# utils/feedback\_analyzer.py

import openai

import json

import logging

logger = logging.getLogger(\_\_name\_\_)

def analyze\_feedback(api\_key, prompt, simulation\_data):

"""

Uses OpenAI to analyze simulation data and provide insights.

"""

openai.api\_key = api\_key

try:

data\_str = json.dumps(simulation\_data, indent=2)

full\_prompt = f"{prompt}\n\nSimulation Data:\n{data\_str}\n\nAnalysis:"

response = openai.ChatCompletion.create(

model="gpt-4",

messages=[

{"role": "system", "content": prompt},

{"role": "user", "content": full\_prompt}

],

max\_tokens=500,

temperature=0.3

)

analysis = response['choices'][0]['message']['content'].strip()

logger.debug(f"Analysis: {analysis}")

return analysis

except Exception as e:

logger.error(f"Error analyzing feedback with OpenAI: {e}")

return None