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My goals for this week were to:

Learn about representable functors and the Yoneda lemma, which I skipped in favor of universal properties and (co)limits. I also wanted to TeX up my notes and write the bibliographic entries for *Basic Category Theory* and *Category Theory for Programmers*.

I made the following progress on these:

I finished all of my modified goals for this week (sorry Yoneda lemma, you were too confusing for now). I also started working through the readings on adjunctions.

I have the following questions and concerns I want to discuss with my capstone advisor:

I want to go over some free constructions and examples of adjunctions to make sure I'm understanding them correctly. I think it's starting to stick but I want to make sure and really glue it into my brain. I also want to talk about the possibility of extending the project. I'm making good progress pin-balling my way through the readings and I think I could get away with extending the thesis into applications. It will probably get long though. I already have five pages covering about a $\frac{1}{2}$ of the definitions for the core project.

Some tentative goals for the coming week are:

Read and work through examples of adjunctions in my books and TeX up the definition (adding in explanations of free and forgetful functors). I also want to TeX up some more minor definitions that I previously skipped: epimorphisms and monomorphisms, and full and faithful functors. Time and energy permitting, I'll take a second stab at representable functors and the Yoneda lemma.