The BYOC course - VHDL implementation of a simplified MIPS CPU in a lab course

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This paper describes a computer structure lab course in which the students implement a simplified MIPS CPU. The course is called Build Your Own Computer, BYOC, and is meant to be a continuation course for the basic and theoretical Computer Structure course given in almost any Computer Structure program. It follows a similar approach used in the basic Computer Structure Course and gives the students a practical experience in implementing a CPU and in the methods and approach used for HW FPGA design. This course is a good platform for Computer Science, Computer Engineering and Electrical Engineering courses and can be expanded to many related areas.

Keywords; Computer Structure Lab; MIPS VHDL implementation;

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