Adam Cubel

What did you learn from this project?

I learned how to design, create, test, and use a single cycle CPU. This project assisted in a further understanding of each of the components which makeup a CPU of any size as well as how these components all work in unison to perform common tasks set forth within instructions. I believe that the most profound thing learned from this project was the overall process itself.

What would you do differently next time?

My implementation was rather straightforward, and it was based on a simple single cycle mips processor which we learned about in class. I think that attempting to tackle a more difficult implementation with more instructions or using a multicycle or pipelined implementation would have led to a more realistic implementation.

What is my advice to someone working on a similar project?

As with any project spanning a long length of time, the key is documentation. Documentation of past changes, testing, and results avoids fragmentation and leads to a more cohesive design. This also allows one to reference past experiences when locating or detecting any future errors or mistakes and being able to “roll back” to a previously working implementation. I would also recommend that someone stay current with the project deadlines. They are there for a reason, and they make it easier to divide the project into segments rather than having to make it all up in the last week of class.