Procedure Excellence Initiative

Use Cases

The purpose of this writing assistant tool is to detect error traps in written guidance and provide suggestions to “error-proof” operating instructions.

1. Basic identification, count, and statistics: document structure
   1. Number of words and average words per instruction step
   2. Number of syllables and average syllables per word
   3. Number of sentences and average sentence length
   4. Number of sentences with CAUTION, WARNING, or NOTE
   5. Number of words per page
   6. Flesch-Kincaid Readability and Grade Level
   7. % of sentences in Active (or Passive) voice
2. Violations from writing rules (error trap guidance) trap rules L
   1. Long action steps (> 15 words)
   2. References to other Procedures or Repeat Loops within a procedure
   3. More than one action (verb) in an action step (sentence)
   4. Use of past tense
   5. Concise wording
   6. Future tense verbs
   7. Use of and/or
   8. Use of N/A
   9. Use of Increase/decrease
   10. More than 1 comma in a sentence
   11. Action words (verbs) to avoid (from list)
   12. Vague terms (should, shall, must, could, and words ending in -ly)
   13. Future tense verbs
   14. Use of negatives (double negatives) in a sentence
   15. Excessive use of “not”
3. Advanced Noun, Adjective, Verb analysis
   1. Similar but different verbs (variation in verb use)
   2. Number of sentences that start with a verb (instruction steps)
   3. Number of conditional sentences (IF-THEN)
4. Provide capability to highlight and “ScreenTip” or popup text over writing rule violations
5. Provide suggestions (similar to MS Word Clarity and Conciseness) to correct violations to writing rules
6. Develop an overall scoring / rating / badge system that grades the procedure (Bronze, Silver, Gold, **Platinum**) based on rules and reading difficulty
7. It would be interesting to develop a predictive algorithm to estimate the amount of time an average person would need to complete the procedure in order to transition from novice to skilled.
8. Automated template (one-to-many)
9. Develop an AI Recognition app that based on a photograph of the equipment or Bar / WR code, it will identify the relevant procedures for the user