

cluetec technology stack

Backend, frontend, mobile apps,
working method & team

Backend

Applications with Spring

- ✓ Spring framework
- ✓ Spring boot
- ✓ Spring data (hibernate, MongoDB abstraction)
- ✓ Spring security
- ✓ Spring batch
- ✓ Spring actuator
- ✓ Netflix stack – service discovery (Eureka), circuit breaker (Hystrix), Intelligent routing (Zuul)
- ✓ Tomcat, Jetty

Applications with JEE

- ✓ JBoss, Wildfly, Wildfly swarm
- ✓ JPA, Hibernate, JMS, etc.

Message queues

- ✓ ActiveMQ
- ✓ RabbitMQ

Stream processing

- ✓ Apache Kafka
- ✓ MQTT
- ✓ Spark, Flink (basics)

Databases

- ✓ **SQL**
Oracle, PostgreSQL, MS-SQL, SQLServer, MySQL/Maria-DB
- ✓ **NoSQL**
MongoDB, elasticsearch, Redis, Cassandra

Deployment

- ✓ Docker as a container platform (Compose, Swarm)
- ✓ nginx als Proxy
- ✓ Ansible for the automatic orchestration of services and containers

Monitoring

- ✓ Graylog
- ✓ Grafana
- ✓ icinga
- ✓ Logstash

Tools

- ✓ Maven
- ✓ Eclipse
- ✓ IntelliJ
- ✓ Git
- ✓ GitLab CI
- ✓ Jenkins 2

Frontend

Frameworks

- ✓ Angular
- ✓ TypeScript
- ✓ RxJS
- ✓ ReactJS
- ✓ nginx als Container
- ✓ ng-Bootstrap (Responsive Design)
- ✓ SCSS

Tools

- ✓ Node.js / npm
- ✓ Webpack
- ✓ Karma
- ✓ Protractor
- ✓ Mocha
- ✓ Selenium

Mobile Apps

iOS

- ✓ Swift
- ✓ Objective-C
- ✓ SQLite
- ✓ Core Data
- ✓ RxSwift
- ✓ Alamofire
- ✓ Xcode
- ✓ Carthage
- ✓ CocoaPods

Android

- ✓ Java
- ✓ SQLite
- ✓ RxJava
- ✓ Gradle
- ✓ Android Studio

Working method

Agile methods

- ✔ Scrum and Kanban as methodologies
- ✔ Principles: KISS, YAGNI, DRY
- ✔ Joint definition of done – e.g. reviews, performance, automated tests, etc.

Continuous integration / Delivery / Deployment

- ✔ CD staging pipeline with GitLab CI for all areas (backend, web and mobile)
- ✔ Automatic tests (Unit, Integration, System)
- ✔ Code reviews via GitLab merge requests
- ✔ Static code analysis with SonarQube
- ✔ Automatic packaging (e.g. Docker images)
- ✔ Automatic deployment (develop, staging, production)
- ✔ Nightly builds

Architectures

- ✔ Client-Server
- ✔ Pub-Sub Pattern (e.g. MQTT)
- ✔ Reactive
- ✔ RESTful
- ✔ Domain-Driven
- ✔ Microservices

Team

People & skills

- ✔ Development team – diploma, bachelor, master KIT, HSKA, HFU
- ✔ UX and graphic design
- ✔ Analytic and technological excellence
- ✔ T-shape skills: specialised with broad base of knowledge
- ✔ Excitement for technology and complex tasks
- ✔ Certified Scrum master and POs
- ✔ Strong softskills