

Evaluation Item	Unacceptable (0)	Marginal (2)	Proficient (3)	Comments
Organization and Project Description	The document is missing an introduction and/or lacks sufficient cases to understand how the proposed compiler will be used.	The document's organization could be improved by adding to the introduction. Additional detail in one or more cases would help with understanding how the proposed compiler will be used.	The document is well organized. An overview and the goals of the project are identified early in the document, and sufficient details are provided in the cases to understand how the proposed compiler will be used.	<p>The document contains some information about the hardware (to be emulated) that doesn't contribute to (a) an understanding of the input language or (b) confidence that the output language can be verified.</p> <p>A use case or two would have helped. I'm not certain how this compiler will be used.</p>
Input Language (Weight: 2x) Required: <ul style="list-style-type: none"> - Two types - Related operators - Looping construct - Condition construct - Procedure construct 	One or more required elements are missing.	The input language includes the required elements, but the language contains conflicting elements or an ambiguity.	The input language is clearly described and includes the required elements.	The required elements are identified in the document, except for types. The document is claiming that opcodes and operands are different types, but these are really just elements of a machine instruction. You might have claimed, instead, that the machine instructions take two (or more) types of values, or that there are more than one type of instruction to be parsed
Lexical Specification	The lexical specification is missing one or more components.	The lexical specification fully describes the input language, but significant elements could be improved to reduce redundancy or enhance the structure of the specification.	The lexical specification fully describes the input language. The elements of the language are organized well, though there may be minor improvements possible.	There isn't a lexical spec, per se, but code is provided to demonstrate the ability to parse the binary format back into ASM.

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Target	The target is not well defined: it is not clear that the target language is specified or can be verified.	The target is clearly defined, but there are concerns about its viability. Elements of the target language may be underspecified or overly complex; development of infrastructure may be required to verify the output.	The target is clearly defined and is viable. There is a clear path to generating output that can be verified through execution (or, for visual items only, inspection).	I am very concerned about the target. First, it relies on an emulator that you will also need to build, and that's challenging work. Second, I am not certain what the outputted C will do or how it will fit with the emulator. Will you be emitting a few functions that, when compiled with the emulator, will let you run the ROM? Or is the emulator a standalone program on which the C program will be executed? A use case or two would have helped.

Additional Notes:

- Please submit to main branch – otherwise, we won't see your submission.
- I reviewed the code you created for parsing the binary and emitting assembly. That's nice progress, but it's difficult, still, to extract the requirements for this phase (what language are you scanning? What features does it have?) from code.
- The idea of emulating hardware is very cool – but it's a great deal of work separate from actually building a translator to C. That is, it's not truly a compiler project, as defined. Our evaluation will focus on the binary to C translation, unless you have a strong feeling that the emulator is part of the compiler toolchain and can convince us that building it will help you understand compiler topics.