



Name: AI-Market Insurers Analyzer(MIA)

Domain: P&C (Property and Casualty) Insurance

Cloud: AWS

Tech-Stack: Backend and Middleware

| Sr. No | Technology/Framework |
|--------|-----------------------|
| 1 | Spring6.x |
| 2 | SpringBoot3.x |
| 3 | Spring AI |
| 4 | Spring Retry |
| 5 | Spring Data Elastic |
| 6 | Spring Rest |
| 7 | Springdoc-openapi |
| 8 | Spring Data JPA |
| 9 | Spring Security 6.x |
| 10 | Spring Cloud |
| 11 | NOSQL-MongoDB |
| 12 | Redis |
| 13 | Bucket4j |
| 14 | Axon |
| 15 | Apache Kafka |
| 16 | RDBMS-Mysql |
| 17 | EFK |
| 18 | Graphana & Prometheus |
| 19 | Resilience4j |
| 20 | Micrometer and Zipkin |

Tech-Stack: UI & Frontend

| Sr. No | Services |
|--------|-------------|
| 1. | Material UI |
| 2. | React JS |
| 3. | Rx JS |
| 4. | Netlify |
| 5. | Axios |
| 6. | Typescript |

Tech-Stack: Security-Keycloak IAM

| Sr. No | Services |
|--------|--|
| 1. | Dev and Prod Setup |
| 2. | Managing Users-Local, LDAP And AD |
| 3. | Authenticaton-OpenID Connect |
| 4. | Authorizing Access-Oauth2.0 |
| 5. | Securing SPA |
| 6. | Securing REST API |
| 7. | Authorization Strategies-RBAC, GBAC And ABAC |
| 8. | Managing Tokens and Sessions |

Tech-Stack: Build and Deploy

| Sr. No | Services |
|--------|---------------------------------------|
| 1. | OCI Container-Docker |
| 2. | Kubernetes(Minikube, Kubeadm and EKS) |

Microservices Principles and Patterns:

| Sr. No | Principle/Pattern |
|--------|--|
| 1 | Bounded Context-DDD |
| 2 | Polyglot Architecture |
| 3 | Centralized Configuration-Config-Server |
| 4 | Service Discovery-Discovery Server |
| 5 | Proxy Pattern - Edge Server |
| 6 | Centralized Log Analysis-EFK |
| 7 | Distributed Tracing--Zipkin&MicroMeter |
| 8 | Circuit Breaker and Retry |
| 9 | Centralized monitoring and alarms-Graphana&Promotheous |
| 10 | Distributed Access Management-Keycloak |
| 11 | Throttling with Distributed Cache-Redis |
| 12 | Event Sourcing and Handling-CQRS |
| 13 | Event Streaming-Kafka |
| 14 | Distributed Tracing-Zipkin&MicroMeter |