ESGI 2015
Projet C

Quelque soit votre spécialité, vous devrez réaliser l'implémentation d'une commande linux répandue.

Vous trouverez ci-après le détail de la commande.

Le cahier des charges est formalisé par le mode d'emploi de chacune de ces commandes.

Vous devrez en analyser son comportement et en développer le maximum de fonctionnalités.

Le projet sera à réaliser par groupe de 3 étudiants de même spécialisation et rythme d'alternance.

Le rendu final sera une soutenance pendant laquelle vous présenterez et illustrerez le fonctionnement de la commande original que vous confronterez au fonctionnement de la votre.

Les livrables (à remettre le jour de la soutenance)

- Une Présentation powerpoint reprenant les principaux points de votre présentation orale
- Un fichier binaire compilé de votre commande, avec l'option --help indiquant les fonctionnalités que vous avez implémenté (version Windows et Linux)
- Les codes sources, documentés en anglais, dont tous les identifiants seront également en anglais

Conseil : ne vous perdez pas dans les innombrables options, fixez vous des objectifs tenables qui couvrent les principales fonctionnalités attendues de la commande

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Usage: diff [OPTION]... FILES
Compare FILES line by line.

Mandatory arguments to long options are mandatory for short options too.
      --normal                  output a normal diff (the default)
  -q, --brief                   report only when files differ
  -s, --report-identical-files  report when two files are the same
  -c, -C NUM, --context[=NUM]   output NUM (default 3) lines of copied context
  -u, -U NUM, --unified[=NUM]   output NUM (default 3) lines of unified context
  -e, --ed                      output an ed script
  -n, --rcs                     output an RCS format diff
  -y, --side-by-side            output in two columns
  -W, --width=NUM               output at most NUM (default 130) print columns
      --left-column             output only the left column of common lines
      --suppress-common-lines   do not output common lines

  -p, --show-c-function         show which C function each change is in
  -F, --show-function-line=RE   show the most recent line matching RE
      --label LABEL             use LABEL instead of file name
                                  (can be repeated)

  -t, --expand-tabs             expand tabs to spaces in output
  -T, --initial-tab             make tabs line up by prepending a tab
      --tabsize=NUM             tab stops every NUM (default 8) print columns
      --suppress-blank-empty    suppress space or tab before empty output lines
  -l, --paginate                pass output through `pr' to paginate it

  -r, --recursive                 recursively compare any subdirectories found
  -N, --new-file                  treat absent files as empty
      --unidirectional-new-file   treat absent first files as empty
      --ignore-file-name-case     ignore case when comparing file names
      --no-ignore-file-name-case  consider case when comparing file names
  -x, --exclude=PAT               exclude files that match PAT
  -X, --exclude-from=FILE         exclude files that match any pattern in FILE
  -S, --starting-file=FILE        start with FILE when comparing directories
      --from-file=FILE1           compare FILE1 to all operands;
                                    FILE1 can be a directory
      --to-file=FILE2             compare all operands to FILE2;
                                    FILE2 can be a directory

  -i, --ignore-case               ignore case differences in file contents
  -E, --ignore-tab-expansion      ignore changes due to tab expansion
  -Z, --ignore-trailing-space     ignore white space at line end
  -b, --ignore-space-change       ignore changes in the amount of white space
  -w, --ignore-all-space          ignore all white space
  -B, --ignore-blank-lines        ignore changes whose lines are all blank
  -I, --ignore-matching-lines=RE  ignore changes whose lines all match RE

  -a, --text                      treat all files as text
      --strip-trailing-cr         strip trailing carriage return on input

  -D, --ifdef=NAME                output merged file with `#ifdef NAME' diffs
      --GTYPE-group-format=GFMT   format GTYPE input groups with GFMT
      --line-format=LFMT          format all input lines with LFMT
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      --LTYPE-line-format=LFMT    format LTYPE input lines with LFMT
    These format options provide fine-grained control over the output
      of diff, generalizing -D/--ifdef.
    LTYPE is `old', `new', or `unchanged'.  GTYPE is LTYPE or `changed'.
    GFMT (only) may contain:
      %<  lines from FILE1
      %>  lines from FILE2
      %=  lines common to FILE1 and FILE2
      %[-][WIDTH][.[PREC]]{doxX}LETTER  printf-style spec for LETTER
        LETTERs are as follows for new group, lower case for old group:
          F  first line number
          L  last line number
          N  number of lines = L-F+1
          E  F-1
          M  L+1
      %(A=B?T:E)  if A equals B then T else E
    LFMT (only) may contain:
      %L  contents of line
      %l  contents of line, excluding any trailing newline
      %[-][WIDTH][.[PREC]]{doxX}n  printf-style spec for input line number
    Both GFMT and LFMT may contain:
      %%  %
      %c'C'  the single character C
      %c'\OOO'  the character with octal code OOO
      C    the character C (other characters represent themselves)

  -d, --minimal            try hard to find a smaller set of changes
      --horizon-lines=NUM  keep NUM lines of the common prefix and suffix
      --speed-large-files  assume large files and many scattered small changes

      --help               display this help and exit
  -v, --version            output version information and exit

FILES are `FILE1 FILE2' or `DIR1 DIR2' or `DIR FILE...' or `FILE... DIR'.
If --from-file or --to-file is given, there are no restrictions on FILE(s).
If a FILE is `-', read standard input.
Exit status is 0 if inputs are the same, 1 if different, 2 if trouble.

Report bugs to: bug-diffutils@gnu.org
GNU diffutils home page: <http://www.gnu.org/software/diffutils/>
General help using GNU software: <http://www.gnu.org/gethelp/>
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