Time & Location: June 28, 2016 at 11:00 AM in HEC 438
Title: DESIGN OF A JMLDOCLET FOR JMLDOC IN OPENJML

The Java Modeling Language (JML) is a behavioral interface specification language designed for specifying Java classes and interfaces. OpenJML is a tool for processing JML specifications of Java programs. To facilitate viewing of these specifications in a user-friendly manner, a tool JMLdoc was created. The JMLdoc tool adds JML specifications to the usual Javadoc documentation. JMLdoc is an enhancement of Javadoc that adds to the Javadoc documentation the JML specifications that are present in the source code. The JMLdoc tool is a drop-in replacement for Javadoc, with additional functionality and additional options. The current design of JMLdoc uses the standard Javadoc’s doclet. The current design lacks the provision for doclet extensions, unlike Javadoc. This thesis proposes a new design which is more aligned with the design of Javadoc and its provision for doclet extensions by implementing a JMLdoclet: a new doclet for OpenJML with support for JML elements. It combines specifications from inheritance and refinements and presents the complete JML specification to the user. This new doclet based design will be more maintainable and easier to extend.

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Approved for distribution by Gary T. Leavens, Committee Chair, on June 6, 2016.

The public is welcome to attend.