What did we learn from this project?

We learned a lot about the different components of a CPU, how each component functions and how they interact. We also got a lot of experience coding in VHDL. We learned how to use tools like ModelSim and Quartus II. We learned how to use the Altera FPGA and how to run our program on it. We also used tools like the In–System Memory tool.

What would you do differently next time?

We would like to make the design simpler, by changing the state diagram to a more efficient one. We would also work with the Altera FPGA sooner, to give us more time testing the hardware.

What advice would you give to someone working on a similar project?

Begin working on the vhdl code early. This will give you time to get each component working in simulation. Start working with the FPGA early, so you have enough time to get all instructions working. Also don’t fall behind on the projects, you need the previous projects to complete the next ones. Falling behind will cost you. Ask the T. A. for any help if you don’t understand anything.