

```
# -*- coding: utf-8 -*-
```

```
"""
```

```
Created on Thu Nov 21 16:13:33 2024
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```
@author: gsagot01
```

```
"""
```

```
import json
```

```
import pandas as pd
```

```
import html
```

```
from datetime import datetime
```

```
import openpyxl
```

```
from openpyxl.utils import get_column_letter
```

```
from openpyxl.styles import Alignment, Font, PatternFill, Border, Side
```

```
# Fonction pour formater les dates et heures
```

```
def format_date_time(date_time_str):
```

```
    try:
```

```
        date_time = datetime.strptime(date_time_str, "%Y-%m-%dT%H:%M:%S%Z")
```

```
        return date_time.strftime("%d/%m/%Y"), date_time.strftime("%H:%M")
```

```
    except Exception:
```

```
        return "", ""
```

```
# Charger le fichier JSON
```

```
try:
```

```
    with open('que-faire-a-paris.json', 'r', encoding='utf-8') as file:
```

```
        data = json.load(file)
```

```
except FileNotFoundError:
```

```

print("Erreur : Le fichier 'que-faire-a-paris.json' est introuvable.")

data = []

except json.JSONDecodeError:

    print("Erreur : Le fichier JSON est mal formaté.")

    data = []


# Colonnes pour le fichier Excel

columns = [

    "ID", "URL de l'événement", "Titre de l'événement", "Résumé", "Description complète",

    "Mots clés", "Période (dates et heures)", "Nom du lieu", "Adresse", "Code Postal", "Ville",

    "Coordonnées géographiques", "Accès PMR", "Accès mal voyant", "Accès mal
entendant",

    "Transports disponibles", "Nom du contact", "Téléphone du contact", "Email du
contact",

    "URL du contact", "Type d'accès", "Détail du prix", "Image de couverture (URL)"

]


# Préparer les données pour le fichier Excel

rows = []


if data: # Vérifier qu'il y a des données à traiter

    for record in data:

        # Vérifiez si chaque élément est un dictionnaire

        if not isinstance(record, dict):

            print("Élément inattendu dans la liste :", record)

            continue


        # Extraire les champs directement

        date_start, time_start = format_date_time(record.get('date_start', ''))

```

```
date_end, time_end = format_date_time(record.get('date_end', ''))
```

```
# Préparer les valeurs en tenant compte des valeurs nulles
```

```
description = record.get('description', '')
```

```
if description:
```

```
    if len(description) > 200:
```

```
        description = description[:200] + "..."
```

```
    description = html.unescape(description.strip())
```

```
else:
```

```
    description = ""
```

```
transport = record.get('transport', '')
```

```
if transport:
```

```
    transport = transport.replace('\n', ' ').replace('<br>', '\n').strip()
```

```
else:
```

```
    transport = ""
```

```
row = {
```

```
    "ID": record.get('id', ''),
```

```
    "URL de l'événement": record.get('url', ''),
```

```
    "Titre de l'événement": record.get('title', ''),
```

```
    "Résumé": record.get('lead_text', ''),
```

```
    "Description complète": description,
```

```
    "Mots clés": ", ".join(record.get('tags', []) or []),
```

```
    "Période (dates et heures)": f"{date_start} {time_start} - {date_end} {time_end}",
```

```
    "Nom du lieu": record.get('address_name', ''),
```

```
    "Adresse": record.get('address_street', ''),
```

```
    "Code Postal": record.get('address_zipcode', ''),
```

```

"Ville": record.get('address_city', ''),
"Coordonnées géographiques": ", ".join(map(str, record.get('lat_lon', []) or [])),
"Accès PMR": "Oui" if record.get('pmr') else "Non",
"Accès mal voyant": "Oui" if record.get('blind') else "Non",
"Accès mal entendant": "Oui" if record.get('deaf') else "Non",
"Transports disponibles": transport,
"Nom du contact": record.get('contact_name', ''),
"Téléphone du contact": record.get('contact_phone', ''),
>Email du contact": record.get('contact_mail', ''),
"URL du contact": record.get('contact_url', ''),
>Type d'accès": record.get('access_type', ''),
>Détail du prix": record.get('price_type', ''),
"Image de couverture (URL)": record.get('cover_url', '')
}

```

```

rows.append(row)

```

```

# Convertir les données en DataFrame et sauvegarder au format Excel

```

```

excel_file = 'que-faire-a-paris.xlsx'

```

```

if rows:

```

```

    df = pd.DataFrame(rows, columns=columns)

```

```

    df.to_excel(excel_file, index=False, engine='openpyxl')

```

```

# Appliquer le style au fichier Excel

```

```

wb = openpyxl.load_workbook(excel_file)

```

```

sheet = wb.active

```

```
# Gel des en-têtes
```

```
sheet.freeze_panes = "A2"
```

```
# Style des en-têtes
```

```
header_font = Font(bold=True, color="FFFFFF", name="Calibri")
```

```
header_fill = PatternFill(start_color="4F81BD", end_color="4F81BD", fill_type="solid")
```

```
header_alignment = Alignment(horizontal="center", vertical="center")
```

```
thin_border = Border(
```

```
    left=Side(style="thin"), right=Side(style="thin"),
```

```
    top=Side(style="thin"), bottom=Side(style="thin")
```

```
)
```

```
# Appliquer un style aux en-têtes
```

```
for col_num, column_title in enumerate(columns, 1):
```

```
    cell = sheet.cell(row=1, column=col_num)
```

```
    cell.value = column_title
```

```
    cell.font = header_font
```

```
    cell.fill = header_fill
```

```
    cell.alignment = header_alignment
```

```
    cell.border = thin_border
```

```
    sheet.row_dimensions[1].height = 25 # Ajuster la hauteur des en-têtes
```

```
# Ajuster automatiquement les tailles des colonnes
```

```
for column in sheet.columns:
```

```
    max_length = 0
```

```
    column_letter = get_column_letter(column[0].column)
```

```
    for cell in column:
```

```
        if cell.value:
```

```

        max_length = max(max_length, len(str(cell.value)))

    adjusted_width = max_length + 2

    sheet.column_dimensions[column_letter].width = adjusted_width


# Appliquer des couleurs alternées pour les lignes
fill_gray = PatternFill(start_color="F2F2F2", end_color="F2F2F2", fill_type="solid")

for row_num, row in enumerate(sheet.iter_rows(min_row=2), start=2):

    for cell in row:

        cell.border = thin_border

        if row_num % 2 == 0: # Ligne paire

            cell.fill = fill_gray

        cell.alignment = Alignment(horizontal="left", vertical="center")


wb.save(excel_file)

print(f"Le fichier Excel '{excel_file}' a bien été généré avec succès ! ")

else:

    print("Aucune donnée valide à transformer.")

```