AEM Sites: Advanced Developer

Course description: AEM Sites: Advanced Developer Training teaches developers the advanced topics of building a custom AEM application, based on OSGi and JCR. This includes practice with OSGi component development and development topics like Unit Testing and Maven project setup. The training also reviews areas that are relevant for successful AEM projects like dispatcher caching, deployment & packaging and integration methods are taught.

The training builds up on the Basic AEM Sites: Developer training. Participants need to have a good understanding of AEM components and templates. In addition, Java skills are required.

Target audience: The AEM Sites: Advanced Developer class is designed for developers who wish to learn about advanced topics of application development with the AEM Platform.

Objectives

The overall goal of this training is to enable developers to create and understand advanced AEM development practices and to prepare themselves for more complicated project work involving integration with third party systems. The participants learn how to structure their code and best practices.

This course is not intended to provide any custom instruction focused on specific sites or projects.

Pre-Requisites

- Successful completion of the AEM: Basic Developer Training. You should be familiar with the following topics:
  › AEM installation
  › JCR/CRX repository concepts — nodes, properties
  › Use of the AEM consoles
  › Use of the onboard, browser-based IDE — CRXDELite
  › AEM Component creation
- Experience in developing basic AEM applications using AEM components and templates
- Java coding experience

Participants should also know the following:

- Relationship between template and page-rendering component
- Major functionality of the jcr:content child of the cq:Page node
- Adding component to the list of available components

Course Material

- AEM Sites: Advanced Developer Student Workbook

Agenda: day 1

🕐 **Morning Session (9 a.m.–Noon)**
- Development models: Maven, vlt
- OSGi components, services, annotations
- Sling, Resource, REST

🕐 **Lunch (Noon–1 p.m.)**

🕐 **Afternoon Session (1–5 p.m.)**
- Sling Events
- Sling Scheduling

Agenda: day 2

🕐 **Morning Session (9 a.m.–Noon)**
- JCR Basics, Content Modelling
- JCR Indexing, Search
- JCR Versioning, Observations
- Jackrabbit Oak

🕐 **Lunch (Noon–1 p.m.)**

🕐 **Afternoon Session (1–5 p.m.)**
- Users, Groups, Permissions
- Unit Testing
- GUI Testing

Agenda: day 3

🕐 **Morning Session (9 a.m.–Noon)**
- Deployment & Packaging
- Dispatcher and Caching
- Reverse Replication
- Content automation / periodic importers
- Overlay / Extend Foundation components

🕐 **Lunch (Noon–1 p.m.)**

🕐 **Afternoon Session (1–5 p.m.)**
- Content Migration / Import
- Migration to AEM 6.0
- Client Libraries