CRU Software Reviewer Template

Thank you for agreeing to review code/software.

Whether there are one or three reviewers looking at the code- there are three primary topics (or review types) that must be evaluated.

1. **Security Review:** Is there any personal identifying information, pathways to the developer’s computers, etc?
2. **Code Review:** Does the code seem efficient and organized?
3. **Domain Review:** Does the code produce software/results that are biologically reasonable?

One reviewer can look at all three- or three separate reviewers can each tackle one of the review types. That is up to the discretion of the developer. If you don’t know which review are you conducting (security, code, domain, or all three) please contact the code/software developer.

Please see below for the questions you must answer for each review type. Thank you again.

**Security Review**

*Purpose: To eliminate any sensitive information from the code.*

Please answer the following questions:

1. Does the code contain any personally identifiable information (names, addresses, etc)?
2. Does the code contain any file system paths that would point back to the developer or their system?
3. Does the code contain any IP addresses?
4. Does the code contain any usernames or passwords?

If the answer to any of the above questions is yes, please indicate below which lines of code contain issues that the developer should address:

**Code Review**

*Purpose: To produce high quality code that is well written and organized according to best coding practices.*

Please answer the following questions:

1. Is the code readable, organized, and efficient?
   1. If not, please indicate where the code could use editing and why.
2. Are there any areas of the code that are vulnerable in any way?
   1. If so, please indicate where the vulnerabilities are location.
3. Are there any areas of the code that could be optimized in a more efficient way?
   1. If so, please indicate where you have identified code that could be more efficient.
4. Does the code contain any errors or bad coding practices?
5. Do you have any additional comments about the code?

**Domain Review**

*Purpose: To ensure the code produces outputs, data, interfaces, or software that is biologically reasonable when compared to other similar information available. Review should be conducted by someone with applicable subject-matter knowledge.*

Please answer the following questions. Not all questions below may be applicable to the code you are reviewing. Please address the questions that are applicable.

1. Does the code/software produce outputs that are biologically reasonable?
2. Does the code/software produce outputs that are comparable, or within reasonable limits, to outputs of similar code, models, interfaces?
3. If the code produces an interface for others to interact with:
   1. Does the interface function properly?
   2. Does the information presented on the interface make sense?
4. Are there any other issues you can identify with the code, or its outputs, that you can identify?