Non specific fault model

1. Run Command
   1. Attempt to run on a valid string selection
      1. Test for string to be accepted by Turing Machine
      2. Test for string to be rejected by Turing Machine
   2. Use of command when string is already selected, i.e. not enough transitions took place the first call of the run method for a valid string
2. Quit Command
   1. Prior to ever running on a string
   2. When currently running on a string
   3. Following acceptance of a string
   4. Following rejection of a string
3. Valid Def File
   1. Valid string file
      1. No errors, no mention of string file loaded
   2. Invalid string file
      1. No errors on .def loading, mentions strings that are not valid for the Turing Machine
   3. No string file
      1. No errors, no mention of string file loaded
4. Invalid Def File
   1. Valid string file
      1. Errors loading the Turing machine, does not execute program
   2. Invalid string file
      1. Errors loading the Turing machine, does not execute program
   3. No string file
      1. Errors loading the Turing machine, does not execute program

Specific fault model

1. Insert Command
   1. Attempt to insert a valid string
   2. Attempt to insert an invalid string
   3. Attempt to insert a duplicate string
2. Delete Command
   1. Deletion of a valid string index
   2. Invalid attempt to delete a string (user selects 0, -1, length of list + 1, length of list + 2)
3. Set Command
   1. Valid selection of configuration setting
   2. Attempt to select current setting
   3. Attempt to select an invalid setting (user selects 0, -1, “a”, “abcd”)
4. Truncate Command
   1. Valid selection of configuration setting
   2. Attempt to select current setting
   3. Attempt to select an invalid setting (user selects 0, -1, “a”, “abcd”)
5. Run Command
   1. Attempt to run on an invalid string selection (user selects 0, -1, “a”, “abcd”)