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#!/bin/bash

# =====
# ABHÄNGIGKEITEN (Ubuntu/Debian):
# sudo apt update && sudo apt install imagemagick libimage-exiftool-perl wmcrtl
# =====

# KONFIGURATION
MAX_LONG_SIDE="1200"
TARGET_SIZE="300kb"
COPYRIGHT="jo.knecht@web.de"
OUTPUT_DIR="export_final"
TEXT_FILE="$OUTPUT_DIR/images.txt"

mkdir -p "$OUTPUT_DIR"
> "$TEXT_FILE"

counter=1
shopt -s nocaseglob

echo "Starte robuste interaktive Verarbeitung..."

for img in *.jpg *.jpeg *.png; do
    [ -e "$img" ] || continue

    # 1. VORSCHAU (eog mit neuer Instanz)
    eog --new-instance "$img" &
    preview_pid=$!

    # FENSTER-STEUERUNG (Verschiebung nach oben rechts)
    (sleep 0.5 && wmcrtl -r "Bildbetrachter" -e 0,1300,50,500,500) &

    # 2. FEHLERSICHERES AUSLESEN DER EXIF-WERTE
    # Wir fragen die Tags einzeln ab, um Verwechslungen zu vermeiden.
    # -S -s liefert nur den reinen Wert.
    f_stop=$(exiftool -S -s -Aperture "$img")
    [ -z "$f_stop" ] && f_stop=$(exiftool -S -s -FNumber "$img") # Fallback auf FNumber

    shutter=$(exiftool -S -s -ExposureTime "$img")
    iso=$(exiftool -S -s -ISO "$img")
    focal=$(exiftool -S -s -FocalLength "$img")
    dzoom=$(exiftool -S -s -DigitalZoomRatio "$img")

    # Fallbacks für die Anzeige
    f_stop=${f_stop:-"n/a"}
    shutter=${shutter:-"n/a"}
    iso=${iso:-"n/a"}
    focal=${focal:-"n/a"}

    zoom_info="$focal"
    if [[ -n "$dzoom" && "$dzoom" != "1" && "$dzoom" != "0" ]]; then
        zoom_info="$focal (Digital: ${dzoom}x)"
    fi

    # 3. INTERAKTIVE ABFRAGE
    echo "-----"
    echo "BILD NR. $prefix: $img"
    echo "DATEN: f/$f_stop | $shutter | ISO $iso | Zoom: $zoom_info"
    read -p "Name für das Bild: " user_name
    read -p "Beschreibung: " user_info

    kill $preview_pid 2>/dev/null

    # 4. DATEINAMEN & FORMAT
    clean_name=$(echo "$user_name" | tr ' ' '_')
    prefix=$(printf "%02d" $counter)
```

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ext="{img##*}"
ext=$(echo "$ext" | tr '[:upper:]' '[:lower:]' | sed 's/jpeg/jpg/')
target_filename="{prefix}_{clean_name}.{ext}"
target_path="{OUTPUT_DIR}/$target_filename"

# 5. VERARBEITUNG
dims=$(identify -format "%wx%h" "$img" 2>/dev/null)
width=$(echo $dims | cut -d'x' -f1)
height=$(echo $dims | cut -d'x' -f2)
[[ "$width" -ge "$height" ]] && RESIZE_PARAM="{MAX_LONG_SIDE}x" || RESIZE_PARAM="{x$
{MAX_LONG_SIDE}"

if [[ "$ext" == "png" ]]; then
    convert "$img" -resize "$RESIZE_PARAM" -strip "$target_path"
else
    convert "$img" -resize "$RESIZE_PARAM" -define jpeg:extent="{TARGET_SIZE}"
"$target_path"
fi

# 6. METADATEN SCHREIBEN & LOG
exiftool -overwrite_original \
    -Copyright="© $(date +%Y) $COPYRIGHT" \
    -Artist="$COPYRIGHT" \
    -Description="{user_info [Zoom: $zoom_info]}" \
    "$target_path" > /dev/null

echo "$target_filename = {user_info (f/{f_stop - $shutter - ISO $iso - Zoom:
$zoom_info)}" >> "{TEXT_FILE}"

((counter++))
done

shopt -u nocaseglob
echo "-----"
echo "FERTIG! Ergebnisse im Ordner: {OUTPUT_DIR}"
```