

Asynchronous FIFO: Bug Log

Session 1 Group 4

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Version 1.0 - May 14, 2024

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Version	Date	Description
v 1.0	5/14/2024	Created to accompany Milestone 3 deliverable

1: Chronological List of Bugs Encountered

There will be two verification levels for the DUT: Unit-level and System-level.

- **Error recognizing the scoreboard and tester class variables inside the testbench class:**
 - **Date Discovered:** This bug was discovered on **May 3rd 2024**, before the Milestone 2 due date.
 - **Type:** Compilation Error.
 - **Description:** This error occurs during the execution of the testbench.sv file which contains the testbench class that instantiates the tester, scoreboard, and coverage classes. The coverage class was unaffected by this error as it was commented out when the error was found. We currently believe that this issue has to do with the order in which certain files are compiled. Having all the classes in the same directory and compiling all project files simultaneously does not fix this issue however. We also tried to reorganize the run.do file to ensure the instantiated classes would compile first so that they would be visible to the testbench.sv file. None of these solutions worked
 - **Solution:** By mimicking the exact run.do file structure as shown in chapter 10 of the UVM Primer, we have resolved the problem. This solution involves including a command in the runfile to compile tb.f which is a file containing some .sv files as well as includes a directory with the classes. If not for this directory, the problem would persist. It is even seen in an individual compilation of files of the UVM Primer chapter 10 code.
 - **Notes:** While we have solved the problem at hand, we are still unsure why this solution works and if it will continue to work in the future. It could become a possible issue again so we have contacted both professor Patil and our TA Mohammed to help us figure this out.

