



SIRIUS WEB TRAINING – STUDIO MAKER

Course Goals

- Learn how to create a simple modeling environment with Sirius
- Learn the methodological and technical bases for building a modeling workbench

Our added -value

The course is designed by the creators of the Sirius Project and other Eclipse committers. Many hands-on exercises (50%)

Duration: 28 hours (8 half days)

Audience: Architects, developers

Prerequisites: Basic knowledge of Java or JS/TS development (React, Spring knowledge are not required)

1 - MDE and Technical stack overview

- Introduction to MDE and Domain Specific Modeling concepts
- Overview of the Eclipse modeling technologies
- Overview of React, Spring, GraphQL
- Installation procedures

Exercises

- Environment installation and configuration
- Models creation using the tree editor

Duration: 1h

2 - Sirius overview & End Users's features

- The Sirius approach
- Architecture
- End user features
 - Ergonomic for Diagrams authoring
 - Ergonomic for Tables, Deck, Gantt, Tree authoring
 - Additional panels (search, validation, projects preferences, etc)

Exercises

- Hands-on with provided examples

Duration: 3.5h

3 - My first representation with No-Code View

- Basic usage of Sirius Domain
- Usage of View Studio Maker to make a View Diagram Description
- Specification of basic tool creation tools

Exercises

- Creation of "class-diagram-like" graphical editors
- Discovery of available shapes

Duration: 2.5h

4 - Introduction to meta-modeling

- Basic concepts of EMF & Ecore
- The first modeling tool created by EMF and embedded in Sirius
- Links between meta-models

Exercises

- Creation of a basic EMF meta-model and deployment in Spring
- First customization (icons, labels)

Duration: 2.5 h

5 - Navigation with AQL

- Overview
- Syntax
- Tuning queries

Exercises

- Navigation and advanced querying with system services

Duration: 2.5

6 - Diagram representation

- Creation of React (Front-end) and Spring modules (Back-end)
- Build with Maven
- Usage of View API Builder with Java code

Exercises

- Creation of "class-diagram-like" graphical editors

Duration: 2h

7 - Editing with diagrams

- Java services
- Edition tools (Direct Edit, CRUD, Re-connection, Selection Dialog, ...)
- Conditional styles

Exercises

- Enhancement of the sample modeler with extended tools

Duration: 3.5h

8 - Other representations

- Tree
- Table
- Gantt
- Deck
- Form

Exercises

- Enhancement of the sample modeler

Duration: 3.5h

9 - Advanced SDK usage

- Filters, Mappings specialization and reuse
- Validation rules
- Detail Views, Tree Model Explorer
- Custom widget, Custom back-end behavior
- Extensions
- Best practices

Exercises

- Enhancement of the sample modeler

Duration: 5h

10 - Modeler deployment

- Deployment with Docker
- Upgrades

Exercises

- Creation of a build for the sample modeler

Duration: 2h