Writing a Nintendo Entertainment System emulator, from Start to Finish

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Chapter 1 : starting out

The first thing you want to do is gather information. Various sources, emudev.net, zophar’s domain. Try to find emulator source. Emul8, marat fayzullin

Figure out what processor it uses, and what approaches people have taken to emulating that system.

**I want to write an emulator. Where should I start?**

In order to write an emulator, you must have a good general knowledge of computer programming and digital electronics. Experience in assembly programming comes very handy too.

1. [Select a programming language to use.](http://fms.komkon.org/EMUL8/HOWTO.html#LABF)
2. [Find all available information about the emulated hardware.](http://fms.komkon.org/EMUL8/HOWTO.html#LABG)
3. [Write CPU emulation or get existing code for the CPU emulation.](http://fms.komkon.org/EMUL8/HOWTO.html#LABH)
4. Write some draft code to emulate the rest of the hardware, at least partially.
5. At this point, it is useful to write a little built-in debugger which allows to stop emulation and see what the program is doing. You may also need a disassembler of the emulated system assembly language. Write your own if none exist.
6. Try running programs on your emulator.
7. Use disassembler and debugger to see how programs use the hardware and adjust your code appropriately.

[1]

Chapter 2: design

**Considerations**

**Efficiency**

**why python**

**building a debugger into your emulator**

**how accurate you want to be**

Chapter 3: implementation

**Unit testing**

**what approach works best**

[1] marat fayzullin http://fms.komkon.org/EMUL8/HOWTO.html