import os

import logging

from dotenv import load\_dotenv

from ib\_async import IB

from ib\_async.connection import ConnectionException

# Load the .env file that contains IBKR credentials and account mode

load\_dotenv()

# Retrieve credentials and account mode from environment variables

IBKR\_USERNAME = os.getenv("IBKR\_USERNAME")

IBKR\_PASSWORD = os.getenv("IBKR\_PASSWORD")

IBKR\_ACCOUNT\_MODE = os.getenv("IBKR\_ACCOUNT\_MODE", "paper") # Default to 'paper'

# Set up logging

logging.basicConfig(level=logging.INFO)

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

# Function to connect to IBKR

def connect\_to\_tws():

try:

if not IBKR\_USERNAME or not IBKR\_PASSWORD:

raise ValueError("IBKR credentials are not set in the environment variables.")

ib = IB()

# Determine account mode (paper/live)

if IBKR\_ACCOUNT\_MODE.lower() == "live":

logger.info("Connecting to live account...")

# Use live TWS Gateway or TWS settings

ib.connect(host="live\_host", port=4001, client\_id=1)

elif IBKR\_ACCOUNT\_MODE.lower() == "paper":

logger.info("Connecting to paper account...")

# Use paper trading TWS Gateway or TWS settings

ib.connect(host="localhost", port=7497, client\_id=1)

else:

raise ValueError(f"Invalid IBKR\_ACCOUNT\_MODE: {IBKR\_ACCOUNT\_MODE}")

logger.info("Connection established.")

return ib

except ConnectionException as e:

logger.error(f"Failed to connect to IBKR: {e}")

return None

except ValueError as e:

logger.error(f"Configuration error: {e}")

return None