PROJECT: BOGOR – JAVA ENVIRONMENT FOR ECLIPSE

DELIVERABLE: FORMAL SPECIFICATION

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1. FSM

This MSE project uses finite state machine as the formal specification. All figures in this document use box to present state, solid edge to present user action, dotted edge to present Eclipse event. These finite state machines only present the major actions. There are assumptions for each FSM.

1.1. Incremental Builder Plug-in

Figure 1.1.1 and Figure 1.1.2 present the incremental builder finite state machine. Assumption for Figure 1.1.2 is that the project being used in the diagram should have BB builder nature checked.

![Finite State Machine Diagram](image)

**Figure 1.1.1**
Figure 1.1.2

BB: Bytecode to BIR
Assumption: Project with BB Builder
1.2. Bogor VM View Plug-in

There are two assumptions of executing this FSM: Java editor has been opened, and view has not.

FSM - Bogor VM Viewer
1.3. Launcher Plug-in

The function of displaying model checking result in Eclipse console is not included in this FSM.

Figure 1.3
1.4. Error Trace Plug-in

**Figure 1.4**

1. Click Bogor Trail File

2. Step through the errors

3. If there is a finite number in trail file mapping to Java code.

4. Close combo view/trail editor

5. Close combo view/trail editor

6. Step through the errors

7. Java code highlighted in Java editor

**FSM - Java Error Trace Plug-In**