

System Verification and Validation Plan Checklist

Spencer Smith

October 10, 2019

- Follows the template, all parts present
 - Table of contents
 - Pages are numbered
 - Revision history included for major revisions
 - Sections from template are all present
 - Values of auxiliary constants are given (constants are used to improve maintainability and to increase understandability)
- Grammar, spelling, presentation
 - No spelling mistakes (use a spell checker!)
 - No grammar mistakes (review, ask someone else to review (at least a few sections))
 - Paragraphs are structured well (clear topic sentence, cohesive)
 - Paragraphs are concise (not wordy)
 - No Low Information Content (LIC) phrases ([List of LIC phrases](#))
 - All hyperlinks work
 - Every figure has a caption
 - Every table has a heading
 - Symbolic names are used for quantities, rather than literal values
- LaTeX

- Template comments do not show in the pdf version, either by removing them, or by turning them off.
- References and labels are used so that maintenance is feasible
- Overall qualities of documentation
 - Test cases include SPECIFIC input
 - Test cases include EXPLICIT output
 - Description over specification, when appropriate
 - Plans for what to do with description data (performance, usability, etc). This may involve saying what plots will be generated.
 - Plans to quantify error for scalar values using relative error
 - Plans to quantify error for vector and matrix values using a norm of an error vector (matrix)
 - Plans are feasible
 - Plans are ambitious enough for an A+ effort
 - Survey questions for usability survey are in an Appendix (if appropriate)
 - Plans for the use of student colleague reviewers beyond just assigning them to review - maybe introduce task based inspection?
 - Very careful use of random testing