

Updated 07/26/2023

Sign up

Polymer 3 training

3 days (21 hours)

Presentation

Polymer 3 is a JavaScript Framework created by Google. Composed of a set of decoupled elements (separation of HTML, CSS and JavaScript code) that can be reused independently, it meets the new standards of Web development. Polymer 3 JS enables you to create Web or Mobile applications that offer the same possibilities as a rich client, and to reuse the components developed for other applications. This hands-on training course provides a complete overview of the Framework in version 3, from its architecture to its full implementation in a Web application.

As with all our training courses, this one will introduce you to the latest version of Polymer (at the time of writing: Polymer 3.4).

Objectives

- Discover Polymer 3's new features
- How to develop a new Web application
- Design an application based on Polymer 3
- Understanding the advanced mechanisms of the Polymer 3 framework

Target audience

Web developers

Prerequisites

Basic knowledge of HTML, CSS, JavaScript and object concepts.

Polymer training program

Introduction and general information

- The role of a framework
- The Component paradigm
- W3C Web Components Specification
- Polymer JS overview
- Polymer Project website

EcmaScript 6 and higher

- New language syntaxes
- Development with modules
- New APIs a must
- Async/Await

Polymer JS working environment

- node, npm, yarn
- webpack
- Web Component in 2018
- Polymer CLI

Using a WebComponent

- Importing an element
- Element invocation
- Passing parameters
- Calling methods inside and outside an element
- Lifecycle V3

Templating Polymer language

- Templating Polymer
- Bindings
- Properties
- Methods
- Polymer guidelines

Polymer concepts

- Built-in methods
- Mixins
- Best practices

Creating a Polymer element

- The different extends
- Properties in detail
- The events
- The look
- Testing components

The lit-html alternative

- Using lit-html in a web project
- Use LitElement
- Differences with Polymer Element

Polymer Data System

- Concepts
- Objects and Tables
- Complex observer & Computed Properties
- Data Binding
- Mediator Pattern
- Unidirectional / bidirectional management
- A concrete example

Polymer and Application

- Routing with Page.js
- Requesting a WebService
- Production start-up

Conclusion

- Going further with Redux, RxJS
- Training summary
- Documents delivery
- Some useful resources

Practical work

• Development of an online library-type application.

Angular Advanced Training

Vue.js training

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.