

SentinelRisk Product Specification

Product Specification - SentinelRisk (version Spring Boot + Angular)

Product Name: SentinelRisk

Product Specification

SentinelRisk is a next-generation risk management and compliance platform designed to help organizations identify, assess, and mitigate risks efficiently. It enables structured risk tracking, real-time analytics, and automated compliance management through a scalable, API-driven architecture.

Key Features

Risk Management

- Centralized risk repository with categorization
- Risk lifecycle management: Identification -> Assessment -> Treatment -> Monitoring
- Custom risk scoring models
- Risk acceptance, mitigation, transfer, and escalation workflows
- Automated risk review cycles

Risk Assessment & Analysis

- Multi-dimensional risk assessment models
- Dynamic risk calculation using quantitative and qualitative methods
- Heatmaps & risk trend forecasting
- Impact vs. likelihood matrix generation

Compliance & Audit Management

- Predefined compliance mappings (ISO 27001, NIST, SOC 2, GDPR, etc.)
- Automated control verification and gap analysis
- Internal and external audit tracking
- Policy & control document repository

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Incident & Remediation Tracking

- Incident logging & classification
- Root cause analysis and mitigation tracking
- SLA-based remediation plans
- Automated escalation mechanisms

Advanced Reporting & Analytics

- Customizable risk dashboards
- Risk trend visualization and heatmaps
- Scheduled and on-demand executive risk reports
- Predictive analytics for emerging risks

User & Access Control

- Role-Based Access Control (RBAC) with granular permissions
- Multi-user support with workflow approvals
- Single Sign-On (SSO) and Multi-Factor Authentication (MFA) integration

Integrations & API-First Approach

- REST API for seamless integration with third-party tools
- Webhooks for real-time event notifications
- CSV/JSON-based risk import/export for bulk management

Deployment & Infrastructure

- Cloud-native & on-premise deployment
- Microservices architecture based on Spring Boot
- Secure encrypted database storage with PostgreSQL

Technology Stack

- Backend: Java (Spring Boot for robust, scalable APIs)
- Frontend: Angular (for a modern, responsive, and component-based UI)
- Database: PostgreSQL
- Authentication: Keycloak integration for Identity and Access Management (IAM)

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- Deployment: Docker, Kubernetes

Conclusion

SentinelRisk provides a scalable, secure risk management and compliance platform, now leveraging Spring Boot for high-performance backend services and Angular for a dynamic and interactive frontend experience. This modern architecture enables seamless integration, real-time analytics, and an exceptional user experience tailored to enterprise risk governance needs.