

hromadne-upravy.scm

```
;Vylepšení naskenovaných obrázků, určených pro odeslání mailem.
;
;Vstup: PNG, JPG, BMP, PNM
;Vystup: JPG
;Vyžaduje GIMP 2.6 a vyšši
;
;(c) Zbynek Gavenda

(define (fce-lomitko cesta)
;vstup: retezec (url), vystup: retezec
(let* (
  (lomitko nil)
)
  (cond
    (
      (string-ci=? (substring cesta 0 1) "/" )
      (set! lomitko "/" ) ;pro Linux
    )
    (
      (string-ci=? (substring cesta 1 3) "://" )
      (set! lomitko "//" ) ;pro Windows
    )
    (
      (string-ci=? (substring cesta 0 2) "\\\\" )
      (set! lomitko "\\\" ) ;pro Windows
    )
    (else
      (set! lomitko "/" ) ;pro ostatni (ftp, http, smb, file...)
    )
  )
  (list lomitko)
)

(define (fce-trid-obrazky rawFileList typ)
;vstup: seznam (filename,fileurl), cislo, vystup: seznam
;typ: 0 - vse
;1 - jen jpg
;(let* (
  (filelist nil)
)
  (while (> (length rawFileList) 0)
    (let* (
      (rawFilename (car rawFileList))
      (rawTeckaPripona (substring rawFilename (- (string-length rawFilename) 4) (string-length rawFilename)))
    )
      (cond
        (
          (and (string-ci=? rawTeckaPripona ".png") (= typ 0))
          (set! filelist (cons rawFilename filelist ))
          (set! rawFileList (cdr rawFileList))
        )
        (
          (string-ci=? rawTeckaPripona ".jpg")
          (set! filelist (cons rawFilename filelist ))
          (set! rawFileList (cdr rawFileList))
        )
        (
          (and (string-ci=? rawTeckaPripona ".bmp") (= typ 0))
          (set! filelist (cons rawFilename filelist ))
          (set! rawFileList (cdr rawFileList))
        )
        (
          (and (string-ci=? rawTeckaPripona ".pnm") (= typ 0))
          (set! filelist (cons rawFilename filelist ))
          (set! rawFileList (cdr rawFileList))
        )
        (else
          (set! rawFileList (cdr rawFileList))
        )
      )
    )
  (list filelist)
)

(define (fce-pocet-duplicit rawFileList slozka vzor)
;vstup: seznam (fileurl), retezec (dirurl), retezec, vystup: cislo (0 ...)
;polozky v rawFileList musi mit
;mezi url slozky a jmenem obrazku (s priponou) lomitko
(let* (
  (duplicit -1)
  (filename nil)
)
  (while (> (length rawFileList) 0)
    (set! filename (car rawFileList))
    (set! filename (substring filename
      (+ (string-length slozka) 1)
      (- (string-length filename) 4)))
    (if (string-ci=? filename vzor)
      (set! duplicit (+ duplicit 1))
    )
    (set! rawFileList (cdr rawFileList))
  )
  (if (= duplicit -1)
    (set! duplicit 0)
  )
  (list duplicit)
)

(define (fce-cislo-davky rawFileList slozka)
;vstup: seznam (fileurl), retezec (dirurl), vystup: cislo (-1 ...)
;polozky v rawFileList musi mit
;mezi url slozky a jmenem obrazku lomitko
(let* (
  (cisloDavky -1)
)
  (while (> (length rawFileList) 0)
    (let* (
      (lcif -1)
      (2cifPrvni -1)
      (2cifDruhe -1)
      (2cifPD 0)
      (x 0)
      (filename (car rawFileList))
    )
      (set! filename (substring filename
        (+ (string-length slozka) 1)
        (string-length filename)
      ))

      (set! x 9)
      (while (> x -1)
        (if (string-ci=? (substring filename 0 5) (string-append "(" (number->string x) ".") ))
          (begin
            (set! lcif (+ x 0))
            (set! x (- x 1))
          )
          (set! x (- x 1))
        )
      )

      (set! x 9)
      (while (> x -1)
        (if (string-ci=? (substring filename 0 2) (string-append "(" (number->string x)))
          (begin
            (set! 2cifPrvni x)
            (set! x (- x 1))
          )
          (set! x (- x 1))
        )
      )

      (set! x 9)
      (while (> x -1)
        (if (string-ci=? (substring filename 2 6) (string-append (number->string x) ".") ))
          (begin
            (set! 2cifDruhe x)
            (set! x (- x 1))
          )
          (set! x (- x 1))
        )
      )

      (if (= lcif -1)
        (if (= 2cifPrvni -1)
          ()
          (if (= 2cifDruhe -1)
            ()
            (begin
              (set! 2cifPD (+ (* 2cifPrvni 10) 2cifDruhe))
              (if (= cisloDavky -1)
                (set! cisloDavky 2cifPD)
                (if (> 2cifPD cisloDavky)
                  (set! cisloDavky 2cifPD)
                  ()
                )
              )
            )
          )
        )
      )
      (if (= cisloDavky -1)
        (set! cisloDavky lcif)
        (if (> lcif cisloDavky)
          (set! cisloDavky lcif)
        )
      )
    )
    (set! rawFileList (cdr rawFileList))
  )
  (list cisloDavky)
)

(define (script-fu-hromadna-uprava inputfolder outputfolder rezim)
;vstup: retezec (dirurl), retezec (dirurl), cislo (0 ...), vystup: nic
(let* (
  (inRawFileList nil)
  (outRawFileList nil)
  (filelist nil)
  (inFiltr nil)
  (inFiltr nil)
  (outFiltr nil)
  (cisloDavky -1)
  (status 1)
)
  (if (string-ci=? inputfolder outputfolder)
    (begin
      (set! status 0)
      (gimp-message "Pro načtení a uložení obrázků nelze použít stejnou složku.")
    )
  )

  (cond
    (
      (= rezim 0)
    )
    (
      (= rezim 1)
    )
    (
      (= rezim 2)
    )
    (else
      (gimp! status 0)
      (gimp! message "Požadovaný režim úprav je neplatný.")
    )
  )

  (if (= status 1)
    (begin
      (set! inFiltr (string-append (car (fce-lomitko inputfolder)) "**.*"))
      (set! inRawFileList (cadr (file-glob (string-append inputfolder inFiltr) 1)))

      (if (= rezim 2)
        (set! filelist (car(fce-trid-obrazky inRawFileList 1 )))
        (set! filelist (car(fce-trid-obrazky inRawFileList 0 )))
      )

      (set! outFiltr (string-append (car (fce-lomitko outputfolder)) "**.*"))
      (set! outRawFileList (cadr (file-glob (string-append outputfolder outFiltr) 1)))

      (set! rawFileList (car (fce-trid-obrazky outRawFileList 0)))

      (if (= (length outFilelist) 0)
        (set! cisloDavky "")
        (begin
          (set! cisloDavky (car (fce-cislo-davky outFileList outputfolder)))
          (if (= cisloDavky -1)
            (set! cisloDavky "1")
            (if (>= cisloDavky 99)
              (begin
                (set! status 0)
                (gimp-message "Složka pro ukládání obsahuje pfiliš mnoho obrázků.")
              )
              (set! cisloDavky (string-append "(" (number->string (+ cisloDavky 1) ".") ))
            )
          )
        )
      )
    )
  )

  (if (= status 1)
    (if (< (length filelist) 1)
      (begin
        (set! status 0)
        (gimp-message "Nebyly nalezeny obrázky ke zpracování.")
      )
    )
  )

  (if (= status 1)
    (begin
      (while (> (length filelist) 0)
        (let* ((fileurl (car filelist))
          (newfileurl nil)
          (newfilename nil)
          (pocetDuplicit 0)
          (image (car (gimp-file-load 1 fileurl fileurl)))
          (drawable (car (gimp-image-get-active-layer image)))
          (sirka (car (gimp-image-width image)))
          (vyska (car (gimp-image-height image)))
        )
          (set! newfilename (substring fileurl
            (+ (string-length inputfolder) 1)
            (- (string-length fileurl) 4)))

          (set! pocetDuplicit (car (fce-pocet-duplicit filelist inputfolder newfilename)))

          (if(= pocetDuplicit 0)
            (set! pocetDuplicit "")
            (set! pocetDuplicit (string-append "(" (number->string pocetDuplicit) ")"))
          )

          (set! newfileurl (string-append
            outputfolder
            (car (fce-lomitko outputfolder))
            cisloDavky
            newfilename
            pocetDuplicit )
          )

          ;-----
          (if (= rezim 0)(begin
            (if (= (car (gimp-drawable-is-rgb drawable)) 1)
              ()
              (gimp-image-convert-rgb image))
            ;prevede do RGB, pokud není v RGB

            (plug-in-sel-gauss 1 image drawabl 3.0 25)
            ;selektivni gauosovo rozostreni
            ;polomer, max. delta

            (gimp-image-scale-full image
              (ceiling (/ sirka 2 ))
              (ceiling (/ vyska 2 ))
              3)
            ;velikost obrazku, od GIMPU 2.6
            ;sirka, vyska, metoda (3-LANCZOS)

            (plug-in-sharpen 1 image drawable 10)
            ;doostreni 10
            ;intenzita v %

            (gimp-image-convert-grayscale image)
            ;prevede do odstinu sede

            (file-jpeg-save 1 image drawable
              (string-append newfileurl ".jpg")
              (string-append newfileurl ".jpg")
              0.80 0 1 0 "" 0 0 0 0)
            ;ulozeny do typu jpg
            ;80% kvalita
          ))
          ;-----
          (if (= rezim 1)(begin
            (if (= (car (gimp-drawable-is-rgb drawable)) 1)
              ()
              (gimp-image-convert-rgb image))
            ;prevede do RGB, pokud není v RGB

            (gimp-image-scale-full image
              (ceiling (/ sirka 2 ))
              (ceiling (/ vyska 2 ))
              3)
            ;velikost obrazku, od GIMPU 2.6
            ;sirka, vyska, metoda (3-LANCZOS)

            (file-jpeg-save 1 image drawable
              (string-append newfileurl ".jpg")
              (string-append newfileurl ".jpg")
              0.80 0 1 0 "" 0 0 0 0)
            ;ulozeny do typu jpg
            ;80% kvalita
          ))
          ;-----
          (if (= rezim 2)(begin
            (if (= (car (gimp-drawable-is-rgb drawable)) 1)
              ()
              (gimp-image-convert-rgb image))
            ;prevede do RGB, pokud není v RGB

            (let* ((pomer nil)
              (fotoVyska 600)
              (nVyska nil)
              (nSirka nil))
              (if (< sirka vyska)
                (begin
                  (set! pomer (/ vyska sirka))
                  (if (< sirka 600)
                    (begin
                      (set! nVyska vyska)
                      (set! nSirka sirka)
                    )
                    (begin
                      (set! nVyska (ceiling (* fotoVyska pomer)))
                      (set! nSirka fotoVyska)
                    )
                  )
                )
                (begin
                  (set! pomer (/ sirka vyska))
                  (if (< vyska 600)
                    (begin
                      (set! nVyska vyska)
                      (set! nSirka sirka)
                    )
                    (begin
                      (set! nVyska fotoVyska)
                      (set! nSirka (ceiling (* fotoVyska pomer)))
                    )
                  )
                )
              )
            (gimp-image-scale-full image nSirka nVyska 3)
            ;velikost obrazku, od GIMPU 2.6
            ;sirka, vyska (600px), metoda (3-LANCZOS)
          )
            (file-jpeg-save 1 image drawable
              (string-append newfileurl ".jpg")
              (string-append newfileurl ".jpg")
              0.90 0 1 0 "" 0 0 0 0)
            ;ulozeny do typu jpg
            ;90% kvalita
          ))
          ;-----
          (set! filelist (cdr filelist)))
        )
      )
    )
  )
  ;-----
  (define (script-fu-scan-text-mail inputfolder outputfolder)
;vstup: retezec (dirurl), retezec (dirurl), vystup: nic
(script-fu-hromadna-uprava inputfolder outputfolder 0)
)

  (script-fu-register "script-fu-scan-text-mail"
    "Vylepsi skeny textu pro mail"
    "Vylepsi obrázky nascenovanych textů v 300dpi, určených pro odeslání mailem v 150dpi."
    "Zbynek Gavenda <gazb@centrum.cz>"
    "Zbynek Gavenda"
    "2008/12/22"
    ""
    SF-DIRNAME "Složka s obrázky" ""
    SF-DIRNAME "Složka pro uložení" ""
  )

  (script-fu-menu-register "script-fu-scan-text-mail"
    "<Image>/Tools/Hromadné úpravy"
  )
  ;-----
  (define (script-fu-scan-image-mail inputfolder outputfolder)
;vstup: retezec (dirurl), retezec (dirurl), vystup: nic
(script-fu-hromadna-uprava inputfolder outputfolder 2)
)

  (script-fu-register "script-fu-scan-image-mail"
    "Vylepsi skeny obrázků pro mail"
    "Vylepsi nascenovane obrázky v 300dpi, určené pro odeslání mailem v 150dpi."
    "Zbynek Gavenda <gazb@centrum.cz>"
    "Zbynek Gavenda"
    "2008/12/22"
    ""
    SF-DIRNAME "Složka s obrázky" ""
    SF-DIRNAME "Složka pro uložení" ""
  )

  (script-fu-menu-register "script-fu-scan-image-mail"
    "<Image>/Tools/Hromadné úpravy"
  )
  ;-----
  (define (script-fu-photo-mail inputfolder outputfolder)
;vstup: retezec (dirurl), retezec (dirurl), vystup: nic
(script-fu-hromadna-uprava inputfolder outputfolder 2)
)

  (script-fu-register "script-fu-photo-mail"
    "Zmensi fotky pro mail"
    "Zmensi fotky z digitálního fotoaparátu, určené pro odeslání mailem ve velikosti 600px (šířka či výška). "
    "Zbynek Gavenda <gazb@centrum.cz>"
    "Zbynek Gavenda"
    "2008/12/22"
    ""
    SF-DIRNAME "Složka s obrázky" ""
    SF-DIRNAME "Složka pro uložení" ""
  )

  (script-fu-menu-register "script-fu-photo-mail"
    "<Image>/Tools/Hromadné úpravy"
  )
)
```