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Journal Week 4  
CS-350

Coding practices are one of the most important things that computer scientist learn. I would argue that this would be one of the separating factors for those with an education vs those who are self-taught. Although anyone can learn secure coding. Fortunately here at SNHU we have an entire class about secure coding (CS-405) the downfall for this assignment is it is not in embedded systems.   
The first rule stated in the article of this assignment is to “Know why you’re using it” referring to the code this is a very important step. On embedded systems you pay for every bit that you use crucially. So having code that someone doesn’t know what it does is not to be used.  
Something important in all coding standards is to validate input given by a user. If anything is made to the public assume it’s made to be broken, and users will try to break it. Another standard is to use C how it is supposed to be used. Many times, programmers have a favorite language and program best practices of that language rather than the language they are currently in, which is frowned upon in embedded C. Another best practice is to use parenthesis wherever possible for more clarity in maintain the code. There are hundreds of different standards just depending on which source is being used. Some quick common pitfalls of embedded C or just C in general is bad memory management. In the previous year’s C has been known as a memory joke in the community and is often times frowned upon by new programmers who don’t understand the benefits of C.