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
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