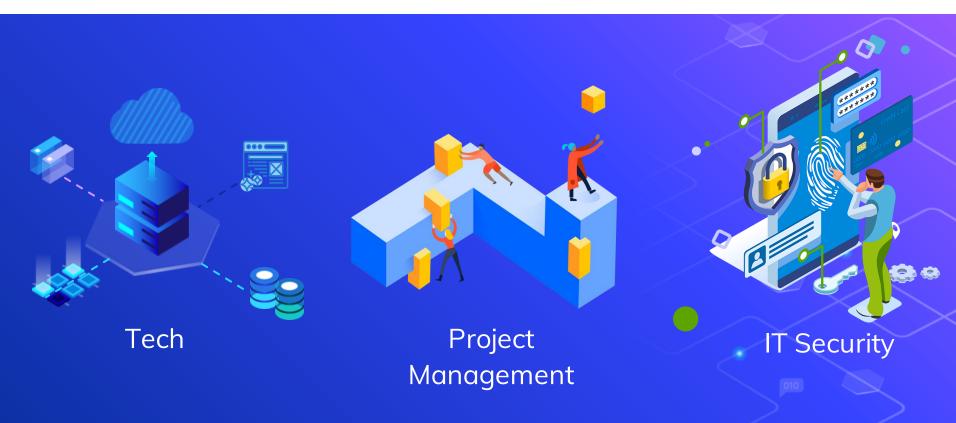
# Halsson - Make IT Simple

# Training Catalog



contact@halsson.com https://halsson.com

#### **Trainings**



#### **Training Methodology**







Offered onsite

Offered online

Nb of days

75%

Practical

25%

**Theoretical** 

#### Tech

« Technology is best when it brings people together. »

- Matt Mullenweg







From the open source world, Python 3 is a language deemed easy to access, simple and particularly portable.

- Introduction to Python
- Variables and Types
- Lists
- Basic Operators
- String Operations
- Conditions

- Functions
- Classes and Objects
- Dictionaries
- Modules and Packages
- Unit Tests
- Debugging

Loops





One of the most used languages in the application development industry. Simple, flexible and benefits from a large ecosystem.

- Introduction to Java
- Data Types and Operators
- Conditions and Loops
- Classes, Objects and Methods
- Packages and Interfaces
- Inheritance

- Exception Handling
- Using I/O
- Multithreaded Programming
- Enumerations
- Unit Tests



## **Java Web Development**



Java Web Application is used to create dynamic websites.

- Introduction to Jakarta
- Web App Architecture
- MVC Model
- Servlet
- O JSP
- Interact with a DB

- O JNDI
- SpringData
- Unit Tests
- Filters and Cookies
- REST Web Services



# Microservices with Java



Microservices architecture is undergoing a major boom. Giants have redesigned their systems to rely on this architecture.

- Microservices Architecture
- Challenges
- Spring Boot
- Eclipse Microprofile
- Apache Camel
- Deploying Microservices

- Docker and Kubernetes Integration
- Cluster Management
- Failover
- Load Balancing
- Distributed Tracing





A server side scripting language used to develop Static websites or Dynamic websites or Web applications.

- Introduction to PHP.
- Variables and Types
- Operators and Conditions
- Loops and functions
- Forms
- Data Transmission

- Interaction with DB (PhpMyAdmin)
- Cookies and Sessions
- File Management
- Web Services
- Ajax Calls





A superheroic JavaScript framework, which is awesome for building highly interactive web applications.

- Introduction to Angular
- TypeScript
- Features of Angular
- Angular Components
- Responsive web designing
- Event binding
- Dependency injection

- Directives
- Pipes
- Forms
- Angular Routing
- Promises and Observables
- Testing Angular applications





A JavaScript library, open sourced, which is great for building modern applications of any size and scale.

- Introduction to React
- Basics
- Output lists
- Conditional content
- Styling
- Advanced component features

- Access Http content from React
- Redux
- Forms and validation
- Authentication
- Unit Tests
- Deployment



Famous Red Hat stack solution, allows you to manage deployments, tasks and configuration on multiple machines.

- Introduction to Ansible
- Installation and Configuration
- Playbooks
- Variables
- Tasks

- Roles
- Error Handling
- Conditions and Loops
- Deployment





Docker is an open source platform for building, deploying, and managing containerized applications.

- Introduction to Docker
- Installation
- Containers vs VM
- Basic Commands
- Images
- Docker File

- Docker Network
- Port Management
- Volume Management
- Docker Compose
- Logging



#### **Jenkins**



Leading open-source automation server. Built with Java, it provides over 1600 plugins to support automating virtually anything.

- Introduction to Jenkins
- Web Interface
- Jenkinsfile
- Build Automation
- Notification Techniques
- Integration with Code Quality

- Test Automation
- Reports Configuration
- Deployment Automation
- Pipelines
- Jenkins Administration
- Jenkins and Docker





The most popular source code repository in the world. It is used by millions of projects around the world.

- Introduction to Git
- Basics
- Repositories
- Branches
- Conflict Management
- History

- Tags
- Merges
- Web Interface Tools



#### **Apache**



Fast, reliable and secure, it is the most used web server in the world.

- Introduction to Apache
- HTTP Protocol
- Installation
- Dynamic modules
- Containers

- Virtual Sites
- User Authentication
- Certificate Management
- Clustering
- Log Management

#### Gestion de projets

« Those who plan do better than those who do not plan, even though they rarely stick to their plan. »

- Winston Churchill







Using best and new Agile practices can keep your projects running smoothly.

- Traditional methods and their limits
- Foundations of Agile methods
- Agile manifesto
- Agile values and principles
- Iterative and incremental principle

- EXtreme Programming
- Scrum
- Kanban
- Monitoring an Agile project
- Agile practices





One of the main and most popular Agile methods highlighting value creation.

- Basics
- Teams
- Sprint
- Planification
- Backlog

- Risk Management
- Change Management
- Daily Scrum
- Review
- Retrospective

# Sécurité informatique

« It takes 20 years to build a reputation and few minutes of cyber-incident to ruin it. »

- Stéphane Nappo





## Secure programming



Strengthen and increase the security of web applications by applying best practices in the industry.

- Introduction to Secure Programming
- Secure Programming Awareness
- Authentication and Session Management
- Input Handling
- Authorization

- Configuration
- Error Handling and Logging
- Cryptography
- Application Security Testing
- OWASP



#### Web Application Penetration Testing ——





Recognize and successfully overcome vulnerabilities and security threats surrounding web applications.

- Penetration Testing Process
- **CSRF**
- Introduction to Web Applications O Other Attacks
- Information Gathering

Web Services

O XSS

XPath

SQL Injection

- Error handling
- Authentication and Authorization Web App Security Testing Tools
  - Session Security

Web App Penetration Testing



#### **Penetration Testing**



More comprehensive and large training to identify weaknesses in infrastructure, network, applications and systems.

- Evolution of Hacking
- Legal Issues
- Operating System ServicesSecurity Overview
- Footprinting
- Google Hacking
- Scanning Network

- Enumeration
- Malware Threats
- Sniffing
- Social Engineering
- Session Hijacking
- Web Servers security
- Web applications security



# Sécurité Infonuagique



Particularly focused on cloud security and the measures to be taken.

- Cloud Concepts
- Cloud Threats
- Cloud Attacks
- Cloud Security

- Cloud Security Tools
- Cloud Penetration Testing Tools





Wifi networks are present everywhere. Ensuring their safety is of major importance to an organization.

- Wireless Concepts
- Wireless Encryption
- Wireless Threats
- Wireless Hacking Methodology
- Wireless Hacking Tools

- Bluetooth Hacking
- Countermeasures
- Wireless Security Tools
- Wireless Penetration Testing Tools

#### Halsson

