

Chapter 6 Notes

March 18, 2018

Overview

So this is about chapter 6. It was the most difficult chapter so far. It took me more than four months, much more than any previous chapter, and I didn't do all the exercises.

This chapter is called *Structures*, but it covers much more than just C structures...

Structures

The beginning was just structures, like an association of data cells that can be allocated, stored in arrays, assigned, and so on.

Then there was the difficult part, which took me the most time. It was to write a parser for the C language. The C language is so complex, that I first did a small side project, similar to *Oberon-0* in order to learn to write parsers. So it's miniplm. It's not finished yet. It's supposed to be an interpreter of the minimalistic language described in the ebnf file. There are also example programs. The good news is that it indeed can parse the example files.

I also started the C parser (I only created some files, nothing can run yet).

Hash Tables

I read about the hashtables and there was nothing new. I even did none of the exercises because I already implemented this functionality several times for my own projects and it was already done in the parser exercise.

Unions

It was a nice review about unions, which I also have already used, so that's good.

Bit fields

Bit fields are another useful thing in the C language, which for some reason is not often used. It's just a shortcut to pack and unpack bits in a limited amount of space... It's possible that real problems are usually more complicated than that, so other things must be used...

Conclusion

So that's it for this chapter. I'll finish the parser later when I have more free time. Apart from that, this chapter was not that difficult and I think I knew more than 30% already (but I'm not sure).