Sages

Course code:	**EXTJS**
Course title:	**ExtJS 4 – Effective development of Web applications**
Days:	3

Description:

Course intended for:

The training is aimed at developers, intending to acquire knowledge on development of scalable Web applications, where a large functional part has been transferred to the client layer (Web browser).

Course objective:

The training objective is to get the participants familiar with the theoretical and practical issues of creation of Web applications using the ExtJS library.

The training participants will learn to:

- Use and extend the ExtJS library

- Effectively use the native components and put them together as a whole

- Design effective communication between components and back-end of the Web application

After the training, the participants will be able to develop scalable Web applications on their own using ExtJS.

Course parameters:

3 days 8 hours each

Course curriculum:

1. Introduction to ExtJS technology

2. Installation and initial configuration of ExtJS

3. Programming with ExtJS – object oriented programming (OOP)

- Class system

- Mixins

- Class loading

- Statics

4. Application hierarchy - Components, Containers, Events

5. Structure, configuration and use of components
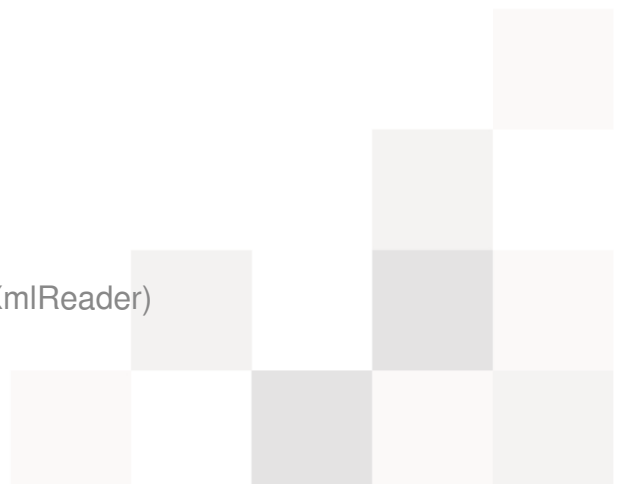
- Panel

- TabPanel

- Window

- Grid

- Tree

- Menu

- Toolbar

6. Organization of containers and components

- Container Layouts (Anchor, Form, Absolute, Fit, Accordion, Card, Column, HBox, VBox, Table, Border)

- Component Layouts (Dock, Tool, Field)

- Component embedding

- CSS Style

7. Data in application

- Data model development (Model)

- Data source development (Store)

  - Data reading (JsonReader, XmlReader)

- - Data writing (JsonWriter, XmlWriter)
  - Local data (LocalStorage, SessionStorage, Memory)
  - Remote data (Ajax, Rest, JsonP)
  - Sorting
  - Filtering

8. Forms

  - Form Panel
  - Fields
  - ComboBox
  - Editors (HTML, Text)
  - Validation
  - Communication with server, data saving

9. Grids

  - Data sources (Store)
  - Columns
  - Grouping, GroupingSummary
  - Summary
  - Edition (CellEditing, RowEditing)

10. Trees

  - Data sources (Store)
  - Nodes (NodeInterface)
  - Tree management (Drag and Drop)
  - Sorting

- Tree grid (TreeGrid)

11. Application style

  - Use of motifs (Classic, Gray, Neptune)

  - Development of own motifs (Sass and Compass)

12. Development of applications in MVC architecture

Combining of components together – building of a complete application.