+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 11/10/2024

Sign up

MEAN Stack JavaScript training

5 days (35 hours)

Presentation

MEAN stack JavaScript is a set of open-source components that together provide a complete framework for the creation of dynamic Web applications. Composed of JavaScript technologies, it takes as its acronym the letters of the technologies used "MongoDBExpressAngularNode". MEAN aims to enable developers to build simple, scalable full-stack JavaScript applications.

Each technology in the stack complements the others to create simple, innovative applications:

MongoDB will handle back-end data collection

Express lets you apply your application's infrastructure to Web pages Angular

enables your application's user interface to be dynamic Node.js lets you implement

your application's backend in JavaScript

In this training course, you'll learn how to use each of the technologies presented above to create dynamic, responsive fullstack applications, from design to deployment. The presence of testing will help you understand your applications' shortcomings and resolve them with the right methods.

As in all our training courses, we use the latest versions of our software.

- MongoDB
- Express
- Angular
- Node JS

Objectives

- Building Web applications with NodeJS and Angular
- Working with data on MongoDB and ExpressJS
- Master the latest versions of the Angular Framework
- Understanding JSON and MongoDB REST Web Services
- Understand how to design single-page applications and how Angular facilitates their development

Target audience

Developer, Tech Lead, Technical Architect

Prerequisites

Fundamental knowledge of JavaScript

Further information

Mean Stack is used on JavaScript libraries so you can follow :

- Our MongoDB training
- Our Node.JS training
- Our training on Angular + Advanced

M.E.A.N Stack Training Program: Mongo + Express + Angular + NodeJS

Introduction

- One-Page" application principle
- Introducing the MEAN stack
- Presentation of a MEAN vs LAMP comparison

Node.js

- Node.js installation
  - Try Node from the command line
  - Configuring a Node.js application
  - Using Node.js to run scripts
  - Node projects
  - The Node Package Manager
  - Creating a project
  - The package.json configuration file
  - Global vs. local package installation
  - Task automation with Grun
- Express installation
  - Working with Express
  - Configure Express
  - Creating an NPM Start script
  - Routing with Express
- Starting a Web application with Node.Js
- Using a Bootstrap model
- Resource configuration
- Managing user interface components with Bower
- Working with Gulp
- Using JSHint in Gulp
- Injecting dependencies with Wiredep
- Injection with Gulp-Inject
- Monitor changes with Nodemon
- Redirect our new pages to Express & Node
- Using a database with Node.js

Mongo B

- Why MongoDB & NoSQL
- Configuring and installing MongoDB
- Prepare event data for insertion into MongoDB
- Write code to insert our data into MongoDB
- Querying MongoDB and displaying results
- Introduction to NoSQL databases
  - The basics
  - Getting to grips with the Mongo command interpreter
  - Interact with command-line data (Mongo shell)
  - Data import and export
  - Connecting to a Node.js application
  - Querying the Node.js database
  - Creating documents from Node.js
- Implement
  - MongoDB Shell
  - MongoDB BSON data types
  - MongoDB REST API
  - The native MongoDB driver
  - MongoDB on Heroku: MongoHQ data types
- Mango Safety
- Authorization and document fixation collections
- The limits of the Mango authorization system
- Authentication

Angular

- The basics
  - Extents
  - Dependency injection
  - Models
  - Expressions
  - Forms
  - Guidelines
  - Entertainment
- HTML compiler,
- Suppliers
- Bootstrap
- Unit testing
- E2E tests
- Use the location service
- Data link
- Integrated guidelines
- Integrated filters
- $scope and contolleurAs controllers
- Modules
- Single Page Apps, Routes, Templates
- Integrated services, Application architecture
- Custom Services & Service vs Factory

Test tools

- Mocha
- Chai
- Jasmine
- Reporter

Practical work

Building a Web-based application using M.E.A.N JavaScript

Companies concerned

This 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.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire enabling us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives with regard to the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

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.