

dotCMS Java Developer Training Agenda

Session 1

1. Introductions
2. dotCMS Technology and Architecture
 - a. General Philosophy of dotCMS
 - b. Libraries and Technology used
 - c. Legacy VS New Code
3. dotCMS Model and Concepts
 - a. HTML Pages
 - b. Templates
 - c. Containers
 - d. Content
 - e. Relations between concepts
 - f. Velocity Objects and How they Parse
4. Basic DB Info
 - a. Philosophy Regarding the DB
 - b. Key Database Tables
 - c. How do Versions work (Inodes/Identifiers)
5. Setting up the Development Environment
 - a. Prerequisites
 - i. Downloading dotCMS code
 - ii. Database Server Installed
 - iii. Java Installed
 - iv. Ant Installed
 - v. Git Installed (optional)
 - b. Process
 - i. Pull Code
 - ii. Build Code
 - iii. Create New Database
 - iv. Point Build to New Database
 - v. Run
 - c. Assignment: Setup Running dotCMS Server on Personal Machine
6. Questions and Answers

Session 2

7. Setting Up Eclipse Environment (cont.)
 - a. Process
 - b. Assignment: Setup and Debug dotCMS in Eclipse

8. Extension Point Concepts
 - a. Viewtools
 - b. Actionlets
 - c. Portlets
 - d. Content Hooks

9. Static Plugins
 - a. Potential Uses
 - i. Configuration Settings
 - ii. Velocity
 - iii. ViewTools
 - iv. RESTful Interfaces - DWR / Jersey
 - v. Portlet
 - vi. Struts
 - vii. Spring
 - viii. TinyMCE Configuration
 - b. Directory Layout Explained
 - i. conf
 - ii. jsp
 - iii. lib
 - iv. ROOT
 - v. src
 - c. Assignment: Deploy Configuration Plugin
 - i. All of your previous config changes should be moved into plugin (i.e. server.xml, ROOT.xml, and log4j.xml)
 - ii. Disable ClickStream Tracking
 - iii. Deploy Plugin and Verify Results
 - b. Assignment: Deploy Hello World Plugin in Eclipse

9. Questions and Answers

Session 3

10. Dynamic Plugins (OSGi)

- a. Introduction to how they work
- b. Limitations/Advantages
- c. Examples
- d. Assignment: Deploy Dynamic Portlet Plugin
- e. Assignment: Deploy Dynamic Servlet Plugin

11. Coding in dotCMS Infrastructure

- a. Documentation Site
- b. APIs
- c. dotConnect
- d. HibernateUtils
- e. Cache
- f. ElasticSearch

12. Where to Go From Here

- a. Support
- b. Google Group
- c. IRC
- d. GitHub
- e. Email

13. Questions and Answers