and release verification.
- Instrument applications for crash reporting, analytics, logging and operational monitoring while respecting privacy and consent requirements.
- Diagnose production issues spanning the mobile client, browser, API gateway, Java service, external integration and device or operating-system behaviour.
- Maintain technical documentation, release notes and support runbooks and transfer knowledge to SAA personnel.

Mandatory qualifications and experience

- A relevant diploma or degree in Computer Science, Information Technology, Software Engineering, or a related discipline; equivalent demonstrated experience may be considered.
- A minimum of 7 years' professional application-development experience, including delivery of production mobile or responsive digital applications.
- Demonstrable production experience with React and React Native using JavaScript and/or TypeScript.
- Demonstrable Java and Spring Boot experience, including the development or integration of REST APIs used by web or mobile applications.
- Experience delivering applications for both iOS and Android and supporting them through build, testing, signing, release and post-release defect cycles.
- Experience with state management, asynchronous data access, offline caching, secure storage, push notifications, deep linking and mobile error handling.
- Experience integrating digital applications with authentication, loyalty, booking, payment, notification or other business-critical services.
- Experience with Git-based delivery, automated testing, CI/CD, code review, issue tracking and Agile development practices.
- Prior experience in airline, travel, loyalty, e-commerce, or comparable high-volume customer-facing application is required.
- Demonstrable ability to participate in production support and troubleshoot across front-end, mobile and Java service layers.

Required technical competencies

- React and React Native component architecture, hooks, navigation, state management, forms, accessibility, responsive design and performance optimisation.
- JavaScript and TypeScript, asynchronous programming, API consumption, client-side validation, error handling and reusable application architecture.
- Java and Spring Boot services, REST APIs, JSON, authentication, validation, persistence and integration with external systems.

- iOS and Android build ecosystems, including Xcode, Gradle, signing, provisioning, store submission and operating-system compatibility management.