Aspect-Oriented Documentation

John W. Stamey, Jr. & Bryan T. Saunders
Department of Computer Science
Coastal Carolina University, Conway, SC 29528
{jwstamey|btsaunde}@coastal.edu

ABSTRACT
This workshop will demonstrate and explain the creation of documentation for Aspect-Oriented programs written in Java. Fundamentals of Aspect-Oriented Programming, separation of concerns, and as well as motivation for Aspect-Oriented Programming , will be presented.

Categories and Subject Descriptors
D.2.10 [Software Engineering] Design;
D.3.2 [Programming Languages] Languages
General Terms
Documentation, Languages
Keywords
Documentation**,** Aspect-Oriented Programming

1. MOTIVATION
Aspect-Oriented Programming (AOP) has become a widely publicized part of the Object-Oriented paradigm over the past ten years. Similar to the familiar concept of modularization for core concerns, AOP recognizes separation of concerns for crosscutting concerns such as logging, synchronization, validation, and persistence.

The code to implement aspects is called *advice*, and is contained in a file separate from the regular source code of the application. At runtime, advice code is woven into the source code. For this reason, the virtual code that is executed at runtime is not available for the programmer to view. This reason makes the documentation of Aspect-Oriented code of extreme importance.

2. STRUCTURE
Two programming aids are currently available to document Aspect-Oriented code in Java: AJdoc and SubText. Both of these are available as plugins for the Eclipse Development Environment, found at http://www.eclipse.org/. This workshop will present examples of AOP in Java, along with instruction and real-time examples of documentation created with AJdoc and SubText. The presentation, code and instructions will also be archived at http://www.aspectorientedprogramming.org after SIGDOC 2005.

3. PARTICIPANTS
All participants of SIGDOC 2005 conference are welcome to participate in the workshop. Familiarity with Java is helpful but not required. Knowledge of Aspect-Oriented Programming is not required, as a short portion of the workshop will be devoted to that topic.

ORGANIZERS
John W. Stamey, Jr. is the project lead for Aspect-Oriented PHP (AOPHP). He has a number of publications in the field of Aspect-Oriented Programming, and has eight years experience developing enterprise web applications. Stamey currently teaches Computer Science at Coastal Carolina University in Conway, SC and is a member of SIGDOC. Stamey and Bryan Saunders were the recipients of an Academic Excellence Grant from Sun Microsystems (Spring 2005) for their work on AOPHP (www.aophp.net).

Bryan T. Saunders is the lead developer for Aspect-Oriented PHP (AOPHP). He is a student at Coastal Carolina University, and has a number of publications with John Stamey in the field of Aspect-Oriented Programming. Saunders and John Stamey were the recipients of an Academic Excellence Grant from Sun Microsystems (Spring 2005) for their work on AOPHP (www.aophp.net).