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Sign up

ActivityPub training

2 days (14 hours)

Presentation

Our ActivityPub training course will help you master this open standard for decentralized social networks. ActivityPub provides a client-to-server API for creating, updating and deleting content, as well as a server-to-server API for federating notifications and content.

Our program will help you understand the role of the Social Web Working Group, as well as Conformance and Specification Profiles, which are crucial components in the use of ActivityPub. You'll also learn about objects and client-server interactions.

Our training course will teach you how to create your own decentralized social networks, giving you all the skills you need to participate in open-source projects and perfect your mastery of the tool.

Like all our training courses, it will be run on the latest version of Activity Pub.

Objectives

- Mastering Activity Pub concepts
- Create your own decentralized social network
- Be able to participate in open source projects

Target audience

- **Web developers**

Prerequisites

- Knowledge of a programming language

ACTIVITYPUB TRAINING PROGRAM

INTRODUCTION TO ACTIVITYPUB AND THE DECENTRALIZED SOCIAL WEB

- ActivityPub protocol overview
- Role in the decentralized social Web
- The objectives of the Social Web Working Group
- Understanding specification profiles and compliance
- Basic components: Actors, Objects and Activities
- The importance of interoperability and federation

UNDERSTANDING OBJECTS IN ACTIVITYPUB

- Object structure and types
- Using object identifiers and retrieving objects
- Source property and its importance
- Extensions and object customization
- Multimedia content management and media downloads

PLAYERS AND COLLECTIONS IN ACTIVITYPUB

- Objects representing actors
- Inboxes and Outboxes
- Understanding and using tracker collections
- Collections of "likes" and shares
- Public addressing and interaction with the public

CLIENT-SERVER INTERACTIONS

- Create, update and delete activities via the server
- Manage tracking, adding, removing, rating and blocking activities
- Cancel an activity and understand the activity delivery process
- Creation of a personal endpoint and extension for real servers
- Practical: Follow a user and receive activities

SERVER-SERVER INTERACTIONS

- Server-to-server activity delivery protocol
- Acceptance and rejection of activities in a federated context
- Announcement activity management (sharing) and activity propagation
- Security in server-server interactions: authentication, authorization and verification
- Practical: Establishing communication and federation between two servers

INTERNATIONALIZATION AND SAFETY

- Managing internationalization in ActivityPub
- Authentication and authorization of actors and servers
- Secure URI verification and management
- Rate caps and content sanitization to prevent spam and DoS attacks
- Security practices for deploying an ActivityPub instance

PRACTICAL WORKSHOP AND FINAL PROJECT

- Mini-project using knowledge acquired during training
- Participate in ActivityPub-related open source projects to gain practical experience
- Discussion of recent developments in the ActivityPub specification and community
- Tips for going ahead and creating applications or services using ActivityPub

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.

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 which enables 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 for 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.