

```

import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import requests
import math
import random
import os
from collections import deque
from keras.models import Sequential, load_model
from keras.layers import Dense, LeakyReLU, Dropout, BatchNormalization
from keras.optimizers import Adam
from keras.losses import MeanSquaredError

data_url = 'https://api.polygon.io/v2/aggs/ticker/NVDA/range/1/day/2022-01-01/2024-12-23?adjusted=true&sort=asc&limit=5000&apiKey=LJipqdFunGp'
data = requests.get(data_url).json()
dataset = pd.DataFrame(data['results'])
dataset["datetime"] = pd.to_datetime(dataset["t"], unit="ms")
dataset['ticker'] = data['ticker']
X = dataset['c'].astype(float).tolist()

plt.figure(figsize=(12, 6))
plt.plot(dataset["datetime"], X, label="NVDA Closing Price", color='b')
plt.xlabel("Date")
plt.ylabel("Closing Price (USD)")
plt.title("NVDA Stock Closing Prices (2022-2024)")
plt.legend()
plt.grid(True)
plt.show()

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train_size = int(len(X) * 0.8)
X_train, X_test = X[:train_size], X[train_size:]

def formatPrice(n):
    return ("-$" if n < 0 else "$") + "{0:.2f}".format(abs(n))

def sigmoid(x):
    return 1 / (1 + math.exp(-x))

def getState(data, t, n):
    d = t - n + 1
    block = data[d:t + 1] if d >= 0 else -d * [data[0]] + data[0:t + 1]
    return np.array([sigmoid(block[i + 1] - block[i]) for i in range(n - 1)])

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def calculate_metrics(trade_log):
    profits = np.array(trade_log)
    total_profit = np.sum(profits)
    win_rate = np.mean(profits > 0) if len(profits) > 0 else 0
    profit_factor = np.sum(profits[profits > 0]) / (abs(np.sum(profits[profits < 0])) + 1e-6)
    sharpe_ratio = np.mean(profits) / (np.std(profits) + 1e-6)
    max_drawdown = np.min(profits) if len(profits) > 0 else 0

    return {
        "Total Profit": formatPrice(total_profit),
        "Win Rate": f"{win_rate * 100:.2f}%",
        "Profit Factor": f"{profit_factor:.2f}",
        "Sharpe Ratio": f"{sharpe_ratio:.2f}",
        "Max Drawdown": formatPrice(max_drawdown)
    }

class Agent:
    def __init__(self, state_size, is_eval=False, model_name ""):
        self.state_size = state_size
        self.action_size = 3 # sit, buy, sell
        self.memory = deque(maxlen=15000) # Increased Memory
        self.inventory = []
        self.model_name = model_name
        self.is_eval = is_eval

        self.gamma = 0.99
        self.epsilon = 1.0
        self.epsilon_min = 0.01
        self.epsilon_decay = 0.99995 #Slower decay

    if is_eval:
        try:
            self.model = load_model(model_name)
            print("Model Loaded Successfully")
        except FileNotFoundError:
            print(f"Model file {model_name} not found. Train the model first.")
            raise
    else:
        self.model = self._model()

    def _model(self):
        model = Sequential([
            Dense(512, input_dim=self.state_size, kernel_regularizer='l2'), #Added Regularization
            BatchNormalization(),
            LeakyReLU(alpha=0.01),
            Dropout(0.25),
            Dense(256, kernel_regularizer='l2'),
            BatchNormalization(),
            LeakyReLU(alpha=0.01),
            Dropout(0.25),
            Dense(128, kernel_regularizer='l2'),
            BatchNormalization(),
            LeakyReLU(alpha=0.01),
            Dense(self.action_size, activation="linear")
        ])
        optimizer = Adam(learning_rate=0.0001, clipvalue=0.5) #Reduced learning rate
        model.compile(loss=MeanSquaredError(), optimizer=optimizer)
        return model

    def act(self, state):
        if not self.is_eval and random.random() <= self.epsilon:
            return random.randrange(self.action_size)
        return np.argmax(self.model.predict(np.expand_dims(state, axis=0), verbose=0)[0])

    def expReplay(self, batch_size):
        mini_batch = random.sample(self.memory, min(len(self.memory), batch_size))
        states = np.array([m[0] for m in mini_batch])
        next_states = np.array([m[3] for m in mini_batch])
        targets = self.model.predict(states, verbose=0)
        next_q_values = self.model.predict(next_states, verbose=0)

        for i, (state, action, reward, next_state, done) in enumerate(mini_batch):
            targets[i][action] = reward if done else reward + self.gamma * np.amax(next_q_values[i])

        self.model.fit(states, targets, epochs=1, verbose=0)

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        if self.epsilon > self.epsilon_min:
            self.epsilon *= self.epsilon_decay

window_size = 15
batch_size = 64
episode_count = 500 # Increased episodes
agent = Agent(window_size)

episode_profits = []

def plot_trading_actions(prices, states_buy, states_sell, episode_or_test):
    plt.figure(figsize=(10, 5))
    plt.plot(prices, label='Stock Price', color='black')
    plt.scatter(states_buy, [prices[i] for i in states_buy], marker='^', color='green', label='Buy', alpha=1)
    plt.scatter(states_sell, [prices[i] for i in states_sell], marker='v', color='red', label='Sell', alpha=1)
    plt.title(f'Trading Actions - {episode_or_test}')
    plt.legend()
    plt.show()

→ /usr/local/lib/python3.11/dist-packages/keras/src/layers/core/dense.py:87: UserWarning: Do not pass an `input_shape`/`input_dim` argument
  super().__init__(activity_regularizer=activity_regularizer, **kwargs)
/usr/local/lib/python3.11/dist-packages/keras/src/layers/activations/leaky_relu.py:41: UserWarning: Argument `alpha` is deprecated. Use
  warnings.warn(
for e in range(episode_count + 1):
    print(f"Running Episode {e}/{episode_count}")
    state = getState(X_train, 0, window_size + 1)
    total_profit = 0
    agent.inventory = []
    states_buy, states_sell = [], []
    trade_log = []

    for t in range(len(X_train) - 1):
        action = agent.act(state)
        next_state = getState(X_train, t + 1, window_size + 1)
        reward = 0

        if action == 1:
            agent.inventory.append(X_train[t])
            states_buy.append(t)
        elif action == 2 and agent.inventory:
            bought_price = agent.inventory.pop(0)
            reward = X_train[t] - bought_price
            total_profit += reward
            trade_log.append(reward)
            states_sell.append(t)

    done = t == len(X_train) - 2
    agent.memory.append((state, action, reward, next_state, done))
    state = next_state

    if len(agent.memory) > batch_size and t % 10 == 0:
        agent.expReplay(batch_size)

    metrics = calculate_metrics(trade_log)
    print(f"Episode {e} Metrics: {metrics}")
    episode_profits.append(total_profit)
    plot_trading_actions(X_train, states_buy, states_sell, f"Episode {e}")

agent.model.save("best_model.h5")

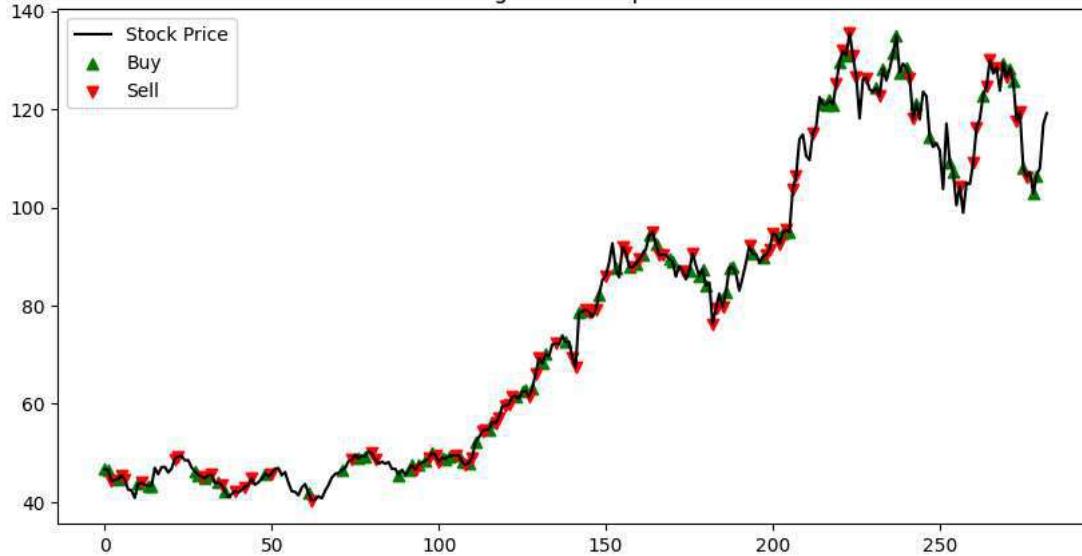
plt.figure(figsize=(10, 5))
plt.plot(range(len(episode_profits)), episode_profits, marker='o', linestyle='--')
plt.title('Profit Trend Across Episodes')
plt.xlabel('Episode')
plt.ylabel('Total Profit')
plt.show()

```

Running Episode 0/500

Episode 0 Metrics: {'Total Profit': '\$151.56', 'Win Rate': '64.20%', 'Profit Factor': '1.88', 'Sharpe Ratio': '0.23', 'Max Drawdown':

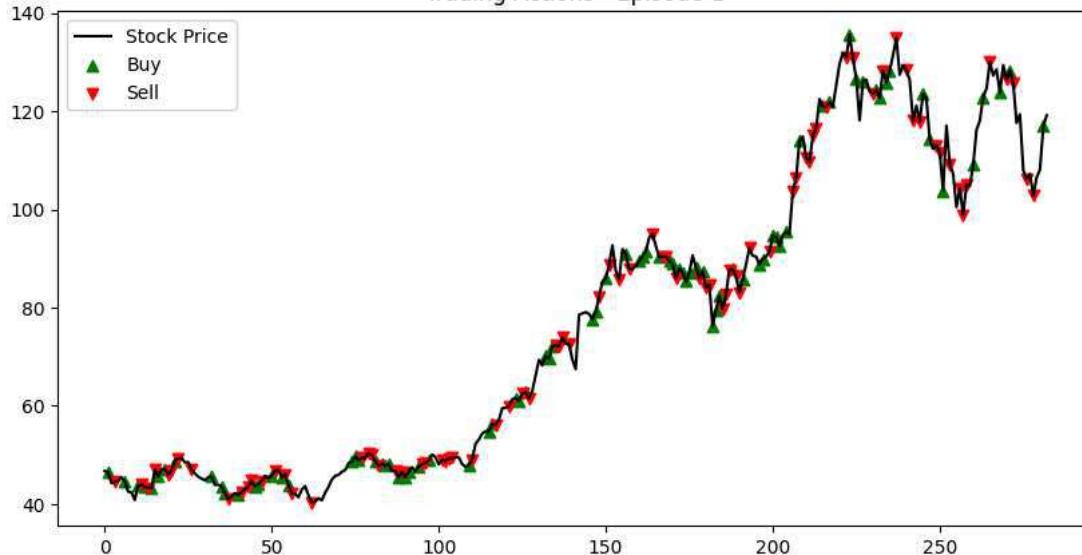
Trading Actions - Episode 0



Running Episode 1/500

Episode 1 Metrics: {'Total Profit': '\$191.16', 'Win Rate': '57.32%', 'Profit Factor': '1.86', 'Sharpe Ratio': '0.20', 'Max Drawdown':

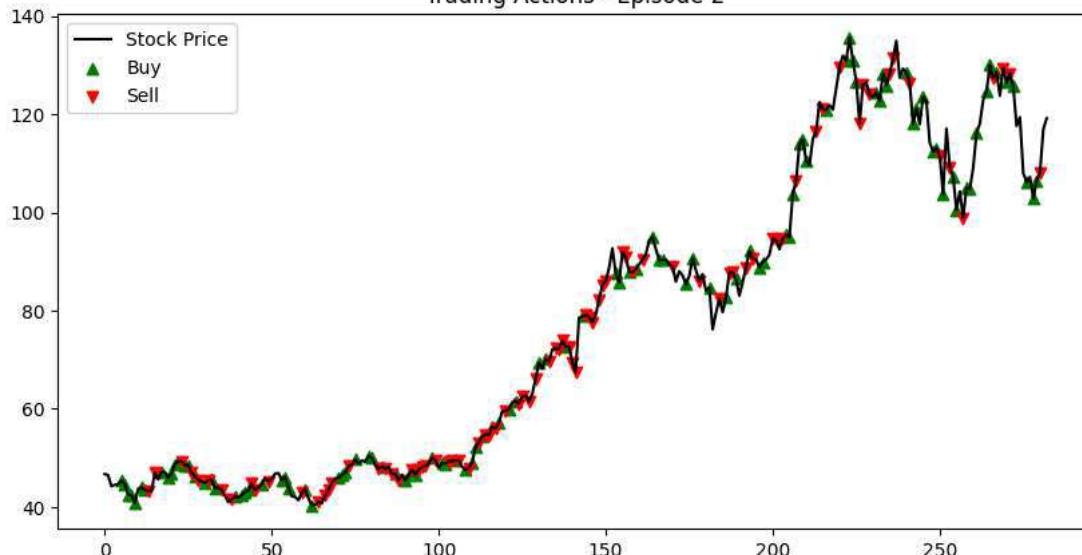
Trading Actions - Episode 1



Running Episode 2/500

Episode 2 Metrics: {'Total Profit': '\$643.33', 'Win Rate': '77.11%', 'Profit Factor': '5.49', 'Sharpe Ratio': '0.62', 'Max Drawdown':

Trading Actions - Episode 2



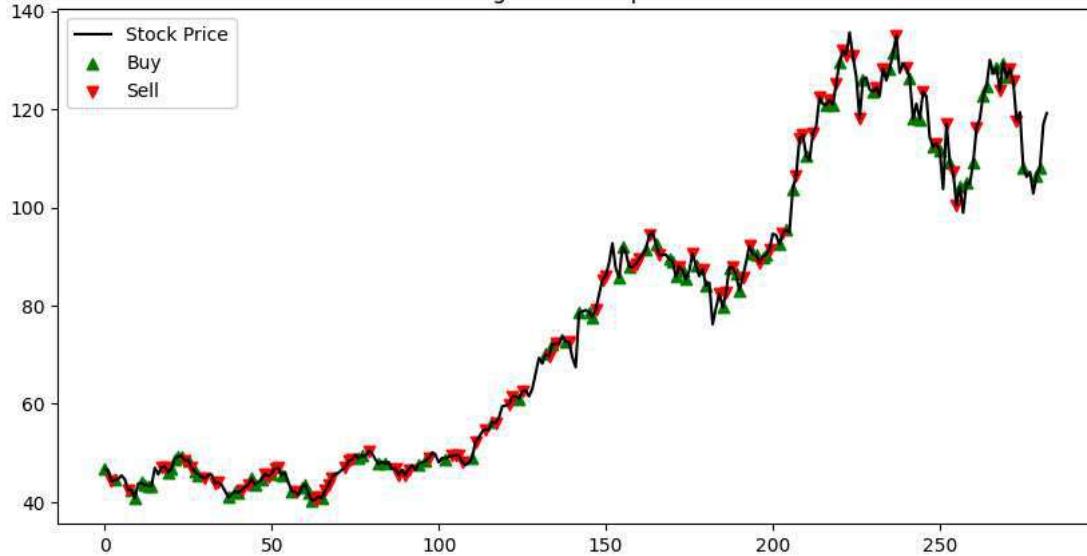
31/07/2025, 09:16

RL.ipynb - Colab

Running Episode 3/500

Episode 3 Metrics: {'Total Profit': '\$351.17', 'Win Rate': '66.67%', 'Profit Factor': '4.75', 'Sharpe Ratio': '0.48', 'Max Drawdown':

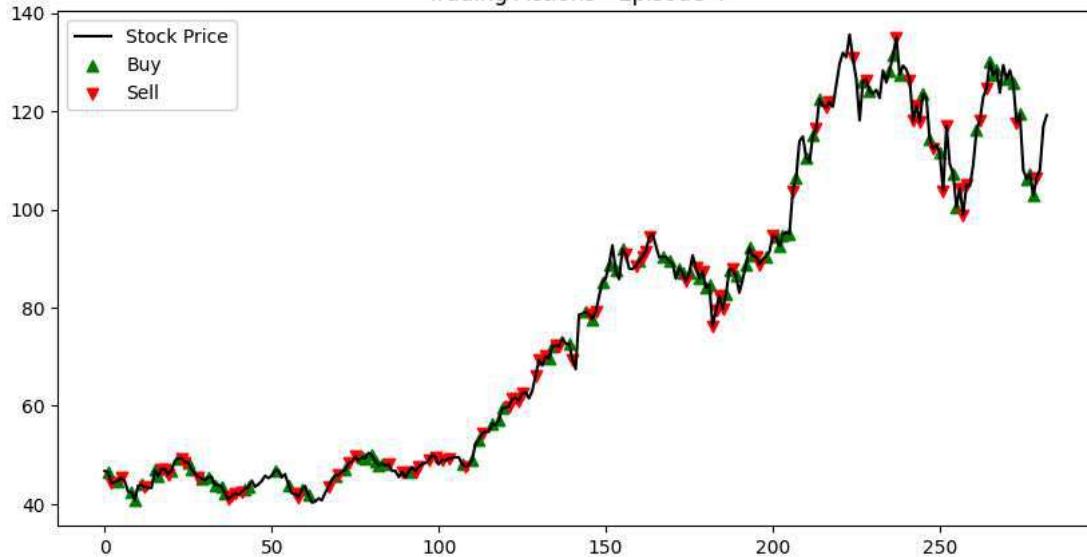
Trading Actions - Episode 3



Running Episode 4/500

Episode 4 Metrics: {'Total Profit': '\$273.22', 'Win Rate': '59.49%', 'Profit Factor': '2.41', 'Sharpe Ratio': '0.28', 'Max Drawdown':

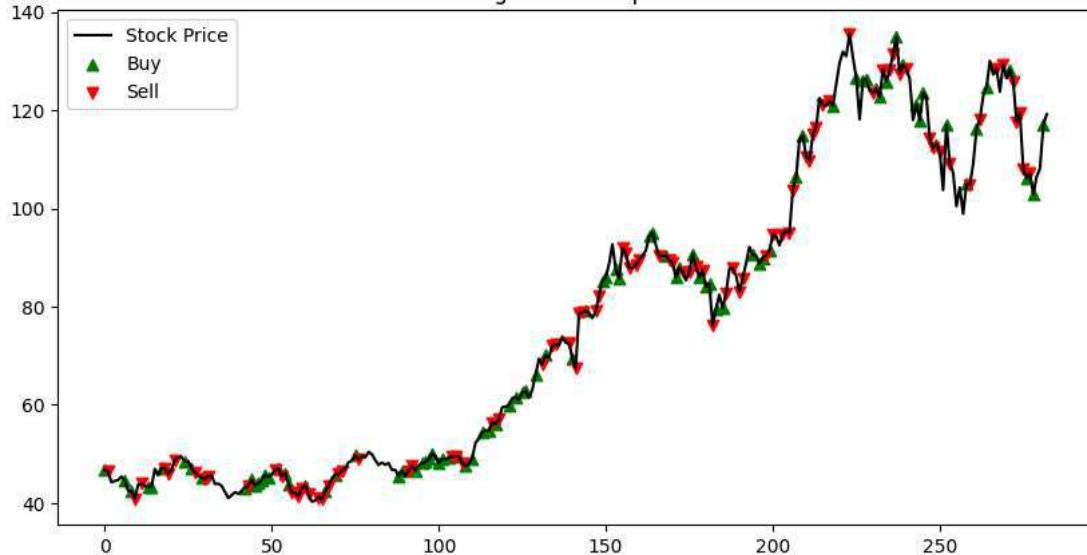
Trading Actions - Episode 4



Running Episode 5/500

Episode 5 Metrics: {'Total Profit': '\$557.78', 'Win Rate': '67.82%', 'Profit Factor': '4.10', 'Sharpe Ratio': '0.49', 'Max Drawdown':

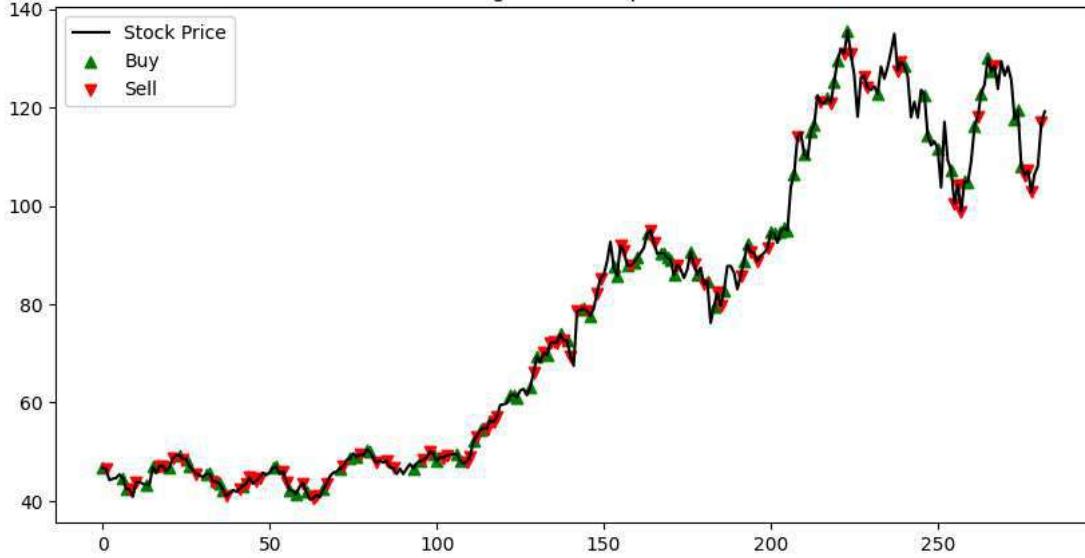
Trading Actions - Episode 5



Running Episode 6/500

Episode 6 Metrics: {'Total Profit': '\$249.40', 'Win Rate': '56.96%', 'Profit Factor': '2.42', 'Sharpe Ratio': '0.25', 'Max Drawdown':

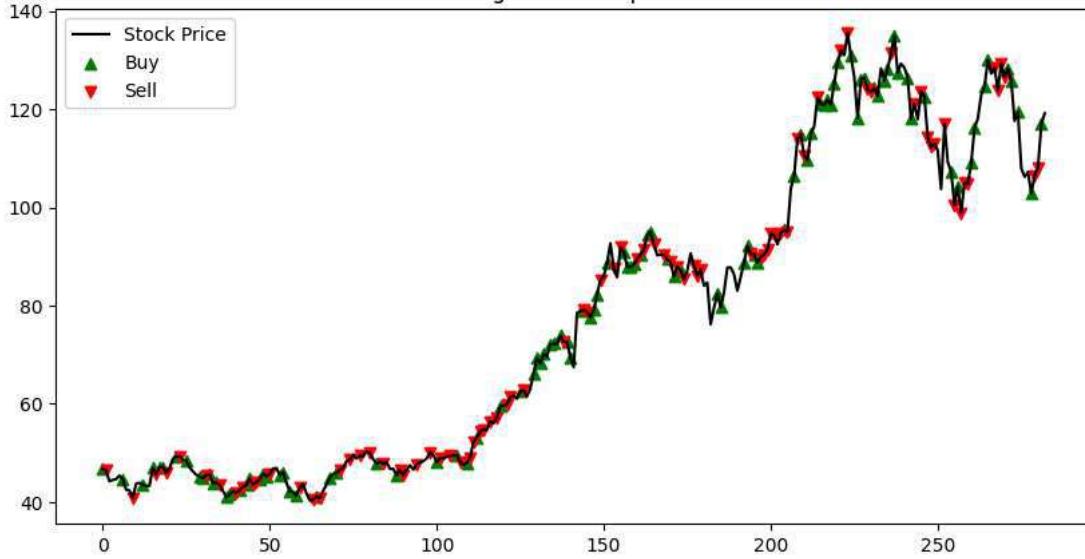
Trading Actions - Episode 6



Running Episode 7/500

Episode 7 Metrics: {'Total Profit': '\$413.86', 'Win Rate': '66.67%', 'Profit Factor': '3.16', 'Sharpe Ratio': '0.38', 'Max Drawdown':

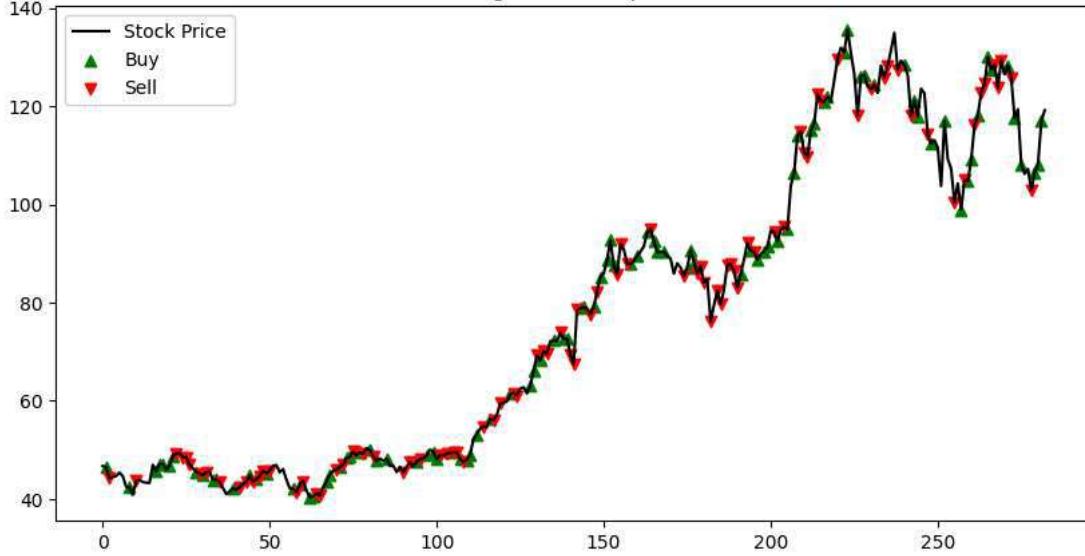
Trading Actions - Episode 7



Running Episode 8/500

Episode 8 Metrics: {'Total Profit': '\$179.13', 'Win Rate': '63.64%', 'Profit Factor': '1.96', 'Sharpe Ratio': '0.23', 'Max Drawdown':

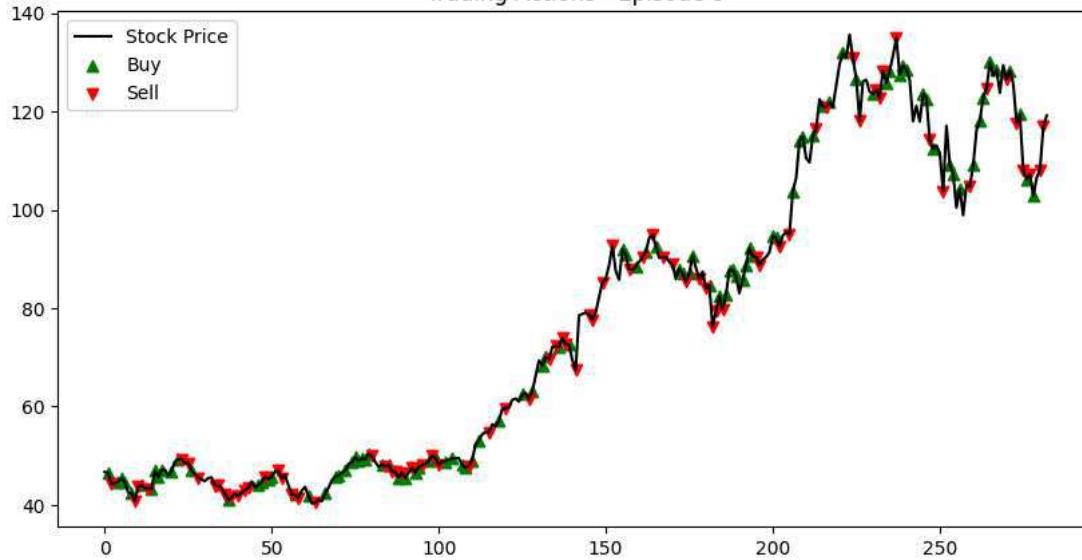
Trading Actions - Episode 8



Running Episode 9/500

Episode 9 Metrics: {'Total Profit': '\$945.48', 'Win Rate': '68.00%', 'Profit Factor': '12.56', 'Sharpe Ratio': '0.77', 'Max Drawdown':

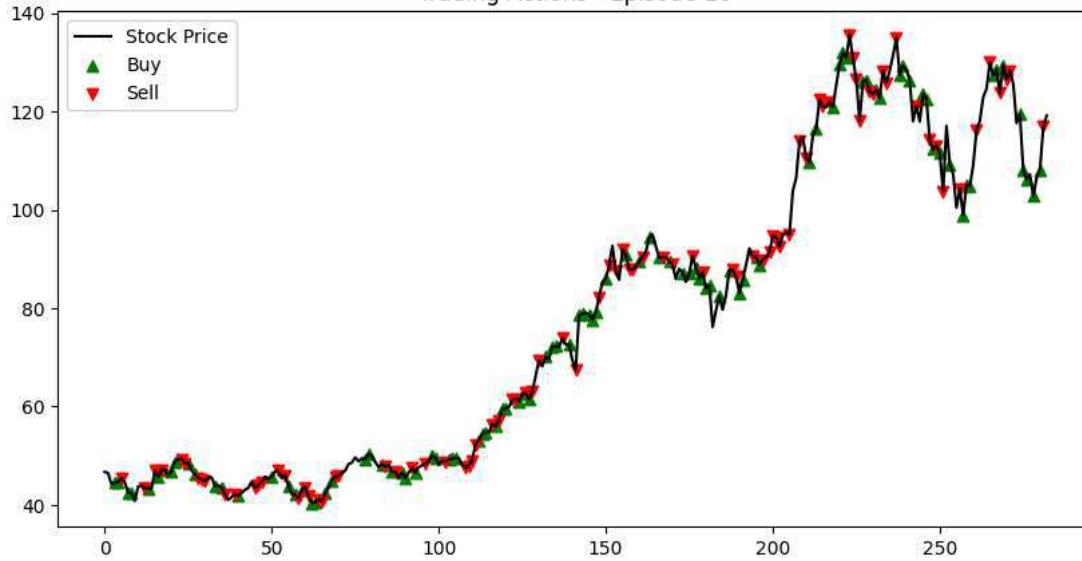
Trading Actions - Episode 9



Running Episode 10/500

Episode 10 Metrics: {'Total Profit': '\$617.72', 'Win Rate': '73.26%', 'Profit Factor': '5.44', 'Sharpe Ratio': '0.52', 'Max Drawdown':

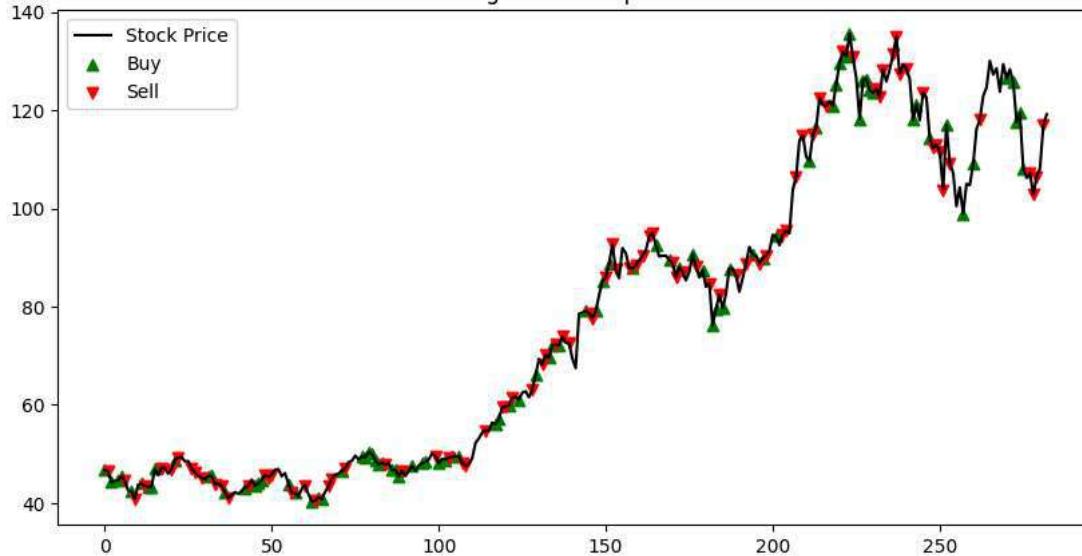
Trading Actions - Episode 10



Running Episode 11/500

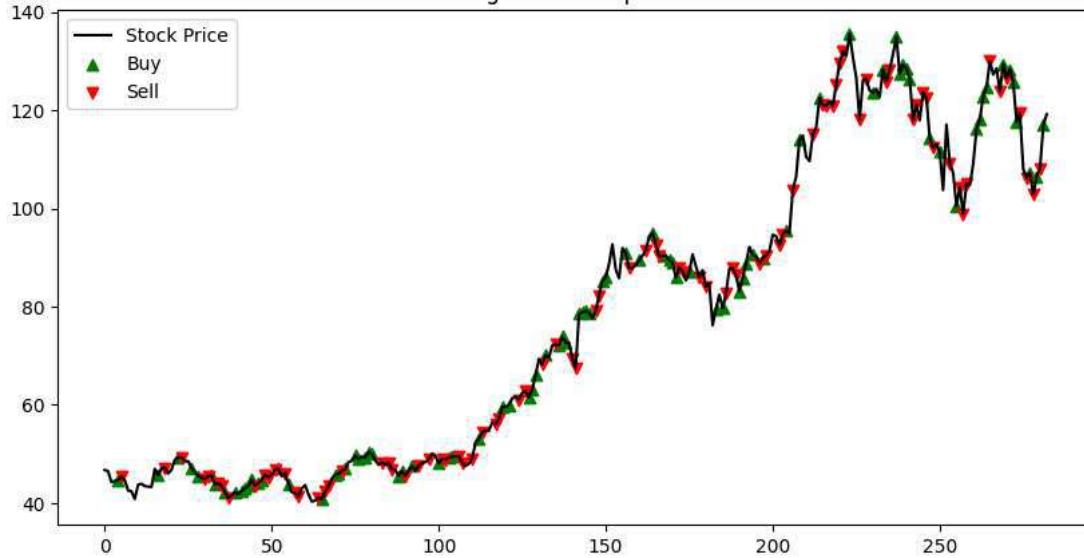
Episode 11 Metrics: {'Total Profit': '\$526.62', 'Win Rate': '60.47%', 'Profit Factor': '4.56', 'Sharpe Ratio': '0.52', 'Max Drawdown':

Trading Actions - Episode 11



Running Episode 12/500

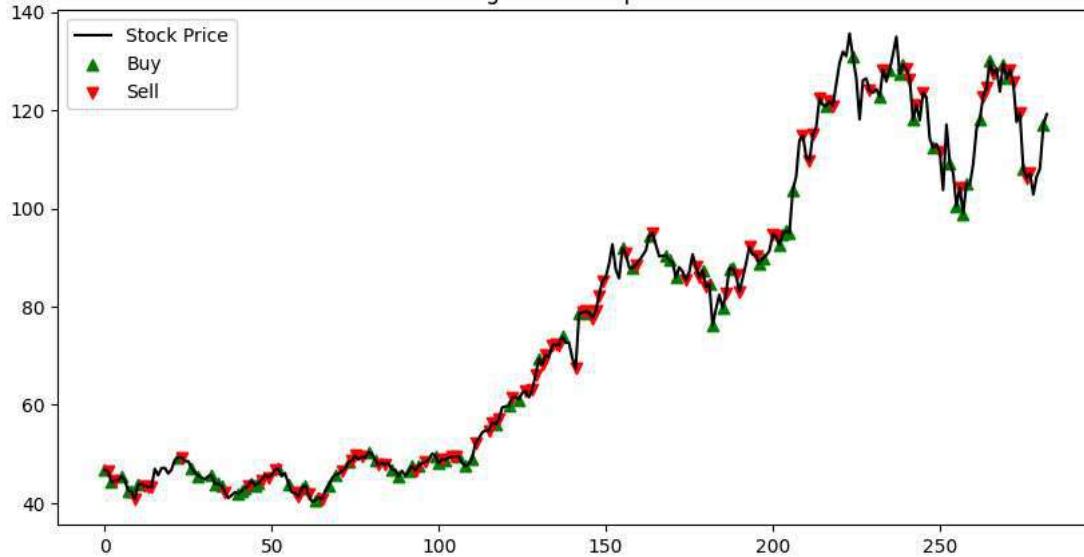
Episode 12 Metrics: {'Total Profit': '\$251.14', 'Win Rate': '60.71%', 'Profit Factor': '2.10', 'Sharpe Ratio': '0.24', 'Max Drawdown':



Running Episode 13/500

Episode 13 Metrics: {'Total Profit': '\$468.86', 'Win Rate': '71.08%', 'Profit Factor': '6.34', 'Sharpe Ratio': '0.60', 'Max Drawdown':

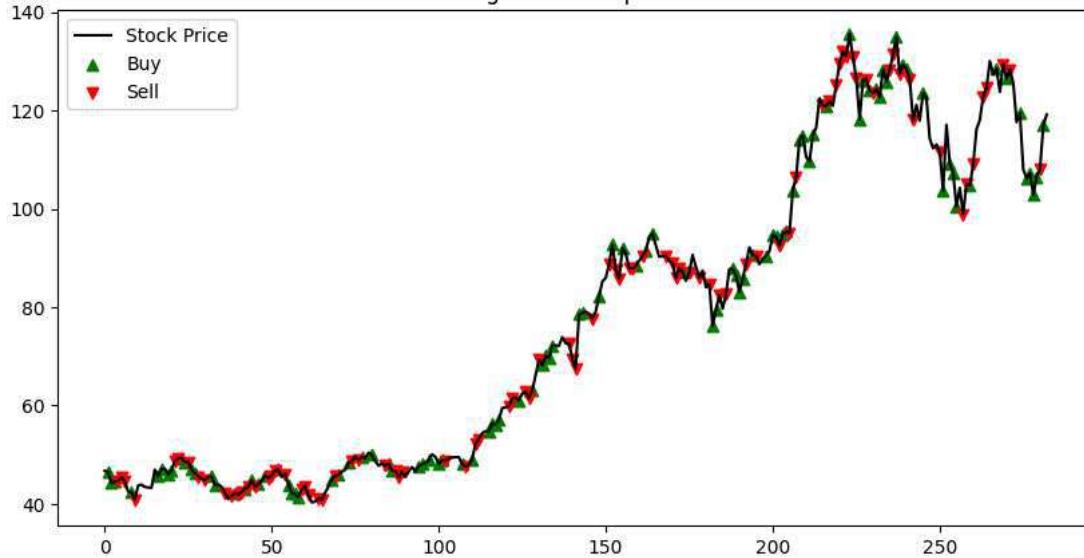
Trading Actions - Episode 13



Running Episode 14/500

Episode 14 Metrics: {'Total Profit': '\$380.74', 'Win Rate': '62.50%', 'Profit Factor': '3.21', 'Sharpe Ratio': '0.39', 'Max Drawdown':

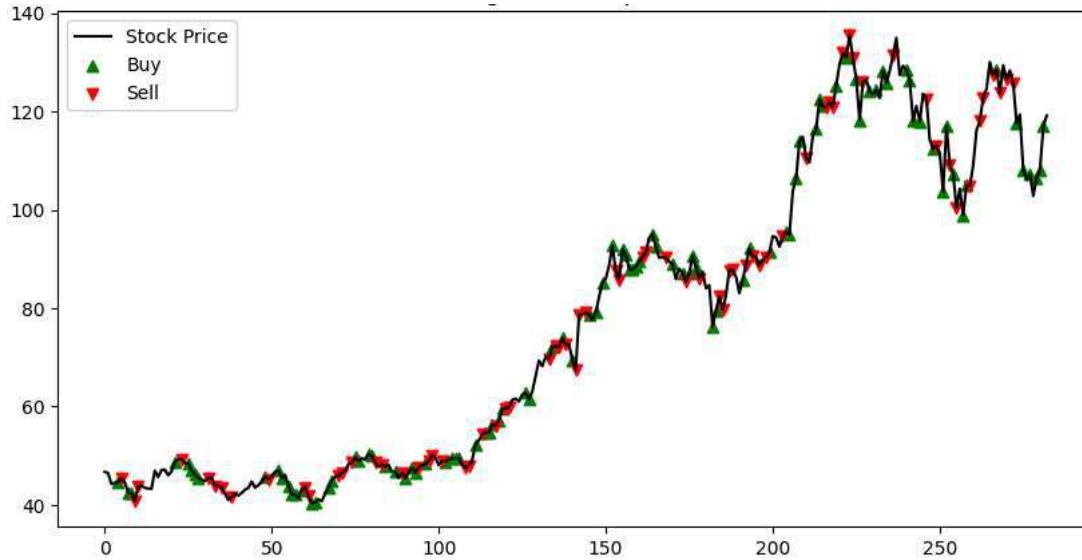
Trading Actions - Episode 14



Running Episode 15/500

Episode 15 Metrics: {'Total Profit': '\$1098.47', 'Win Rate': '82.86%', 'Profit Factor': '35.03', 'Sharpe Ratio': '1.09', 'Max Drawdown':

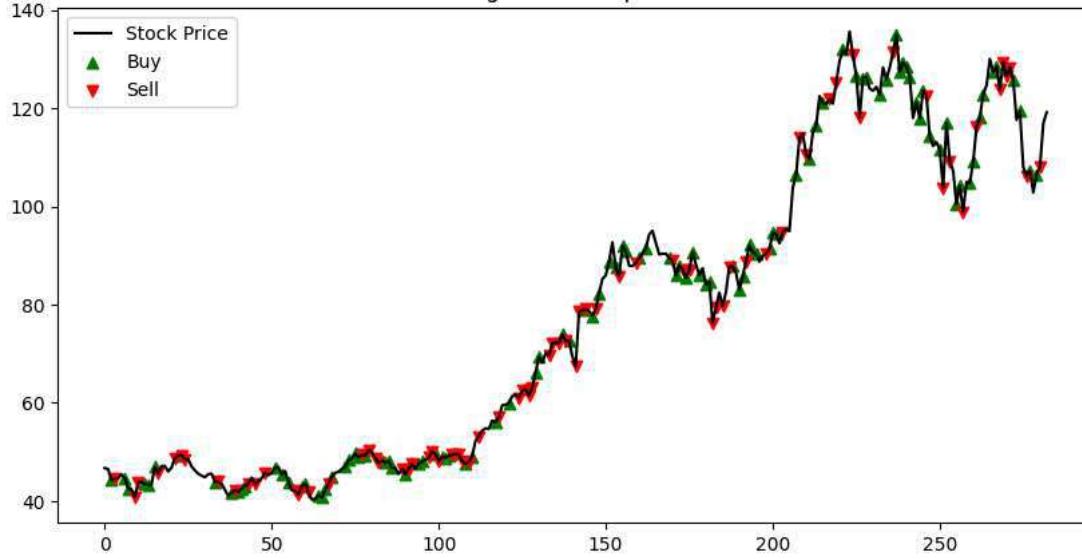
Trading Actions - Episode 15



Running Episode 16/500

Episode 16 Metrics: {'Total Profit': '\$681.56', 'Win Rate': '77.33%', 'Profit Factor': '10.56', 'Sharpe Ratio': '0.68', 'Max Drawdown':

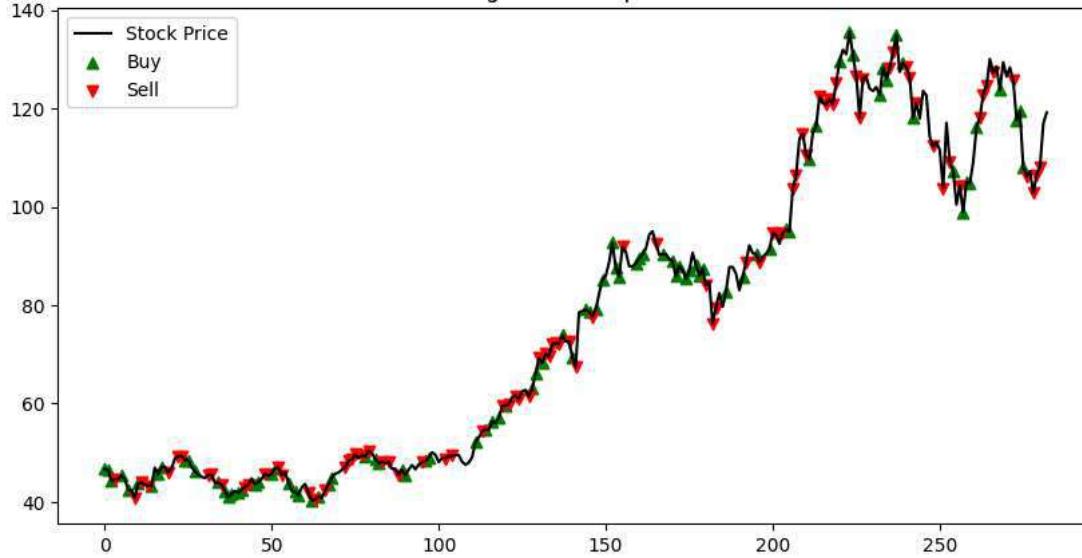
Trading Actions - Episode 16



Running Episode 17/500

Episode 17 Metrics: {'Total Profit': '\$682.47', 'Win Rate': '69.41%', 'Profit Factor': '5.22', 'Sharpe Ratio': '0.55', 'Max Drawdown':

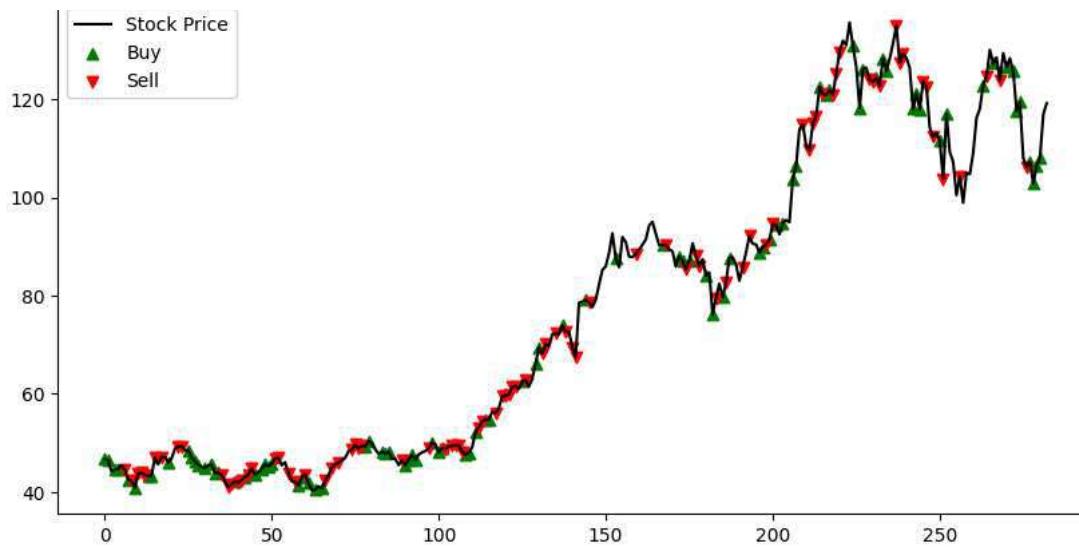
Trading Actions - Episode 17



Running Episode 18/500

Episode 18 Metrics: {'Total Profit': '\$244.55', 'Win Rate': '64.29%', 'Profit Factor': '3.08', 'Sharpe Ratio': '0.41', 'Max Drawdown':

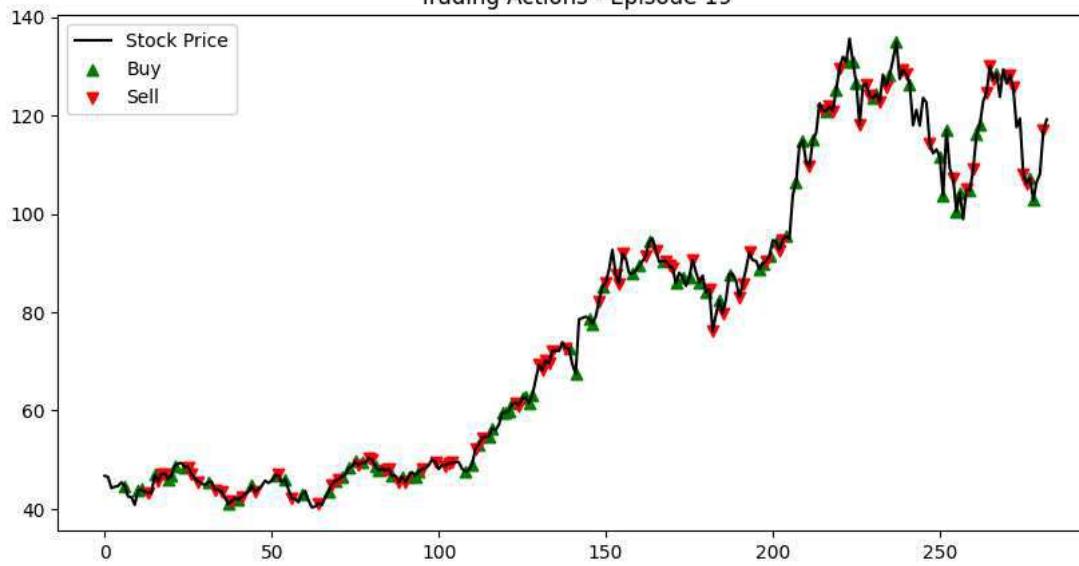
Trading Actions - Episode 18



Running Episode 19/500

Episode 19 Metrics: {'Total Profit': '\$368.18', 'Win Rate': '68.67%', 'Profit Factor': '3.58', 'Sharpe Ratio': '0.42', 'Max Drawdown':

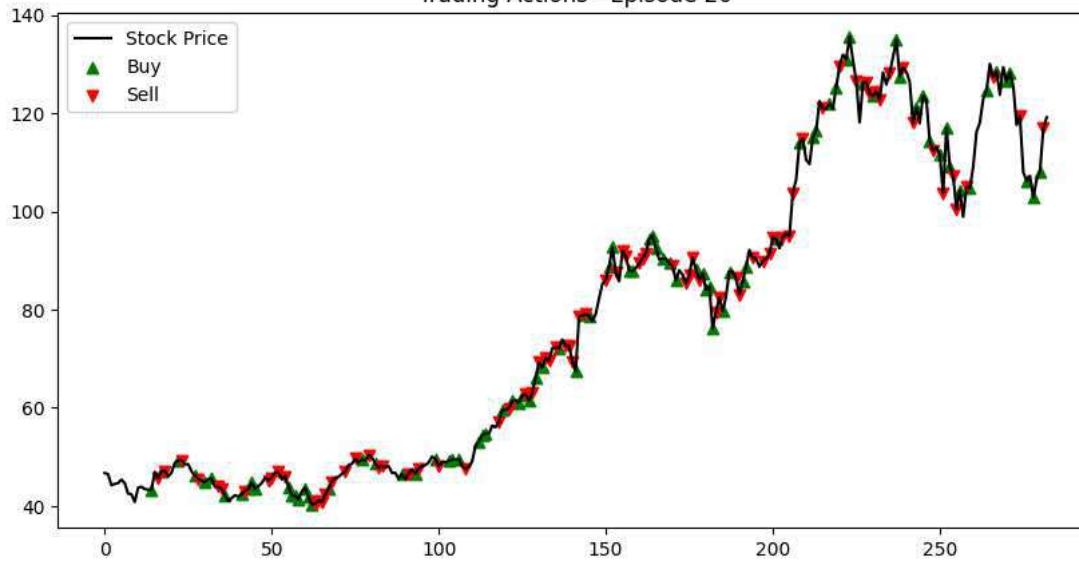
Trading Actions - Episode 19



Running Episode 20/500

Episode 20 Metrics: {'Total Profit': '\$196.66', 'Win Rate': '63.75%', 'Profit Factor': '2.30', 'Sharpe Ratio': '0.33', 'Max Drawdown':

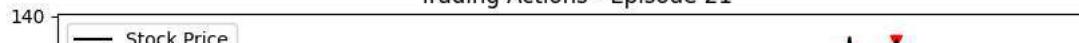
Trading Actions - Episode 20

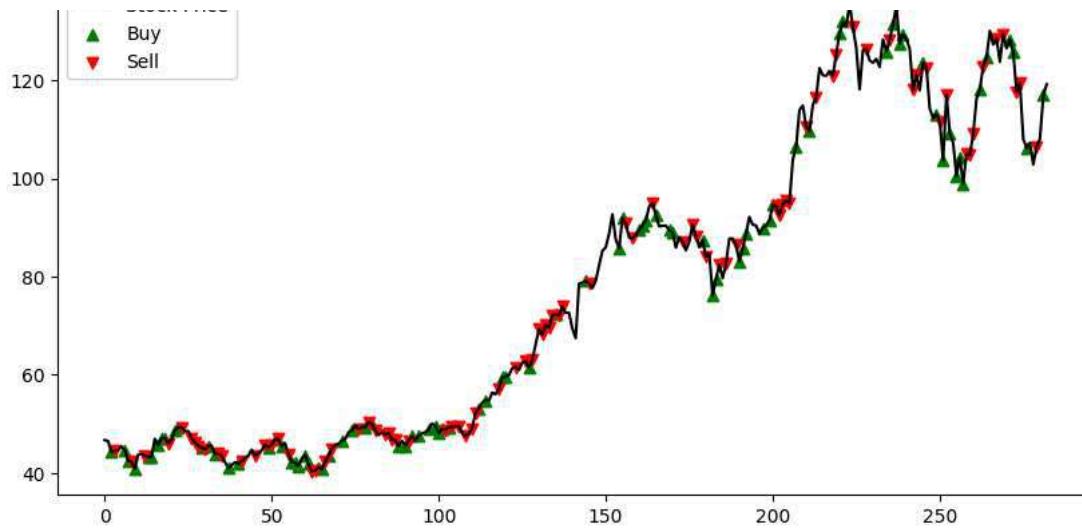


Running Episode 21/500

Episode 21 Metrics: {'Total Profit': '\$308.75', 'Win Rate': '65.48%', 'Profit Factor': '3.72', 'Sharpe Ratio': '0.49', 'Max Drawdown':

Trading Actions - Episode 21

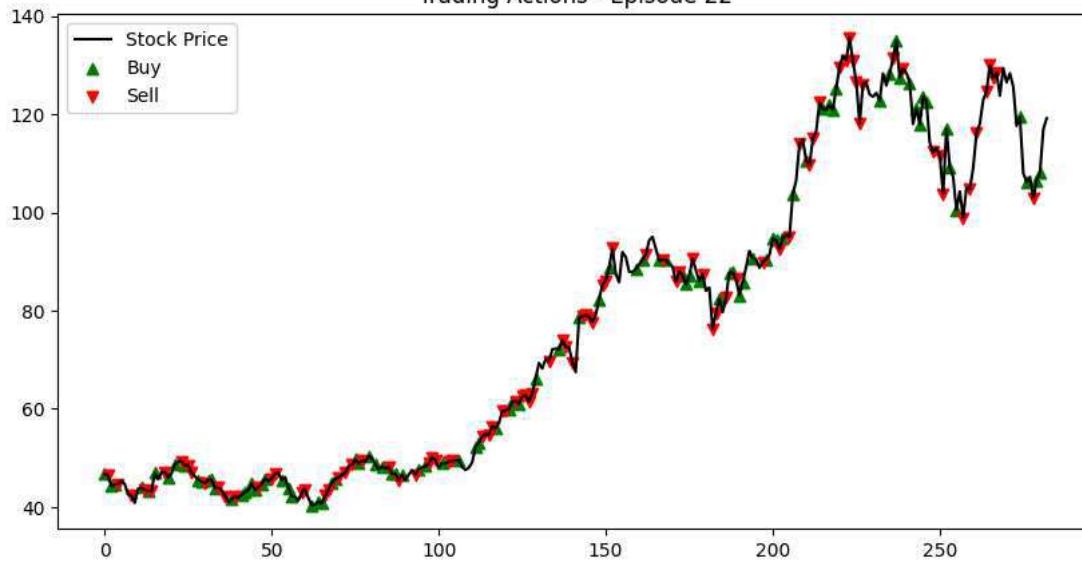




Running Episode 22/500

Episode 22 Metrics: {'Total Profit': '\$433.64', 'Win Rate': '68.89%', 'Profit Factor': '3.64', 'Sharpe Ratio': '0.45', 'Max Drawdown':

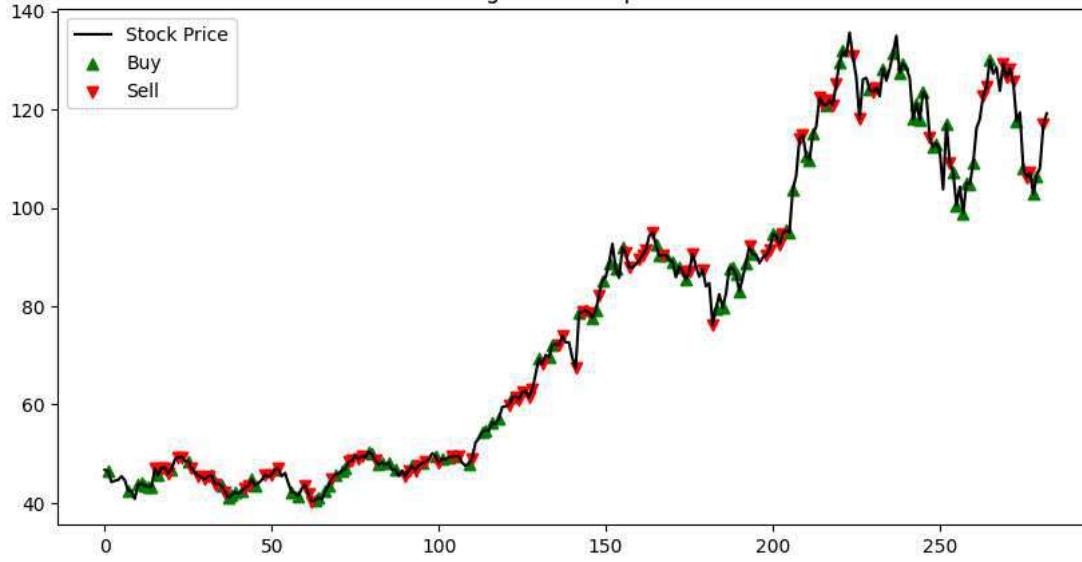
Trading Actions - Episode 22



Running Episode 23/500

Episode 23 Metrics: {'Total Profit': '\$604.69', 'Win Rate': '72.41%', 'Profit Factor': '6.34', 'Sharpe Ratio': '0.60', 'Max Drawdown':

Trading Actions - Episode 23

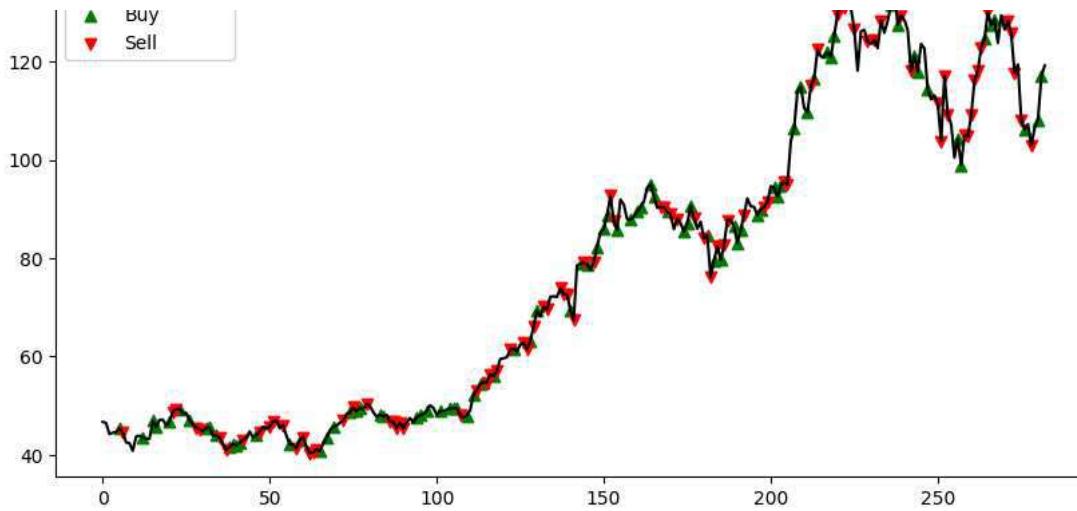


Running Episode 24/500

Episode 24 Metrics: {'Total Profit': '\$428.74', 'Win Rate': '60.47%', 'Profit Factor': '2.79', 'Sharpe Ratio': '0.34', 'Max Drawdown':

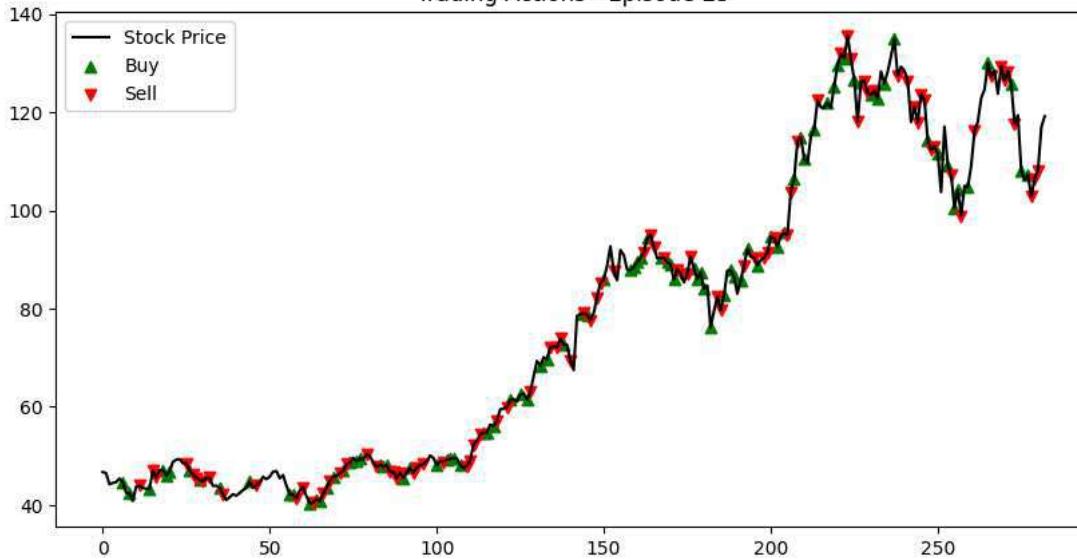
Trading Actions - Episode 24





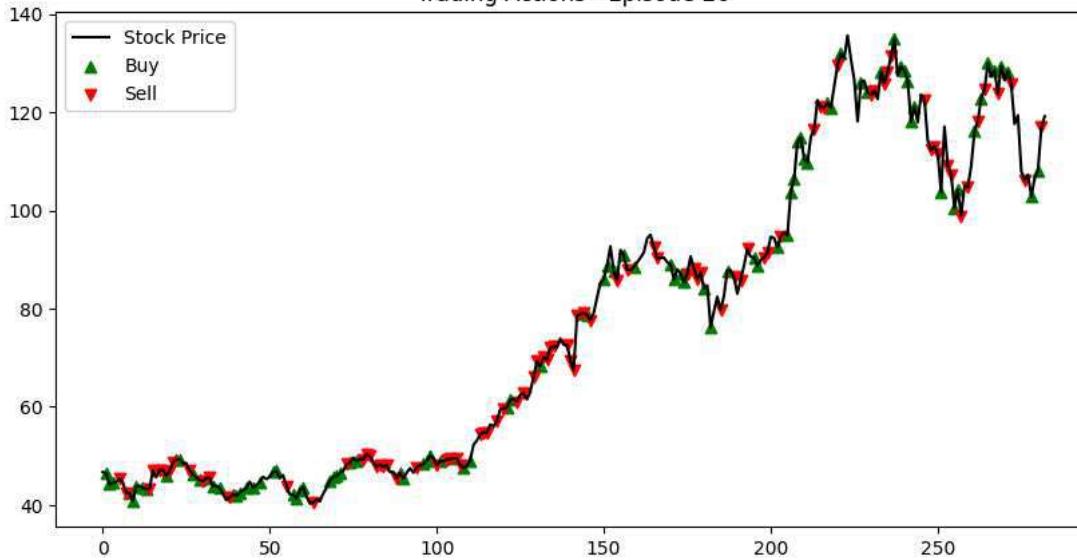
Running Episode 25/500

Episode 25 Metrics: {'Total Profit': '\$342.77', 'Win Rate': '63.64%', 'Profit Factor': '2.72', 'Sharpe Ratio': '0.32', 'Max Drawdown':

Trading Actions - Episode 25

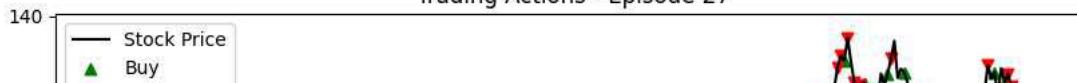
Running Episode 26/500

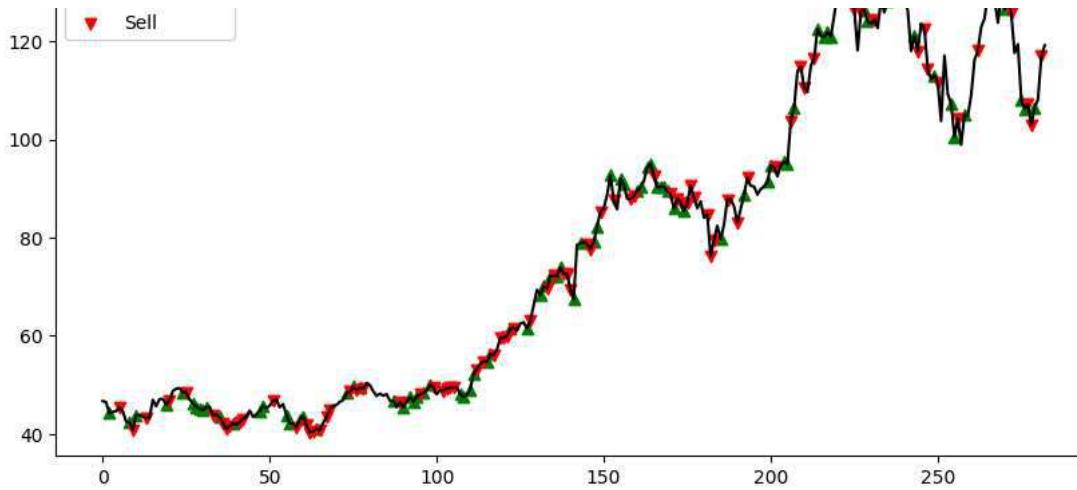
Episode 26 Metrics: {'Total Profit': '\$369.22', 'Win Rate': '70.93%', 'Profit Factor': '3.00', 'Sharpe Ratio': '0.40', 'Max Drawdown':

Trading Actions - Episode 26

Running Episode 27/500

Episode 27 Metrics: {'Total Profit': '\$116.34', 'Win Rate': '51.76%', 'Profit Factor': '1.87', 'Sharpe Ratio': '0.22', 'Max Drawdown':

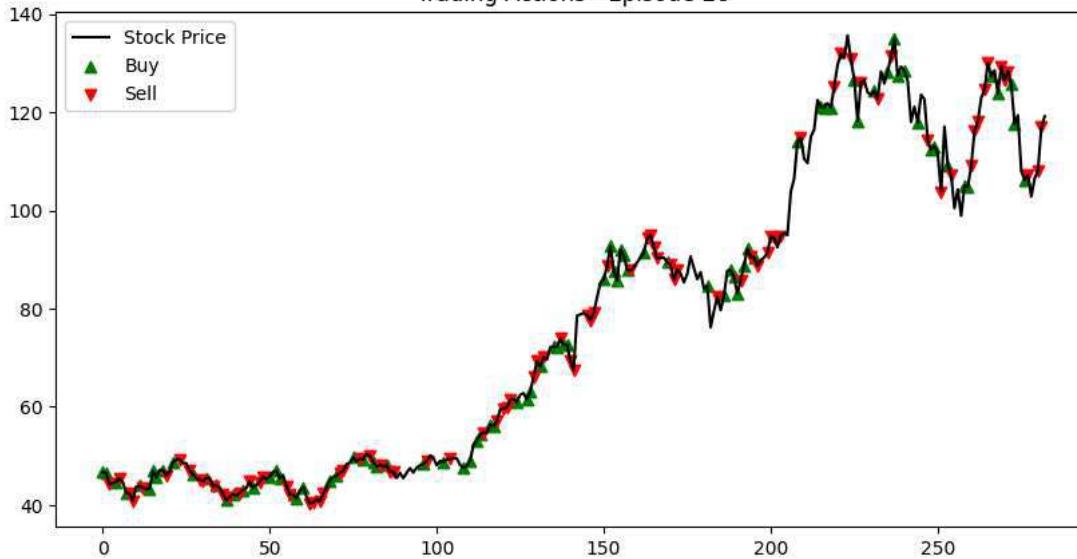
Trading Actions - Episode 27



Running Episode 28/500

Episode 28 Metrics: {'Total Profit': '\$99.19', 'Win Rate': '58.33%', 'Profit Factor': '1.55', 'Sharpe Ratio': '0.14', 'Max Drawdown':

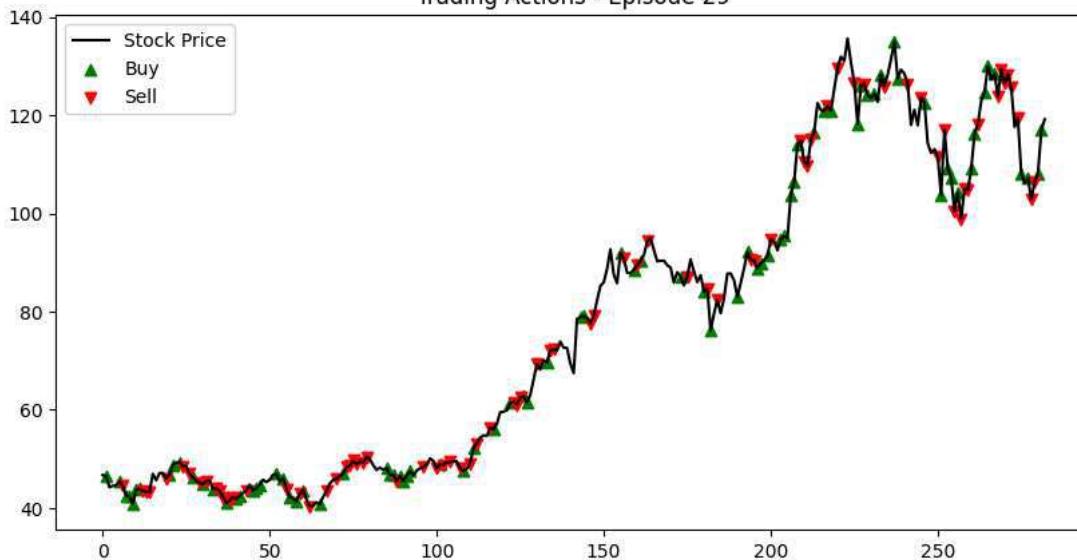
Trading Actions - Episode 28



Running Episode 29/500

Episode 29 Metrics: {'Total Profit': '\$188.20', 'Win Rate': '66.67%', 'Profit Factor': '1.89', 'Sharpe Ratio': '0.22', 'Max Drawdown':

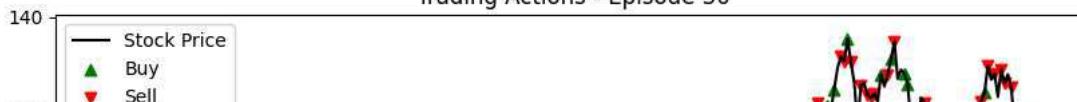
Trading Actions - Episode 29

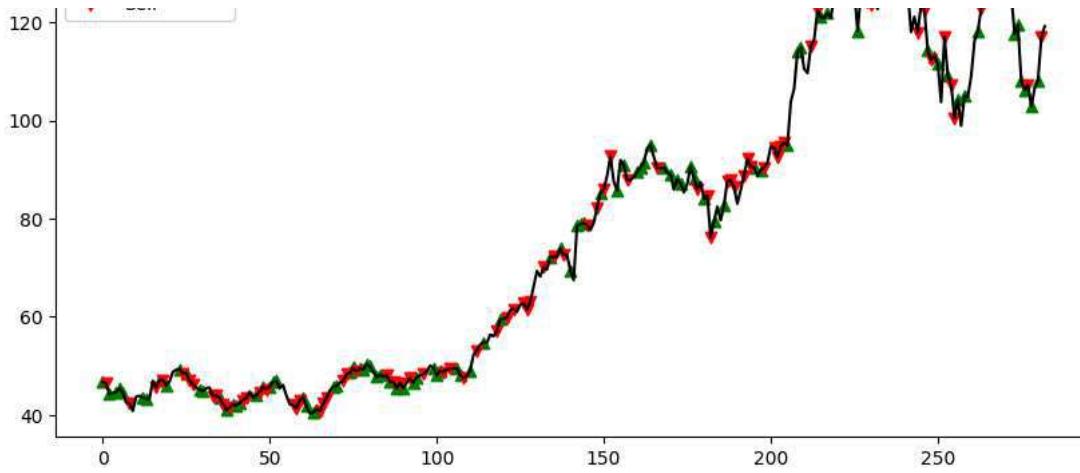


Running Episode 30/500

Episode 30 Metrics: {'Total Profit': '\$968.17', 'Win Rate': '73.56%', 'Profit Factor': '9.95', 'Sharpe Ratio': '0.68', 'Max Drawdown':

Trading Actions - Episode 30

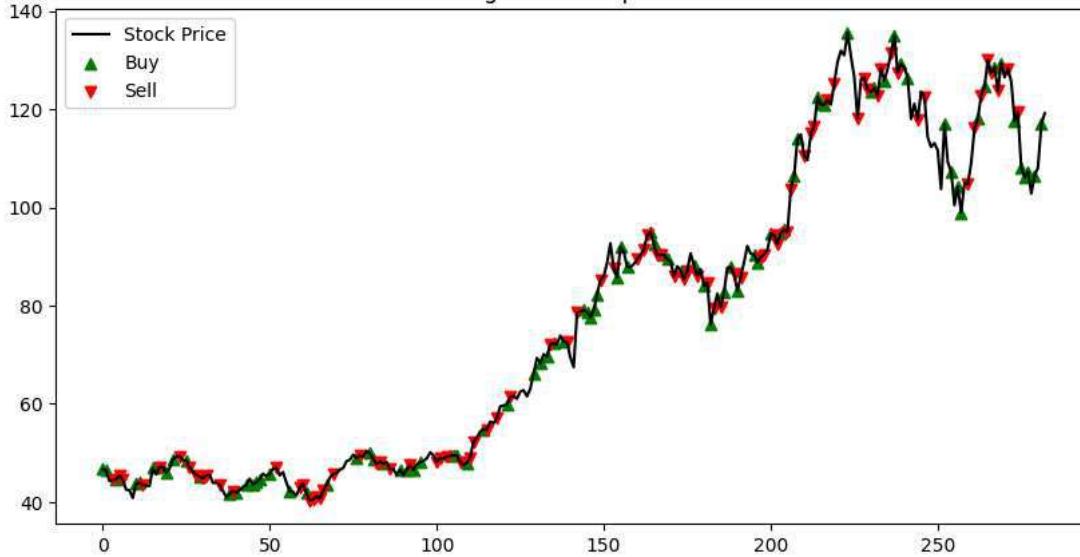




Running Episode 31/500

Episode 31 Metrics: {'Total Profit': '\$273.17', 'Win Rate': '59.76%', 'Profit Factor': '2.84', 'Sharpe Ratio': '0.36', 'Max Drawdown':

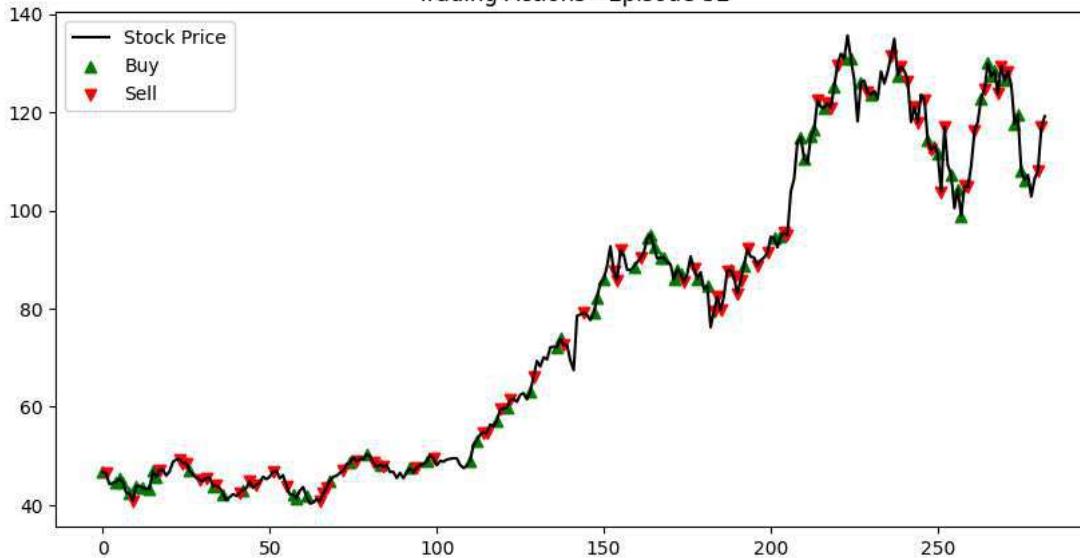
Trading Actions - Episode 31



Running Episode 32/500

Episode 32 Metrics: {'Total Profit': '\$30.67', 'Win Rate': '60.56%', 'Profit Factor': '1.24', 'Sharpe Ratio': '0.08', 'Max Drawdown':

Trading Actions - Episode 32

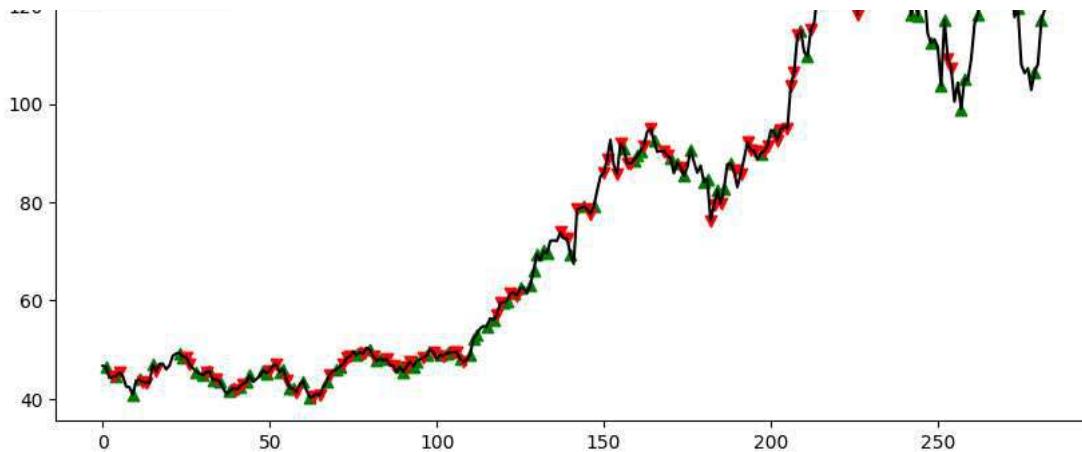


Running Episode 33/500

Episode 33 Metrics: {'Total Profit': '\$887.40', 'Win Rate': '70.11%', 'Profit Factor': '10.66', 'Sharpe Ratio': '0.70', 'Max Drawdown':

Trading Actions - Episode 33

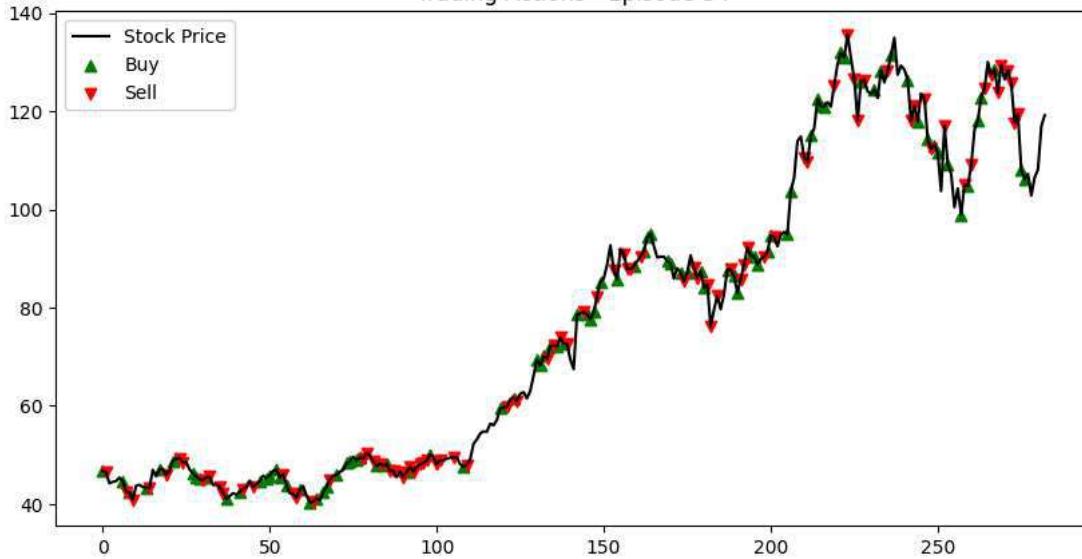




Running Episode 34/500

Episode 34 Metrics: {'Total Profit': '\$290.37', 'Win Rate': '57.83%', 'Profit Factor': '2.95', 'Sharpe Ratio': '0.30', 'Max Drawdown':

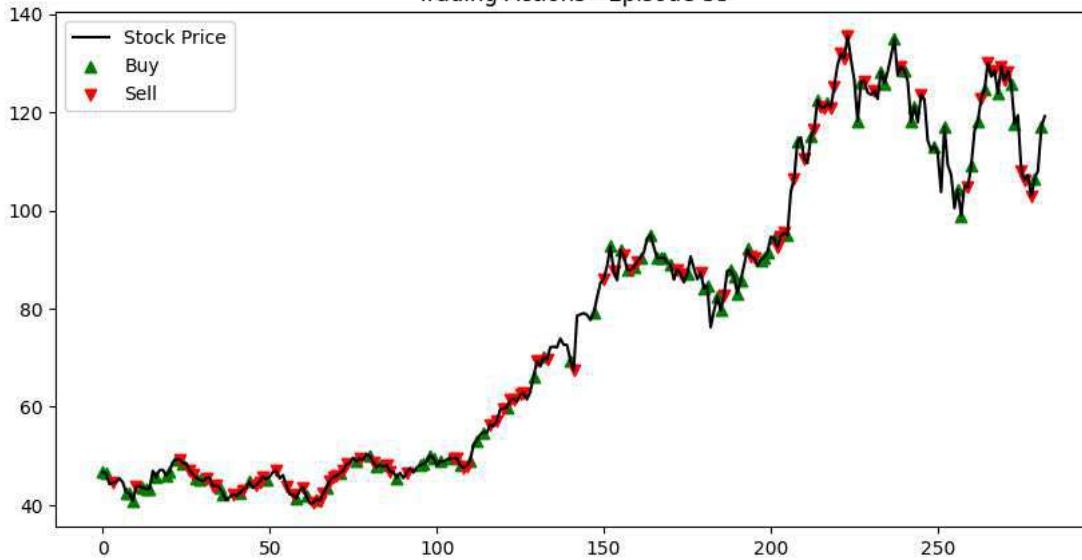
Trading Actions - Episode 34



Running Episode 35/500

Episode 35 Metrics: {'Total Profit': '\$451.65', 'Win Rate': '63.41%', 'Profit Factor': '4.13', 'Sharpe Ratio': '0.41', 'Max Drawdown':

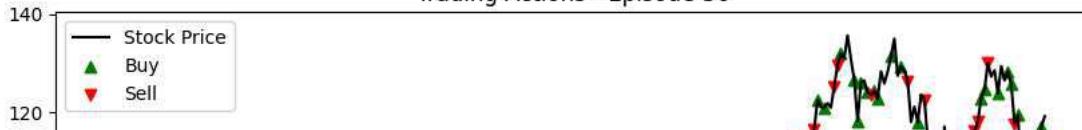
Trading Actions - Episode 35

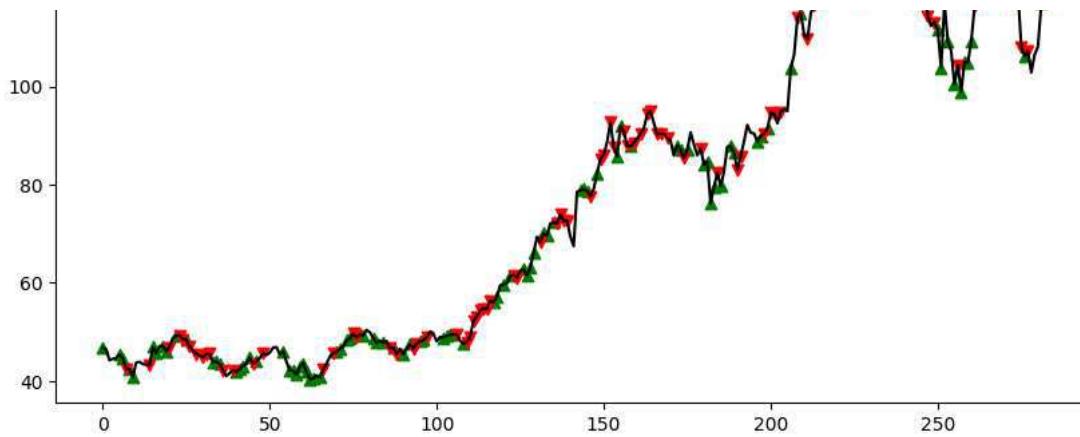


Running Episode 36/500

Episode 36 Metrics: {'Total Profit': '\$1468.47', 'Win Rate': '87.34%', 'Profit Factor': '68.00', 'Sharpe Ratio': '1.25', 'Max Drawdown':

Trading Actions - Episode 36

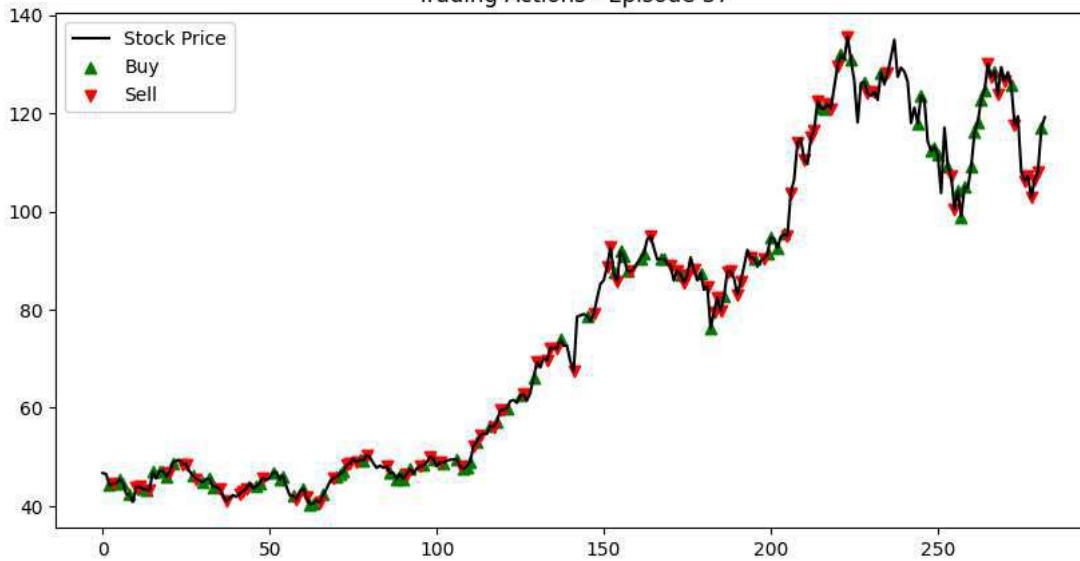




Running Episode 37/500

Episode 37 Metrics: {'Total Profit': '\$722.49', 'Win Rate': '67.44%', 'Profit Factor': '5.83', 'Sharpe Ratio': '0.60', 'Max Drawdown':

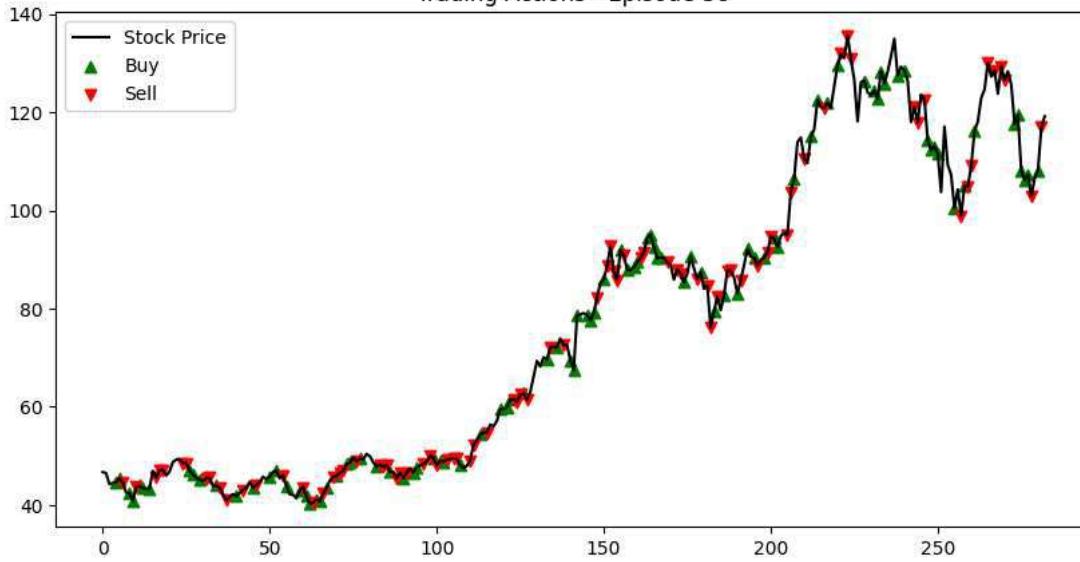
Trading Actions - Episode 37



Running Episode 38/500

Episode 38 Metrics: {'Total Profit': '\$211.04', 'Win Rate': '63.41%', 'Profit Factor': '2.19', 'Sharpe Ratio': '0.24', 'Max Drawdown':

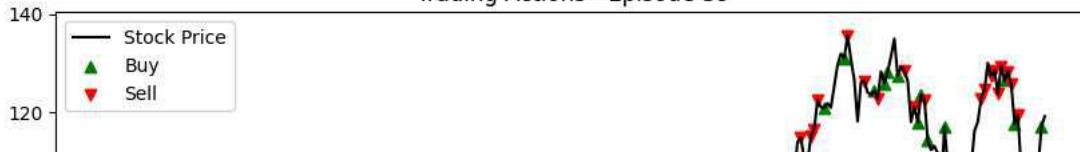
Trading Actions - Episode 38

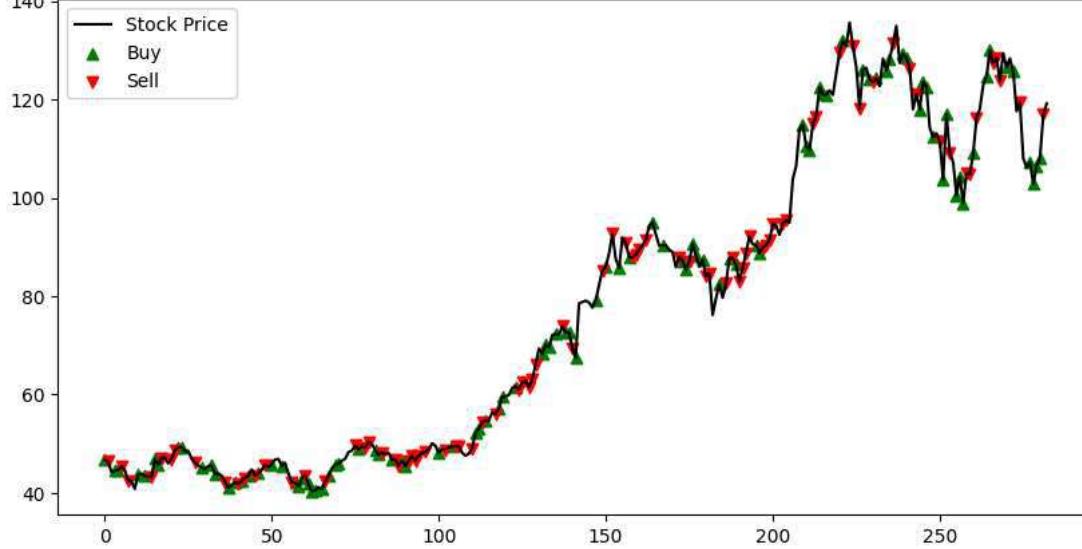
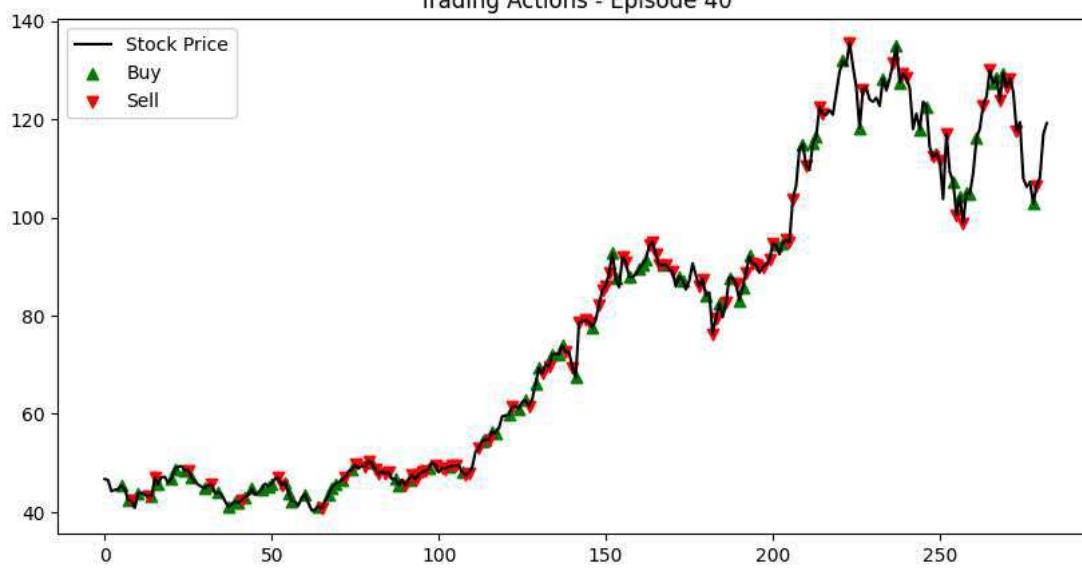
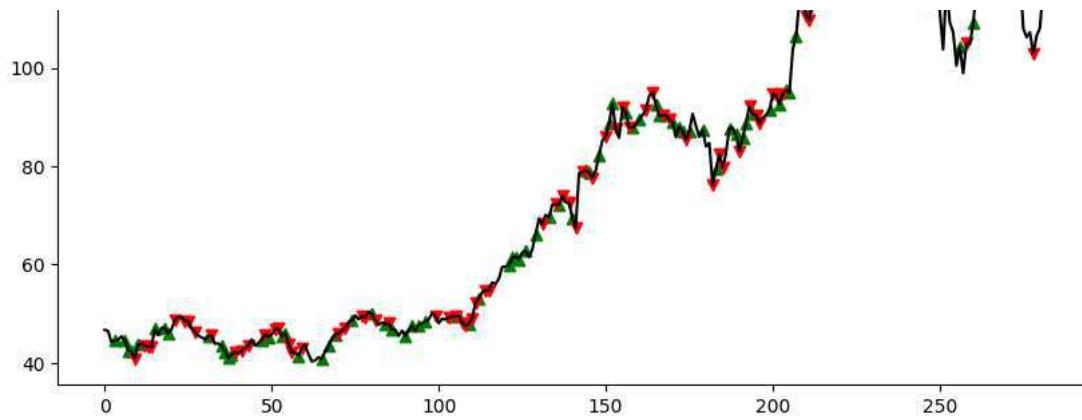


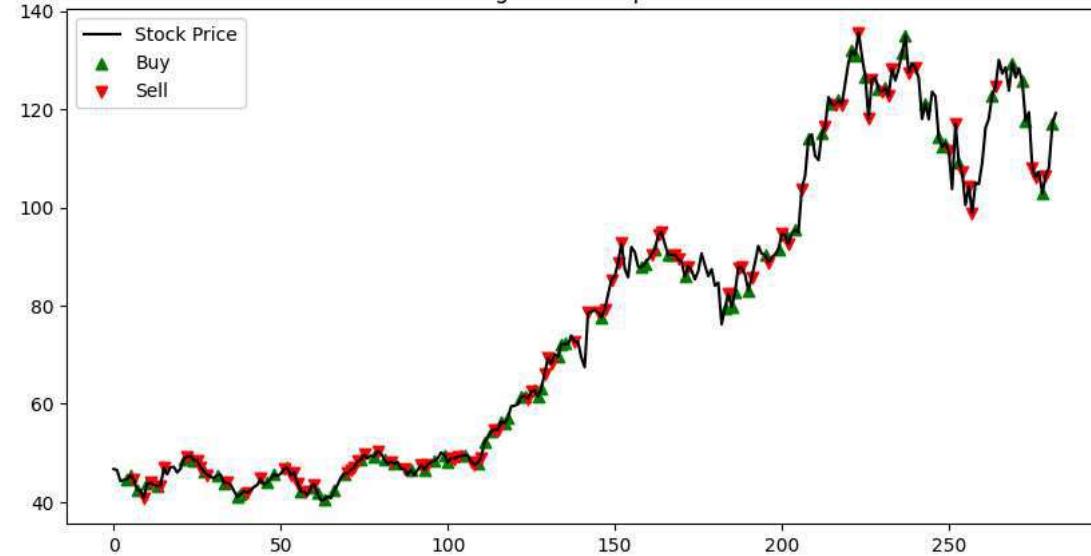
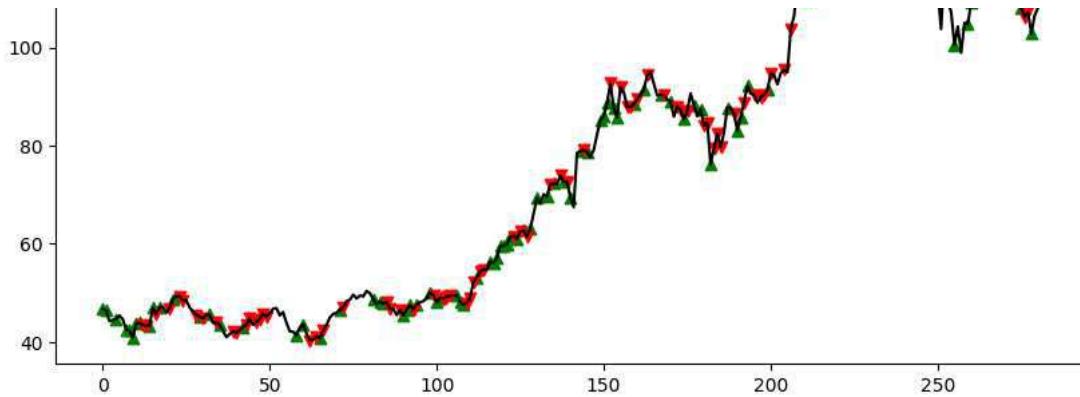
Running Episode 39/500

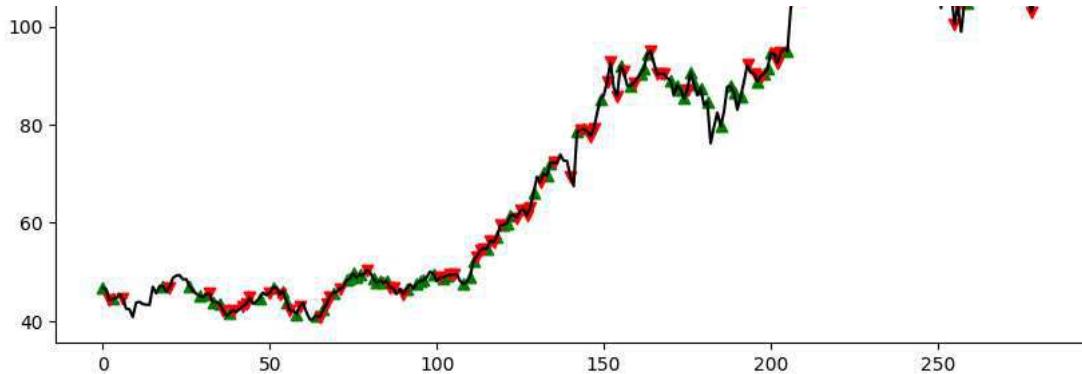
Episode 39 Metrics: {'Total Profit': '\$462.36', 'Win Rate': '74.39%', 'Profit Factor': '4.87', 'Sharpe Ratio': '0.50', 'Max Drawdown':

Trading Actions - Episode 39





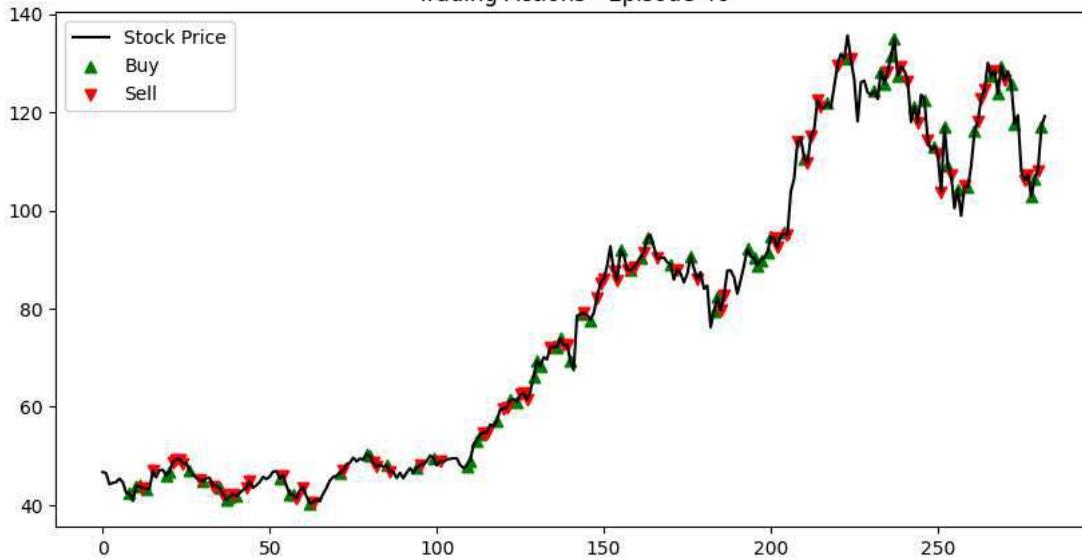




Running Episode 46/500

Episode 46 Metrics: {'Total Profit': '\$157.31', 'Win Rate': '69.86%', 'Profit Factor': '1.90', 'Sharpe Ratio': '0.22', 'Max Drawdown':

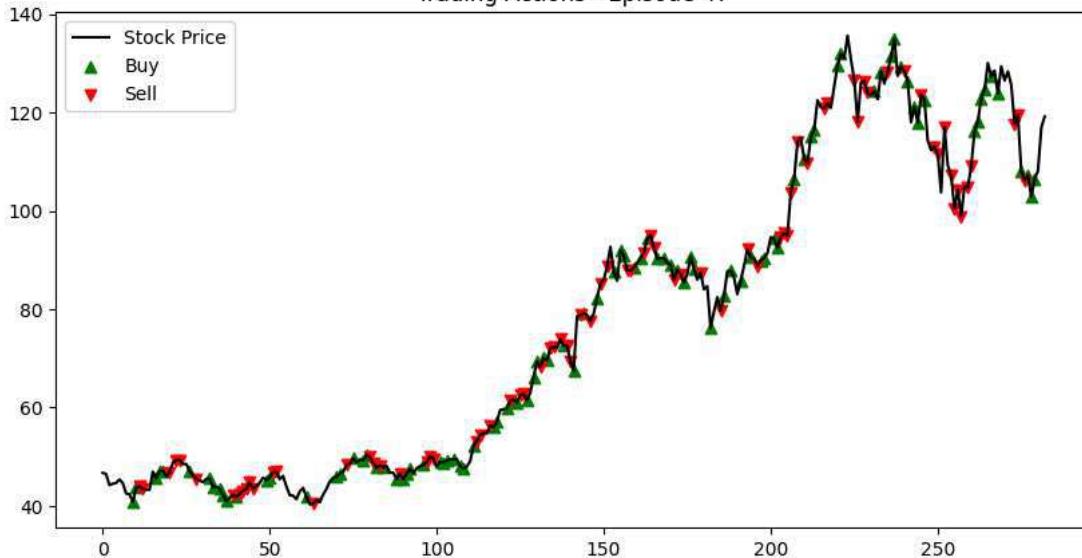
Trading Actions - Episode 46



Running Episode 47/500

Episode 47 Metrics: {'Total Profit': '\$886.18', 'Win Rate': '76.62%', 'Profit Factor': '10.43', 'Sharpe Ratio': '0.79', 'Max Drawdown':

Trading Actions - Episode 47

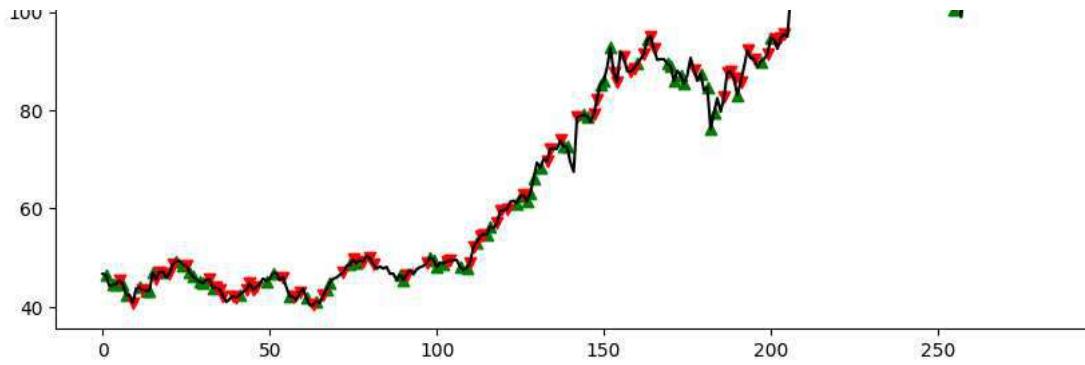


Running Episode 48/500

Episode 48 Metrics: {'Total Profit': '\$120.66', 'Win Rate': '59.52%', 'Profit Factor': '1.70', 'Sharpe Ratio': '0.19', 'Max Drawdown':

Trading Actions - Episode 48

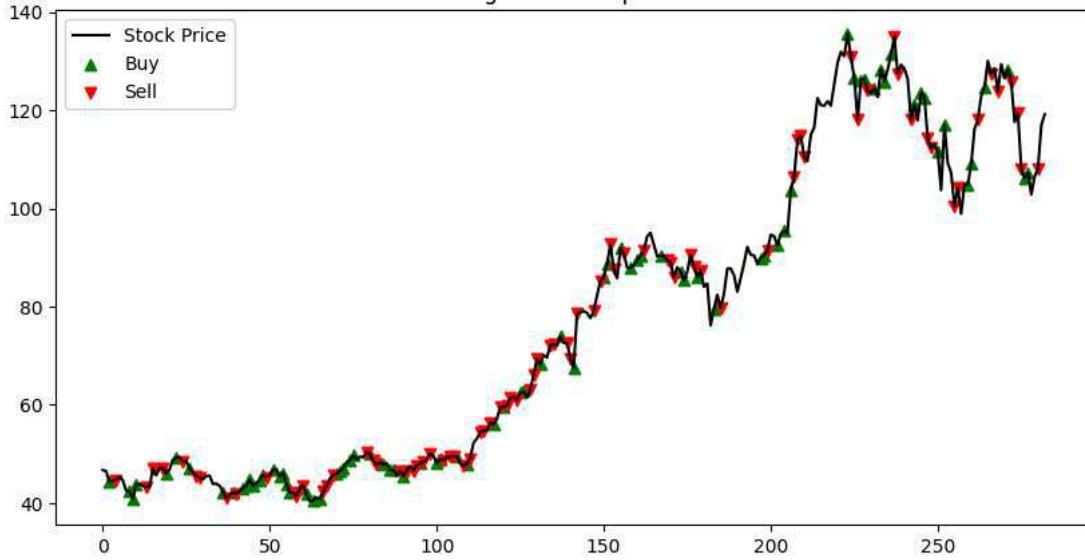




Running Episode 49/500

Episode 49 Metrics: {'Total Profit': '\$253.68', 'Win Rate': '67.50%', 'Profit Factor': '2.53', 'Sharpe Ratio': '0.35', 'Max Drawdown':

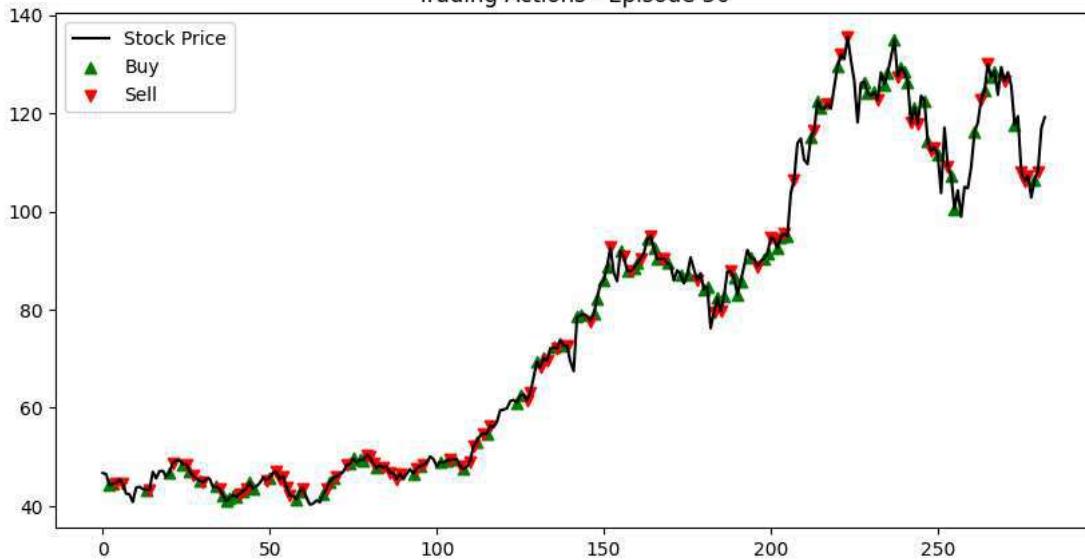
Trading Actions - Episode 49



Running Episode 50/500

Episode 50 Metrics: {'Total Profit': '\$422.03', 'Win Rate': '63.16%', 'Profit Factor': '4.35', 'Sharpe Ratio': '0.40', 'Max Drawdown':

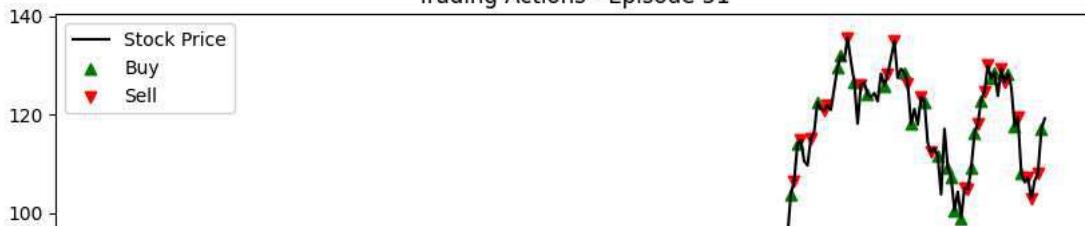
Trading Actions - Episode 50

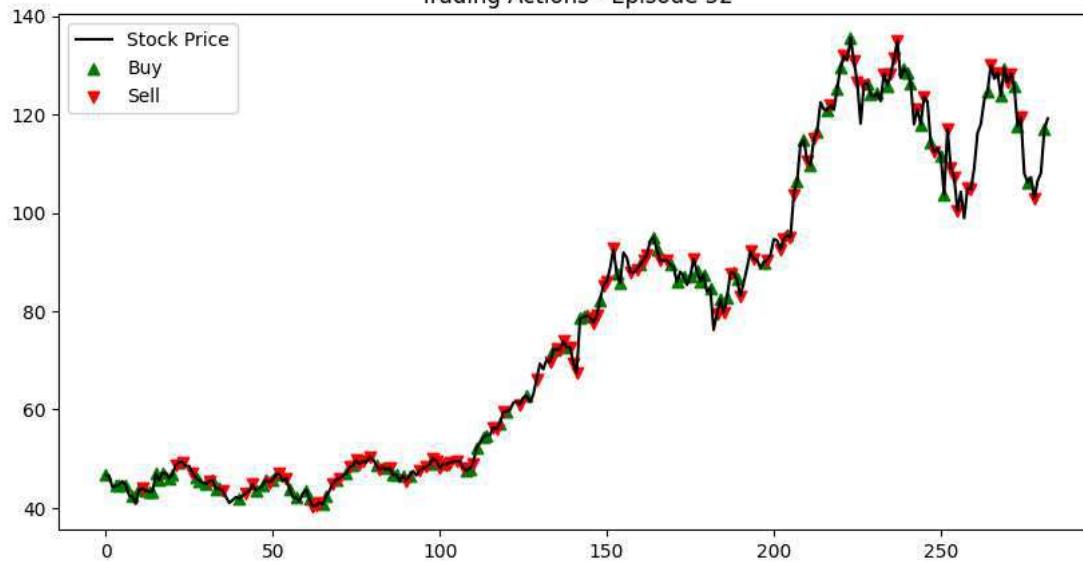
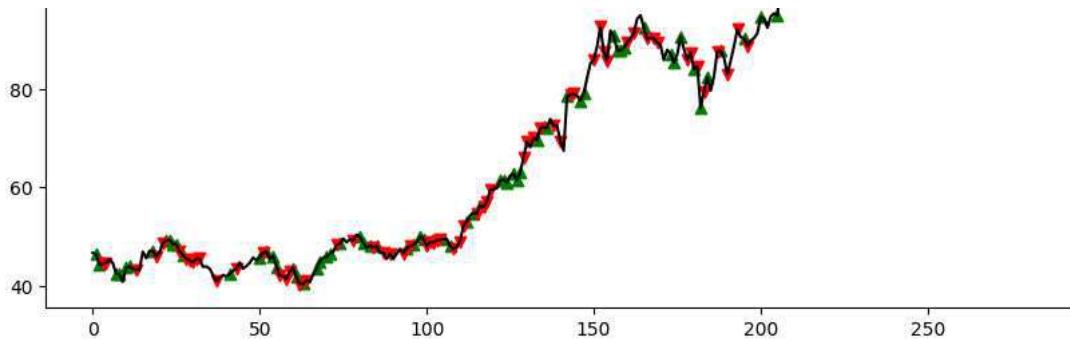


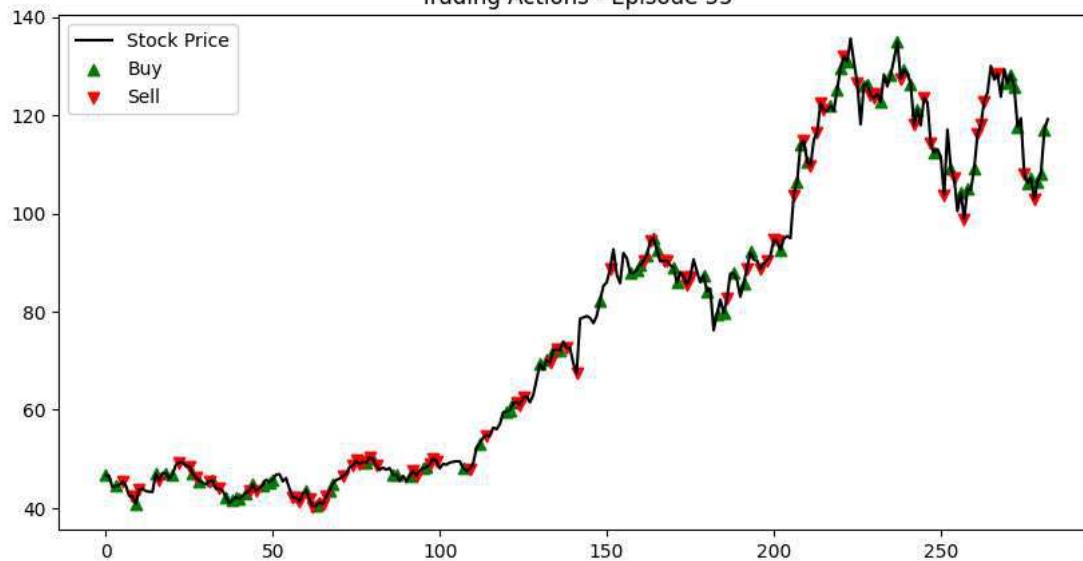
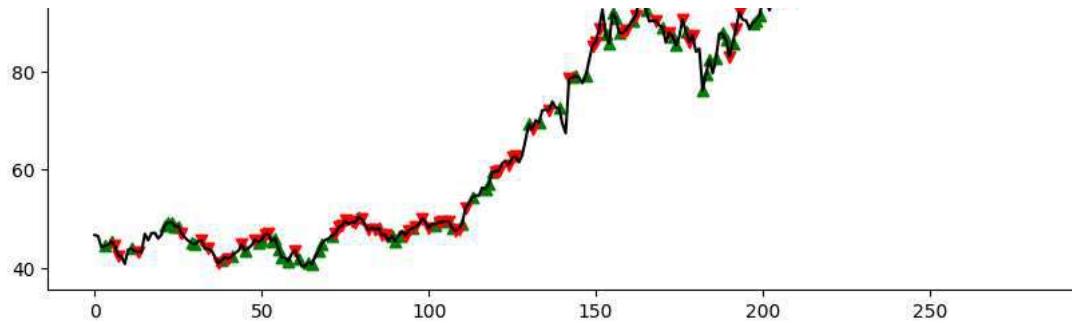
Running Episode 51/500

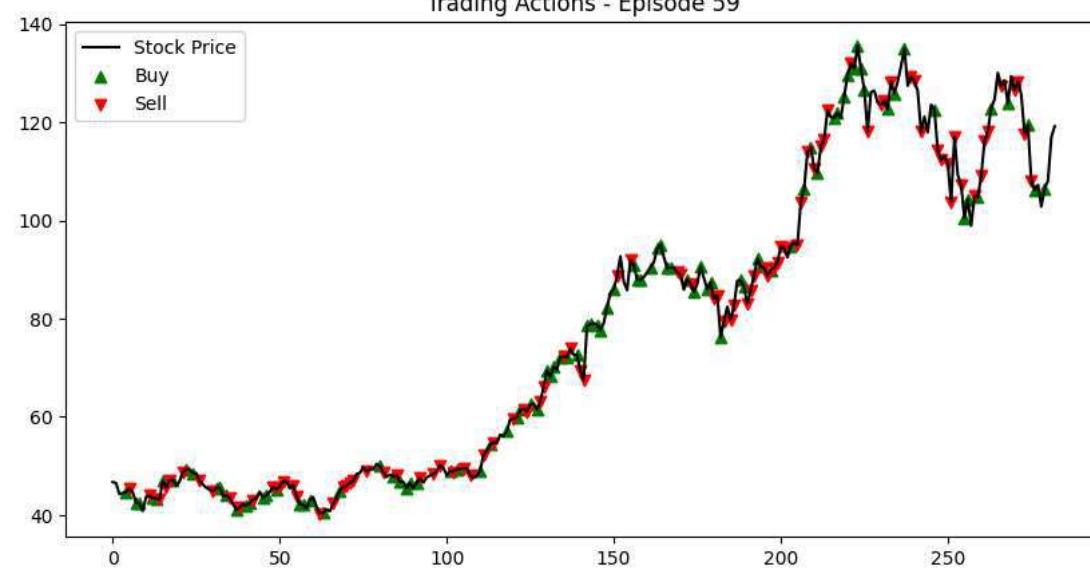
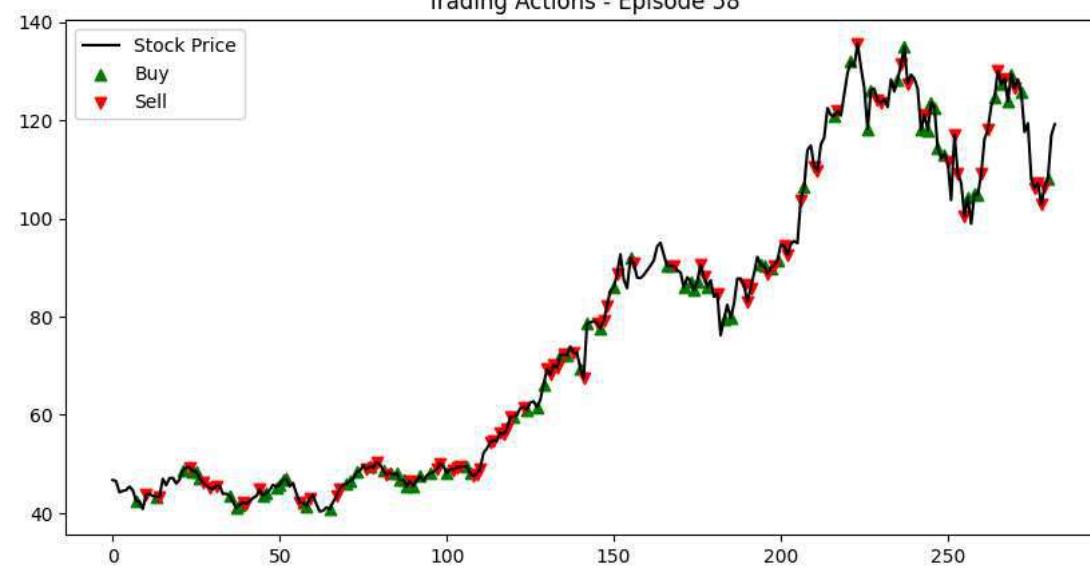
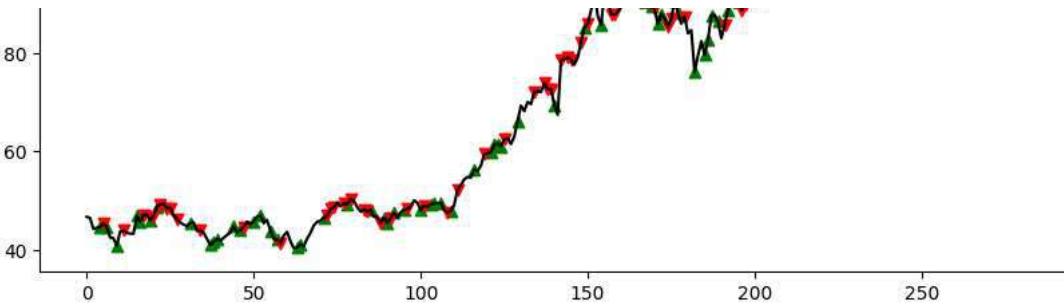
Episode 51 Metrics: {'Total Profit': '\$200.15', 'Win Rate': '61.63%', 'Profit Factor': '2.21', 'Sharpe Ratio': '0.27', 'Max Drawdown':

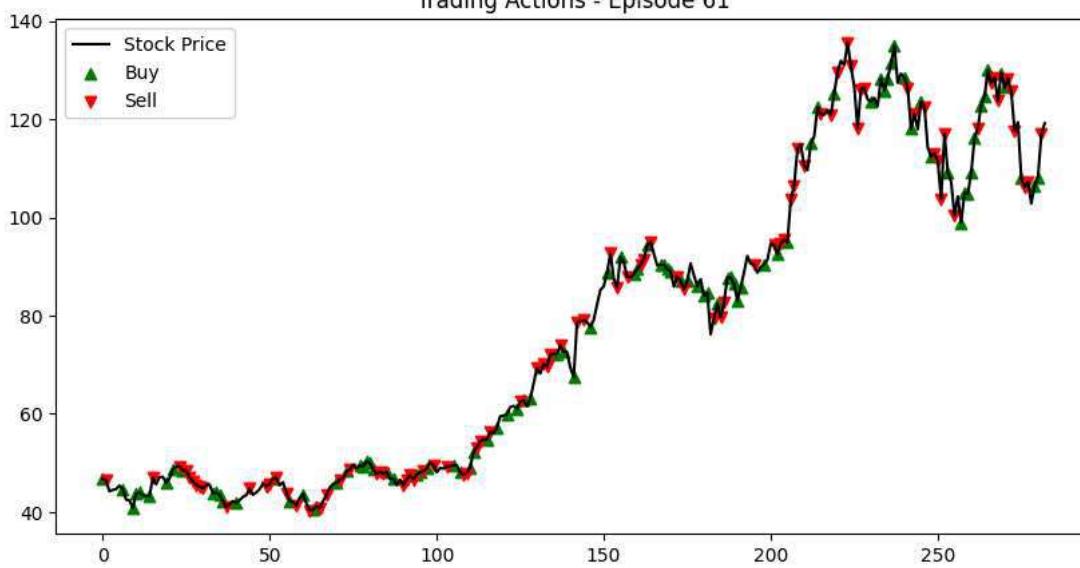
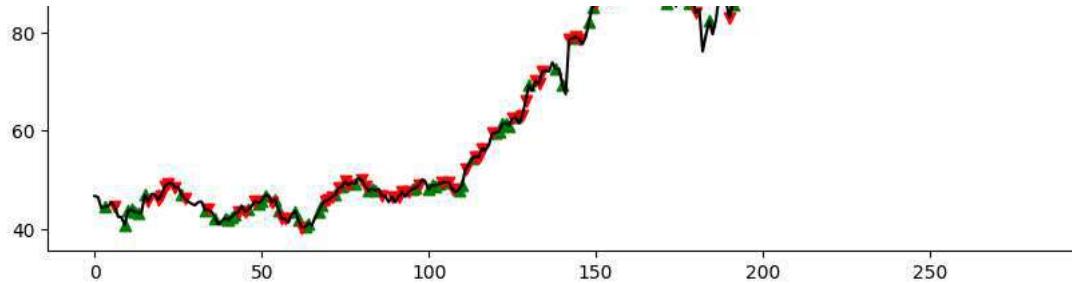
Trading Actions - Episode 51

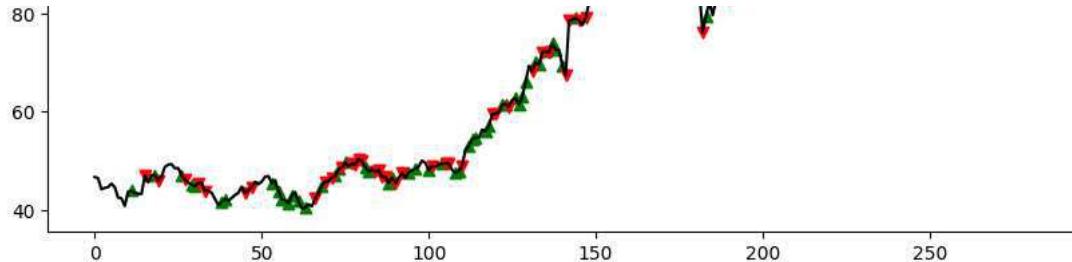












Running Episode 64/500

Episode 64 Metrics: {'Total Profit': '\$81.49', 'Win Rate': '58.75%', 'Profit Factor': '1.60', 'Sharpe Ratio': '0.17', 'Max Drawdown':

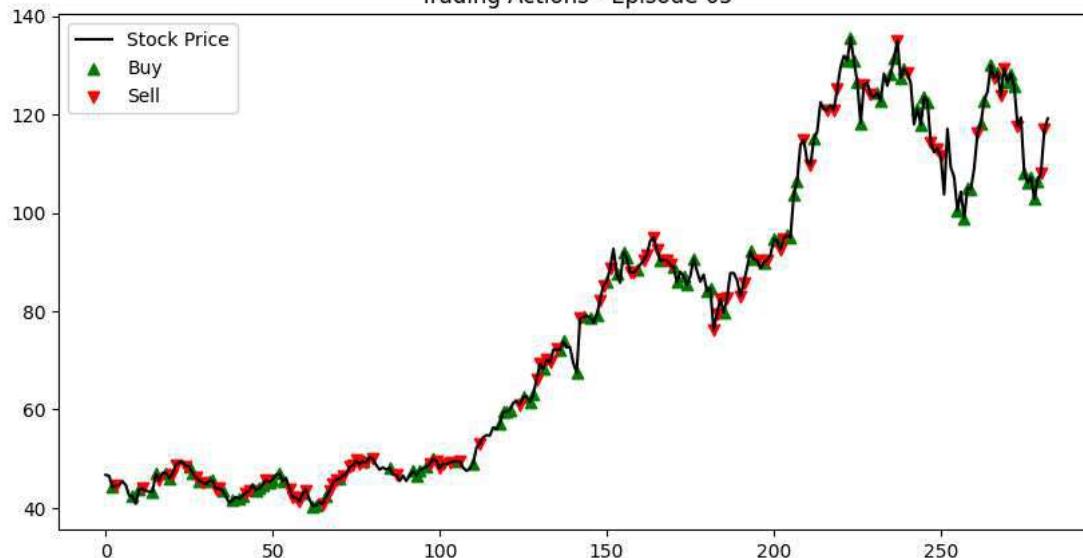
Trading Actions - Episode 64



Running Episode 65/500

Episode 65 Metrics: {'Total Profit': '\$317.14', 'Win Rate': '63.53%', 'Profit Factor': '2.76', 'Sharpe Ratio': '0.35', 'Max Drawdown':

Trading Actions - Episode 65

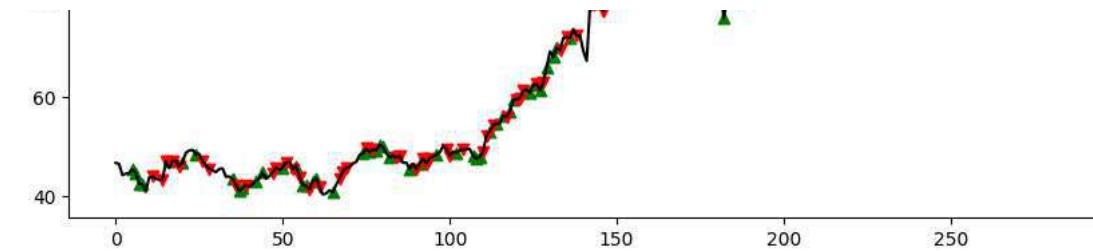


Running Episode 66/500

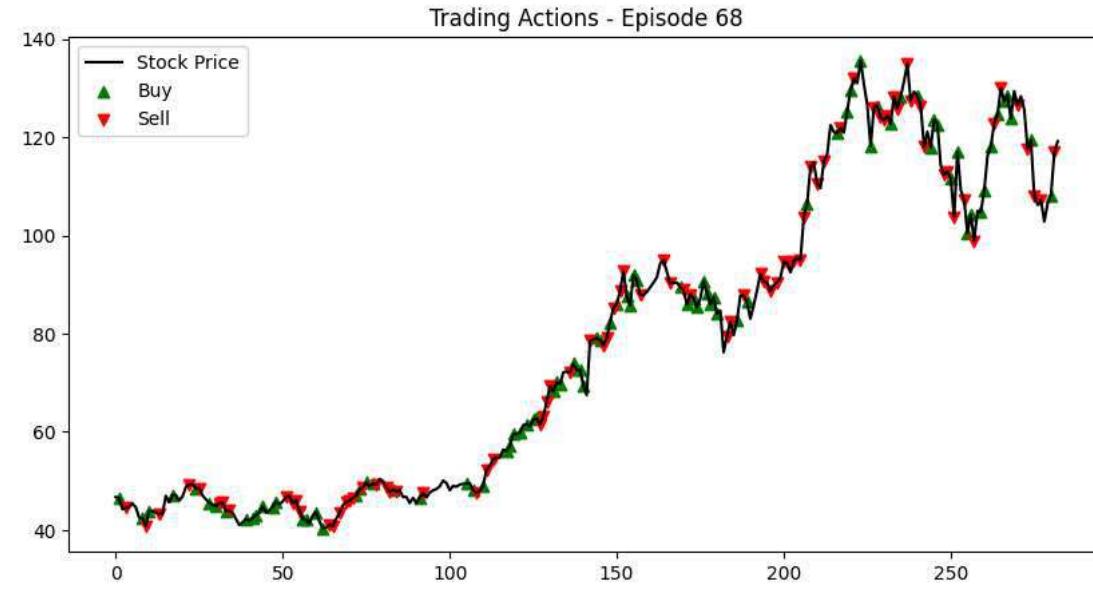
Episode 66 Metrics: {'Total Profit': '\$335.08', 'Win Rate': '62.50%', 'Profit Factor': '3.12', 'Sharpe Ratio': '0.33', 'Max Drawdown':

Trading Actions - Episode 66



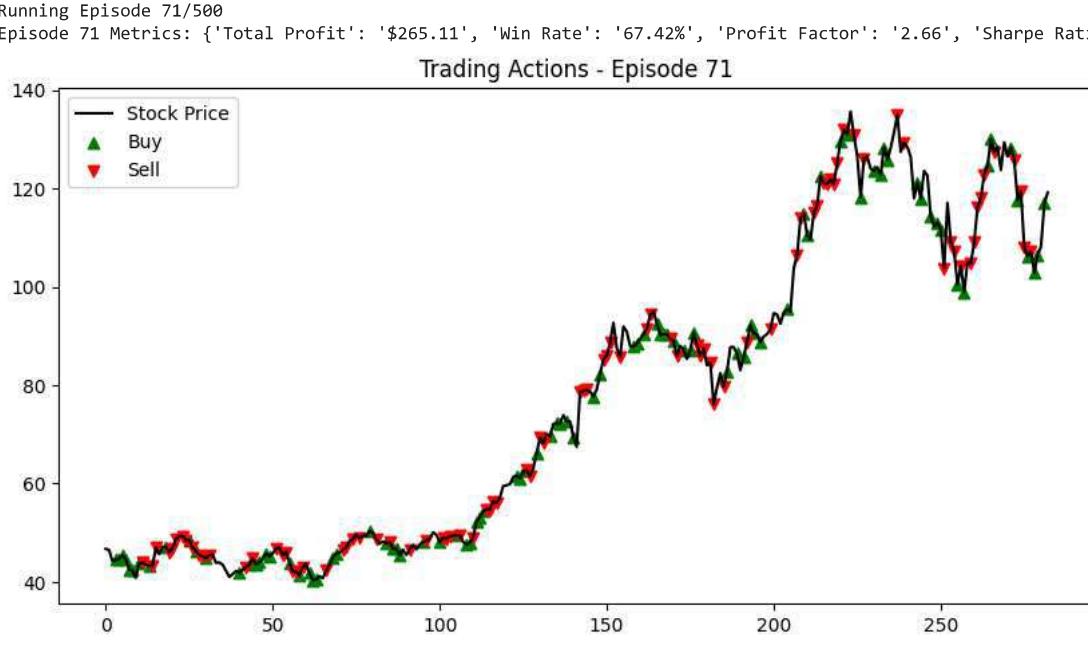
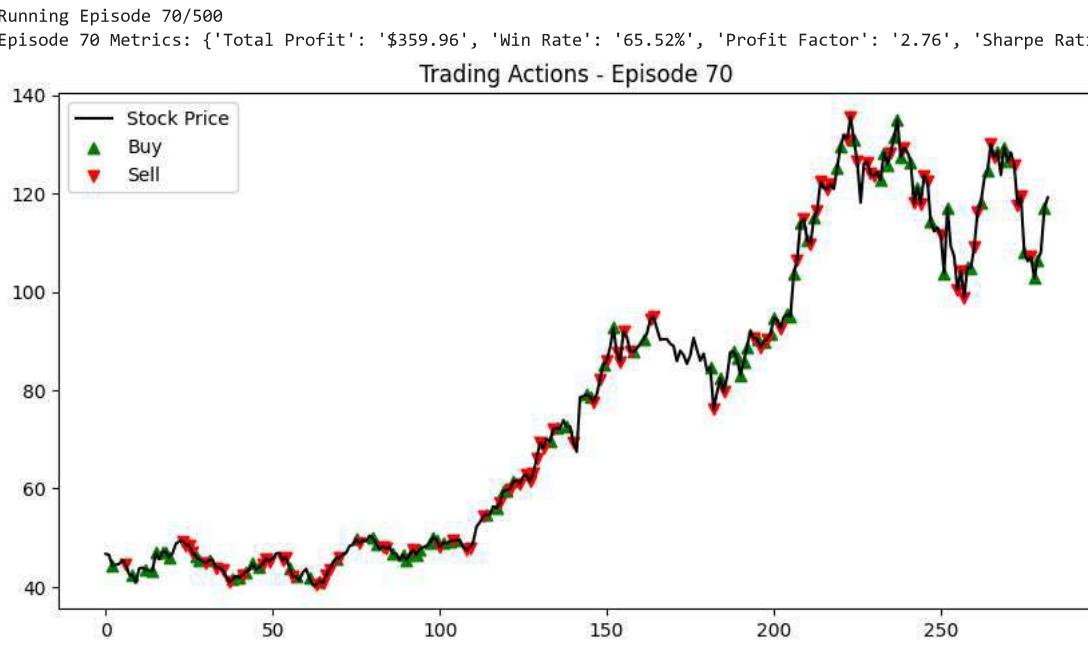
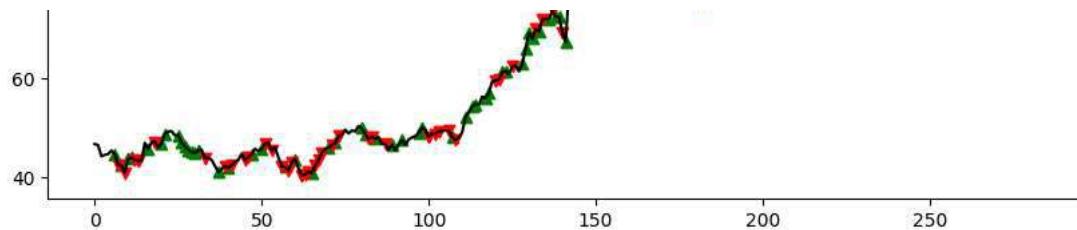


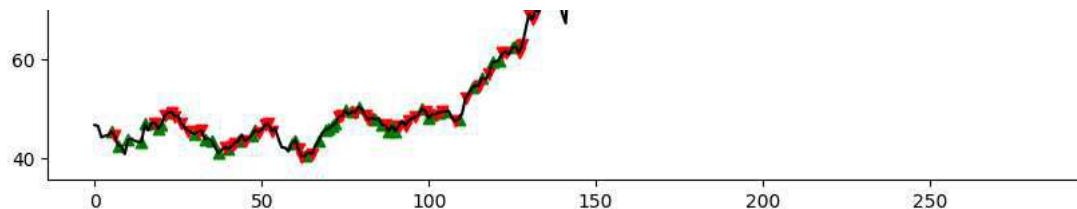
Running Episode 68/500
Episode 68 Metrics: {'Total Profit': '\$442.04', 'Win Rate': '65.85%', 'Profit Factor': '3.95', 'Sharpe Ratio': '0.46', 'Max Drawdown': ''}



Running Episode 69/500
Episode 69 Metrics: {'Total Profit': '\$353.45', 'Win Rate': '59.55%', 'Profit Factor': '3.27', 'Sharpe Ratio': '0.42', 'Max Drawdown': ''}



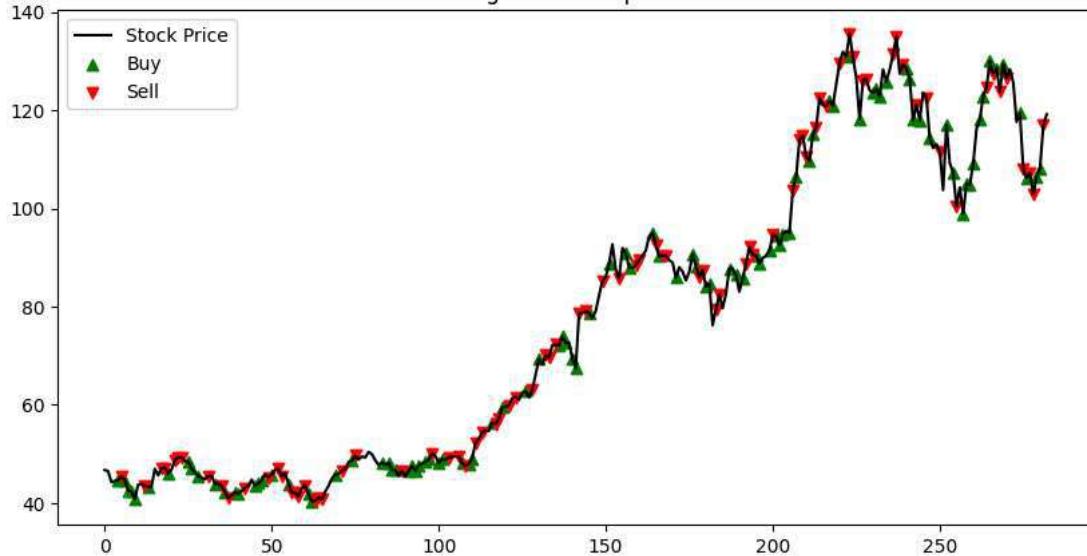




Running Episode 73/500

Episode 73 Metrics: {'Total Profit': '\$709.53', 'Win Rate': '71.95%', 'Profit Factor': '5.55', 'Sharpe Ratio': '0.58', 'Max Drawdown': ''}

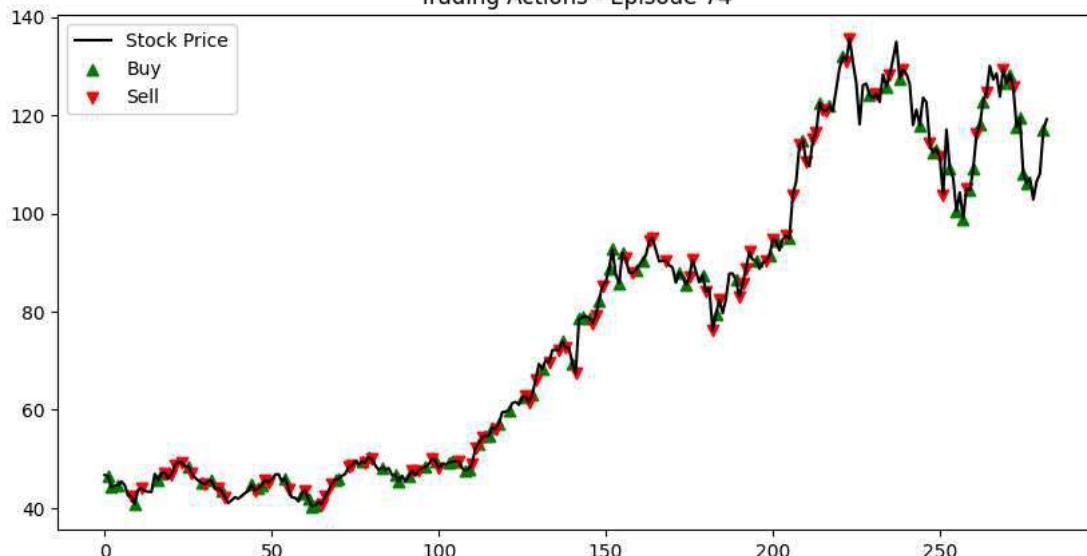
Trading Actions - Episode 73



Running Episode 74/500

Episode 74 Metrics: {'Total Profit': '\$482.60', 'Win Rate': '69.23%', 'Profit Factor': '7.65', 'Sharpe Ratio': '0.67', 'Max Drawdown': ''}

Trading Actions - Episode 74

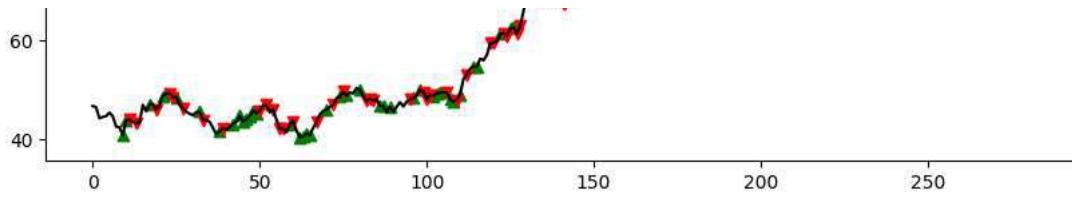


Running Episode 75/500

Episode 75 Metrics: {'Total Profit': '\$746.66', 'Win Rate': '69.77%', 'Profit Factor': '7.44', 'Sharpe Ratio': '0.66', 'Max Drawdown': ''}

Trading Actions - Episode 75

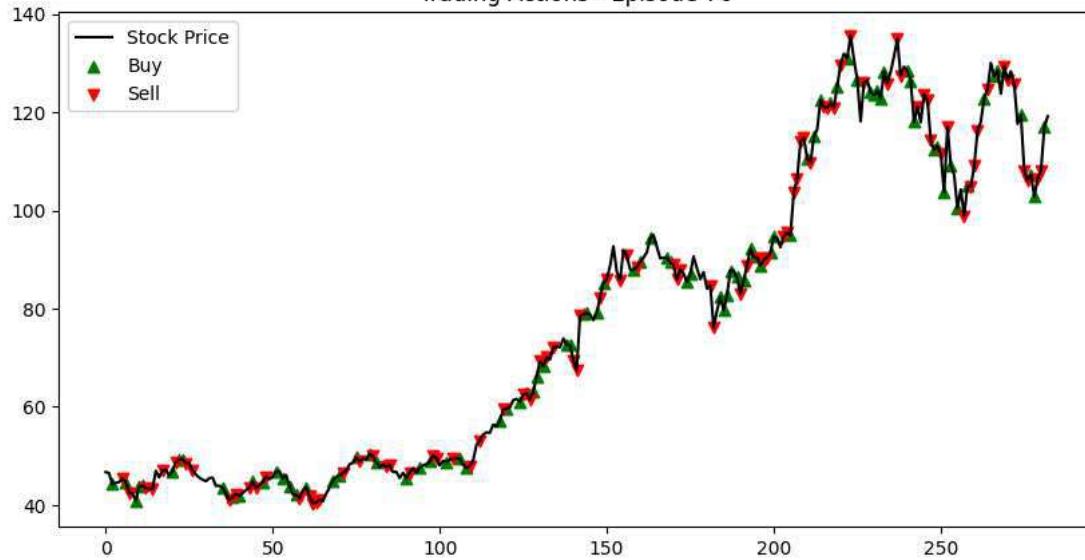




Running Episode 76/500

Episode 76 Metrics: {'Total Profit': '\$178.07', 'Win Rate': '60.92%', 'Profit Factor': '1.90', 'Sharpe Ratio': '0.22', 'Max Drawdown':

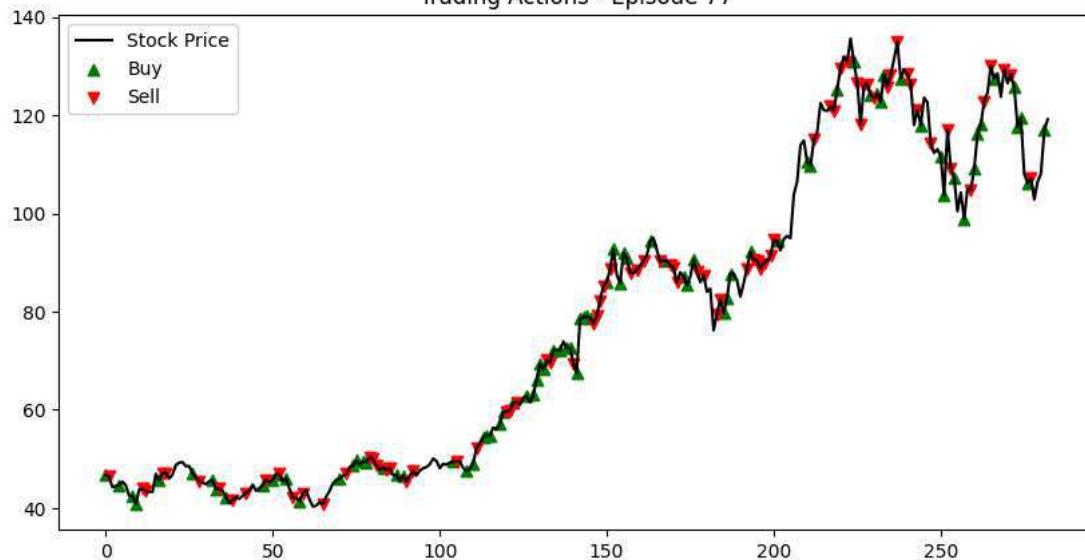
Trading Actions - Episode 76



Running Episode 77/500

Episode 77 Metrics: {'Total Profit': '\$629.03', 'Win Rate': '69.23%', 'Profit Factor': '9.40', 'Sharpe Ratio': '0.66', 'Max Drawdown':

Trading Actions - Episode 77

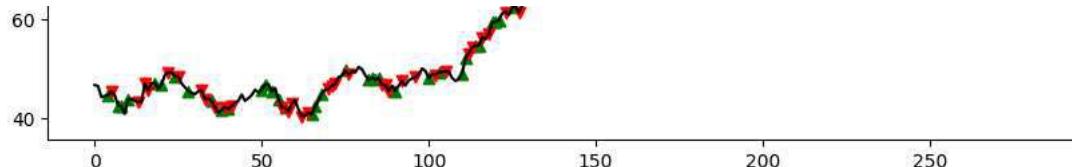


Running Episode 78/500

Episode 78 Metrics: {'Total Profit': '\$211.76', 'Win Rate': '63.95%', 'Profit Factor': '2.77', 'Sharpe Ratio': '0.32', 'Max Drawdown':

Trading Actions - Episode 78

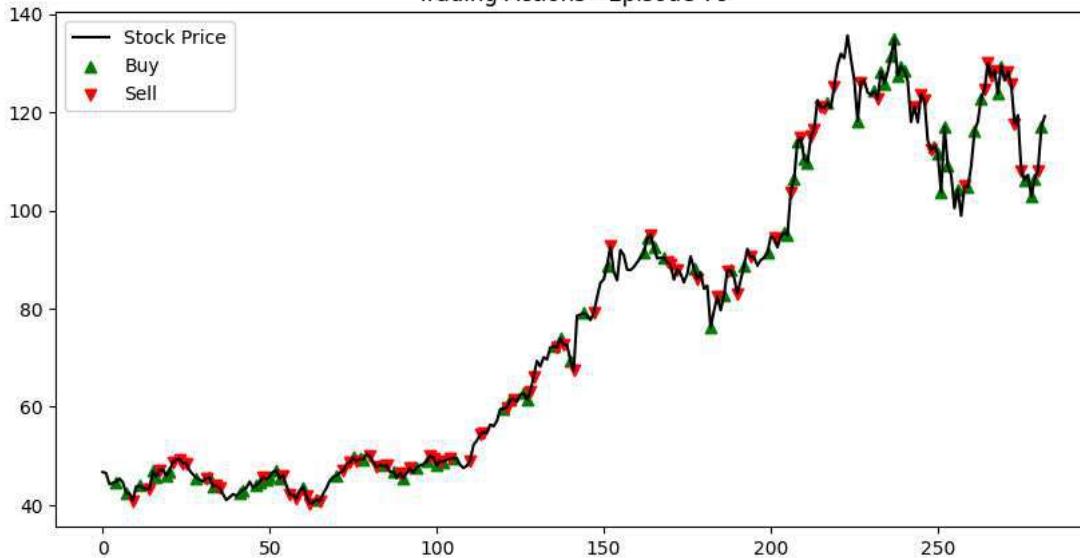




Running Episode 79/500

Episode 79 Metrics: {'Total Profit': '\$118.45', 'Win Rate': '62.16%', 'Profit Factor': '1.96', 'Sharpe Ratio': '0.23', 'Max Drawdown': ''}

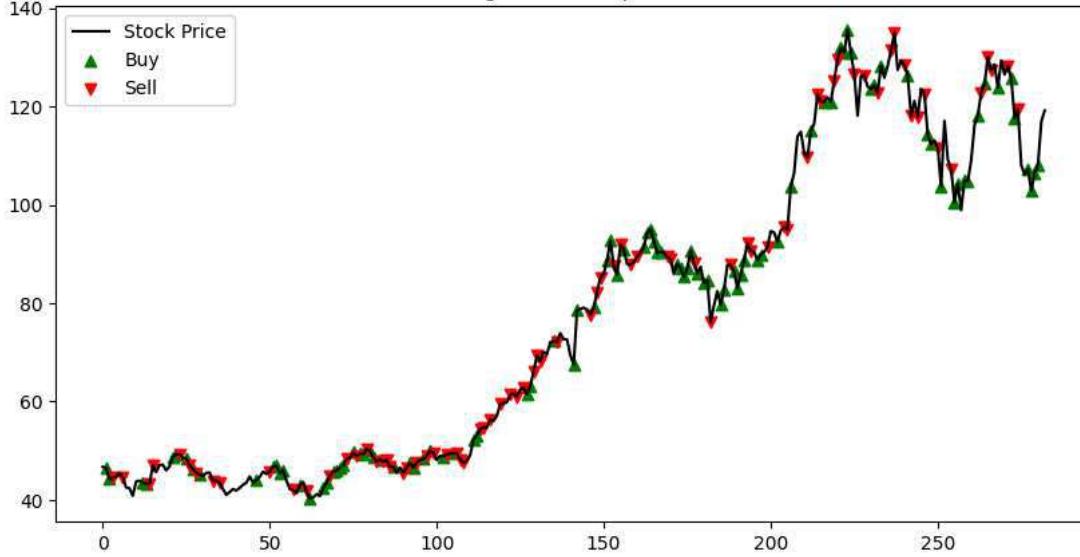
Trading Actions - Episode 79



Running Episode 80/500

Episode 80 Metrics: {'Total Profit': '\$589.00', 'Win Rate': '61.54%', 'Profit Factor': '6.65', 'Sharpe Ratio': '0.50', 'Max Drawdown': ''}

Trading Actions - Episode 80



Running Episode 81/500

Episode 81 Metrics: {'Total Profit': '\$168.65', 'Win Rate': '70.51%', 'Profit Factor': '3.01', 'Sharpe Ratio': '0.35', 'Max Drawdown': ''}

Trading Actions - Episode 81

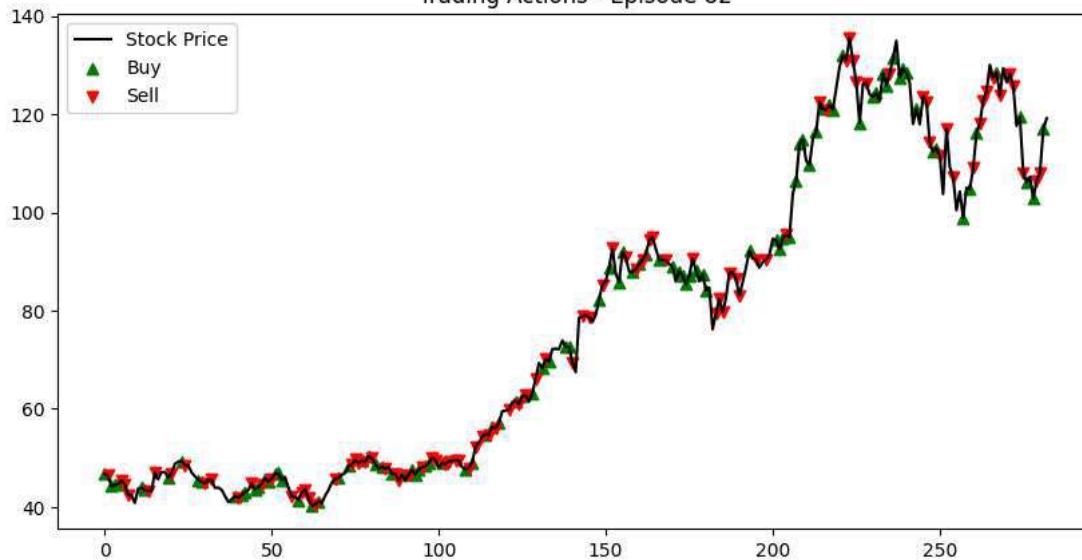




Running Episode 82/500

Episode 82 Metrics: {'Total Profit': '\$151.53', 'Win Rate': '56.52%', 'Profit Factor': '1.94', 'Sharpe Ratio': '0.20', 'Max Drawdown':

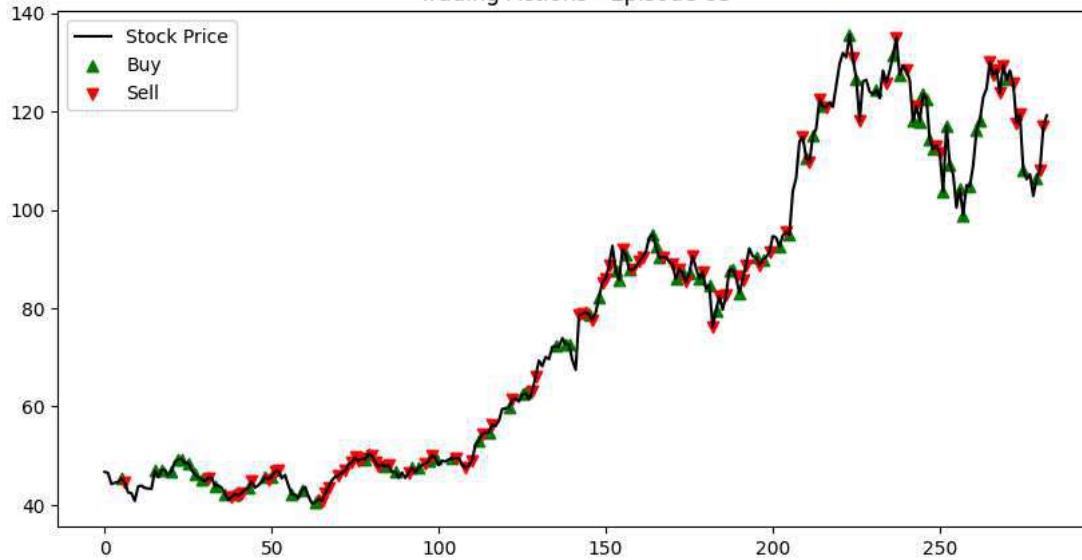
Trading Actions - Episode 82



Running Episode 83/500

Episode 83 Metrics: {'Total Profit': '\$180.23', 'Win Rate': '63.75%', 'Profit Factor': '2.86', 'Sharpe Ratio': '0.36', 'Max Drawdown':

Trading Actions - Episode 83



Running Episode 84/500

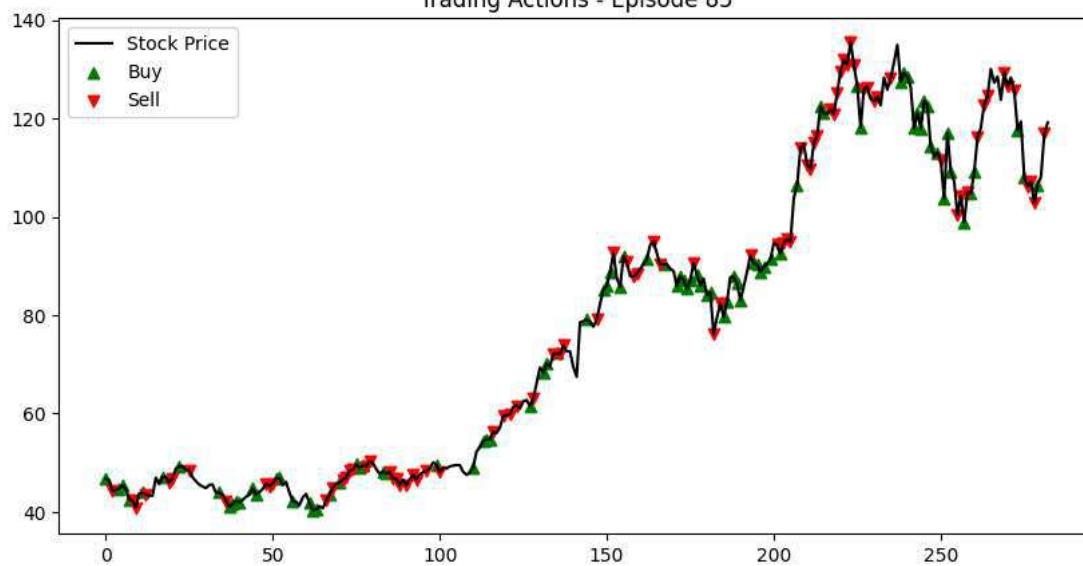
Episode 84 Metrics: {'Total Profit': '\$104.00', 'Win Rate': '53.16%', 'Profit Factor': '1.99', 'Sharpe Ratio': '0.23', 'Max Drawdown':

Trading Actions - Episode 84





Running Episode 85/500
Episode 85 Metrics: {'Total Profit': '\$553.83', 'Win Rate': '72.29%', 'Profit Factor': '4.76', 'Sharpe Ratio': '0.46', 'Max Drawdown': '10.2%'}
Trading Actions - Episode 85



Running Episode 86/500
Episode 86 Metrics: {'Total Profit': '\$238.34', 'Win Rate': '66.28%', 'Profit Factor': '3.08', 'Sharpe Ratio': '0.37', 'Max Drawdown': '10.2%'}
Trading Actions - Episode 86



Running Episode 87/500
Episode 87 Metrics: {'Total Profit': '\$151.60', 'Win Rate': '57.83%', 'Profit Factor': '2.17', 'Sharpe Ratio': '0.24', 'Max Drawdown': '10.2%'}
Trading Actions - Episode 87

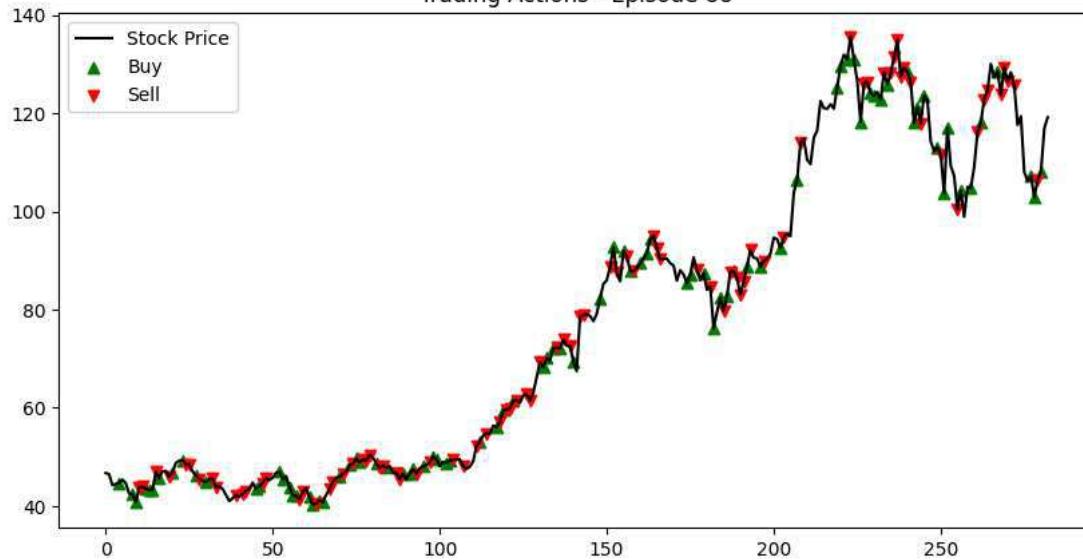




Running Episode 88/500

Episode 88 Metrics: {'Total Profit': '\$222.93', 'Win Rate': '63.53%', 'Profit Factor': '3.07', 'Sharpe Ratio': '0.40', 'Max Drawdown': ''}

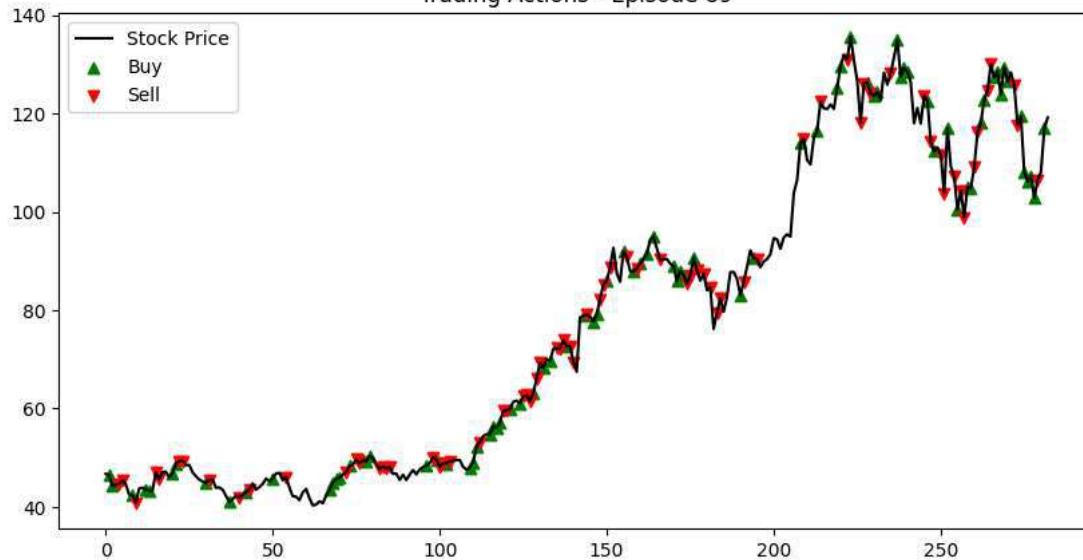
Trading Actions - Episode 88



Running Episode 89/500

Episode 89 Metrics: {'Total Profit': '\$1.80', 'Win Rate': '58.33%', 'Profit Factor': '1.01', 'Sharpe Ratio': '0.00', 'Max Drawdown': ''}

Trading Actions - Episode 89



Running Episode 90/500

Episode 90 Metrics: {'Total Profit': '\$277.63', 'Win Rate': '69.05%', 'Profit Factor': '4.41', 'Sharpe Ratio': '0.45', 'Max Drawdown': ''}

Trading Actions - Episode 90

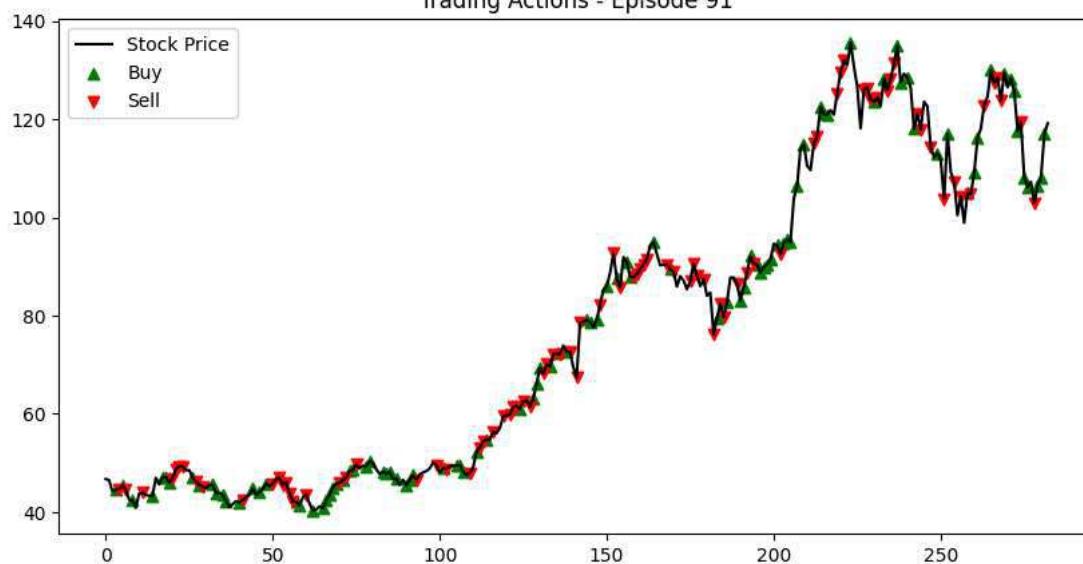




Running Episode 91/500

Episode 91 Metrics: {'Total Profit': '\$907.43', 'Win Rate': '75.58%', 'Profit Factor': '6.52', 'Sharpe Ratio': '0.68', 'Max Drawdown':

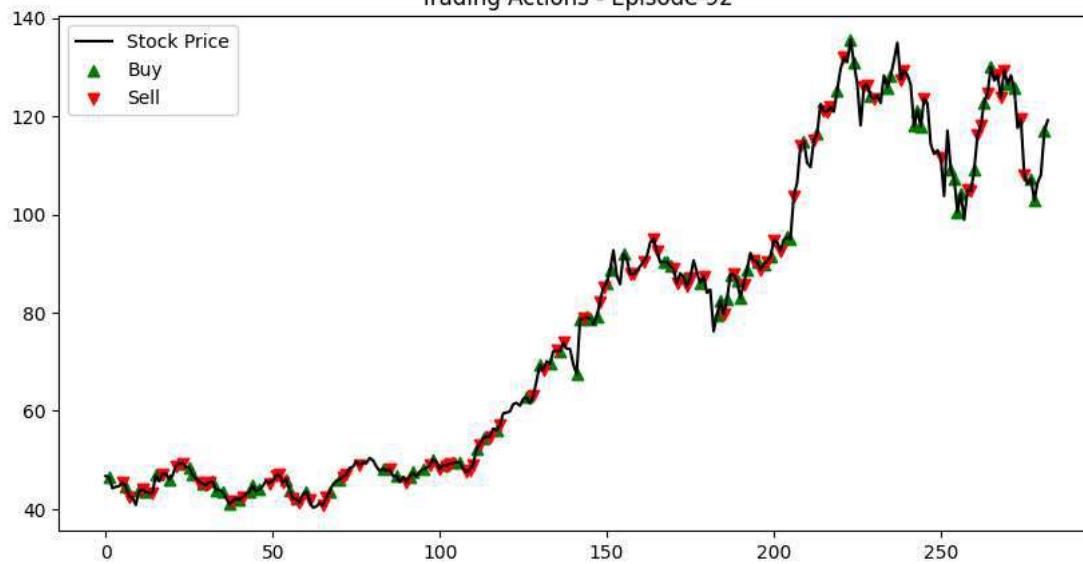
Trading Actions - Episode 91



Running Episode 92/500

Episode 92 Metrics: {'Total Profit': '\$184.96', 'Win Rate': '63.53%', 'Profit Factor': '2.68', 'Sharpe Ratio': '0.31', 'Max Drawdown':

Trading Actions - Episode 92



Running Episode 93/500

Episode 93 Metrics: {'Total Profit': '\$159.21', 'Win Rate': '69.14%', 'Profit Factor': '2.55', 'Sharpe Ratio': '0.34', 'Max Drawdown':

Trading Actions - Episode 93

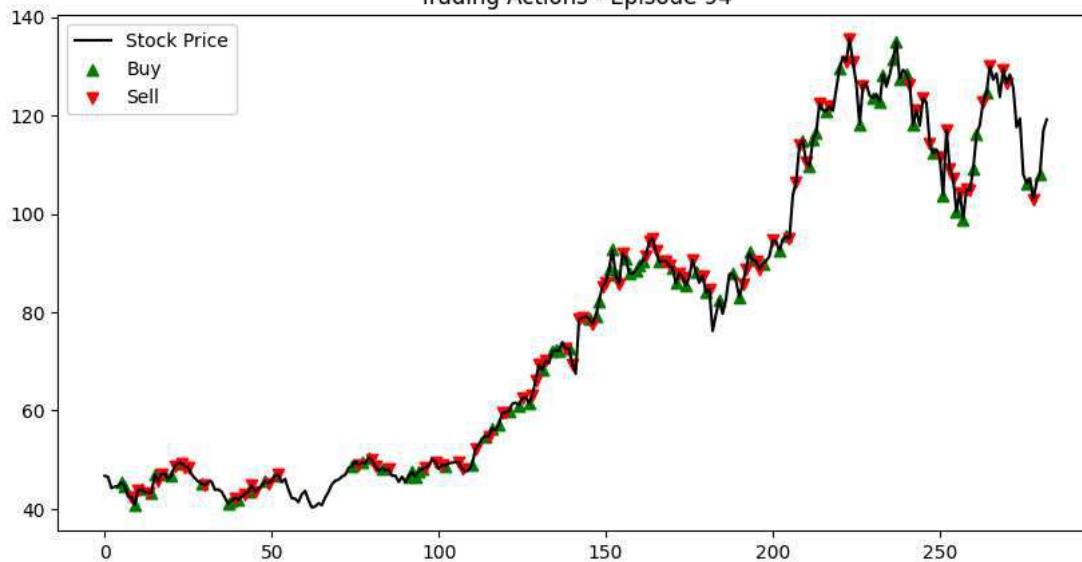




Running Episode 94/500

Episode 94 Metrics: {'Total Profit': '\$174.43', 'Win Rate': '69.77%', 'Profit Factor': '2.41', 'Sharpe Ratio': '0.29', 'Max Drawdown':

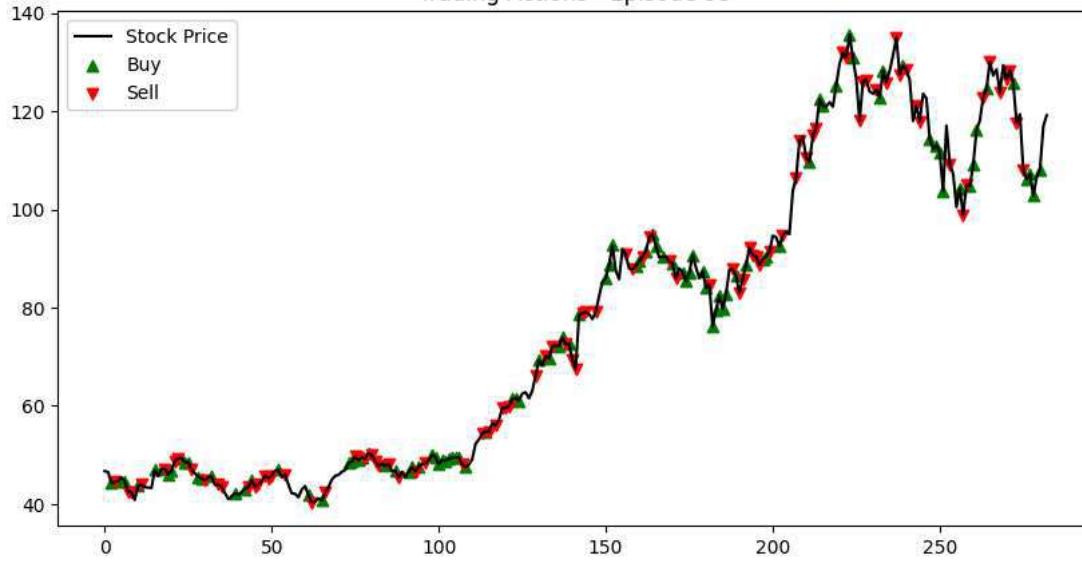
Trading Actions - Episode 94



Running Episode 95/500

Episode 95 Metrics: {'Total Profit': '\$757.86', 'Win Rate': '67.05%', 'Profit Factor': '6.09', 'Sharpe Ratio': '0.53', 'Max Drawdown':

Trading Actions - Episode 95



Running Episode 96/500

Episode 96 Metrics: {'Total Profit': '\$56.84', 'Win Rate': '57.50%', 'Profit Factor': '1.40', 'Sharpe Ratio': '0.11', 'Max Drawdown':

Trading Actions - Episode 96

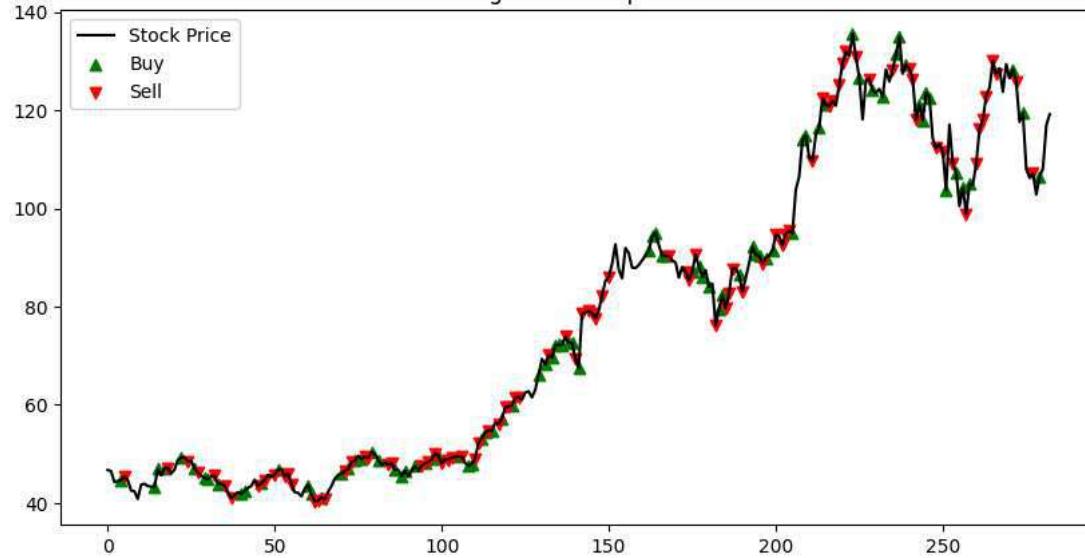




Running Episode 97/500

Episode 97 Metrics: {'Total Profit': '\$204.66', 'Win Rate': '63.53%', 'Profit Factor': '2.02', 'Sharpe Ratio': '0.24', 'Max Drawdown':

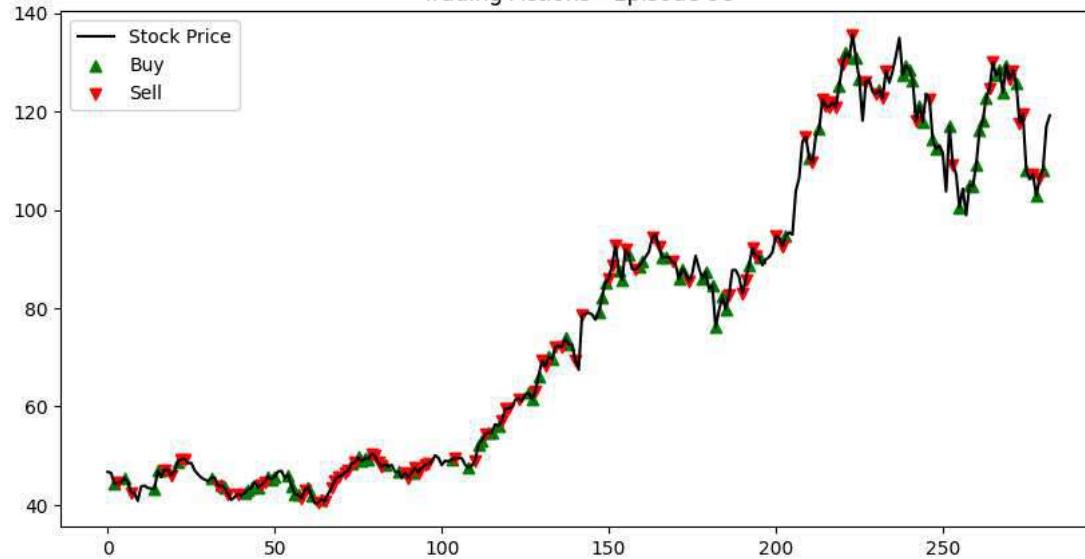
Trading Actions - Episode 97



Running Episode 98/500

Episode 98 Metrics: {'Total Profit': '\$277.38', 'Win Rate': '67.06%', 'Profit Factor': '3.50', 'Sharpe Ratio': '0.38', 'Max Drawdown':

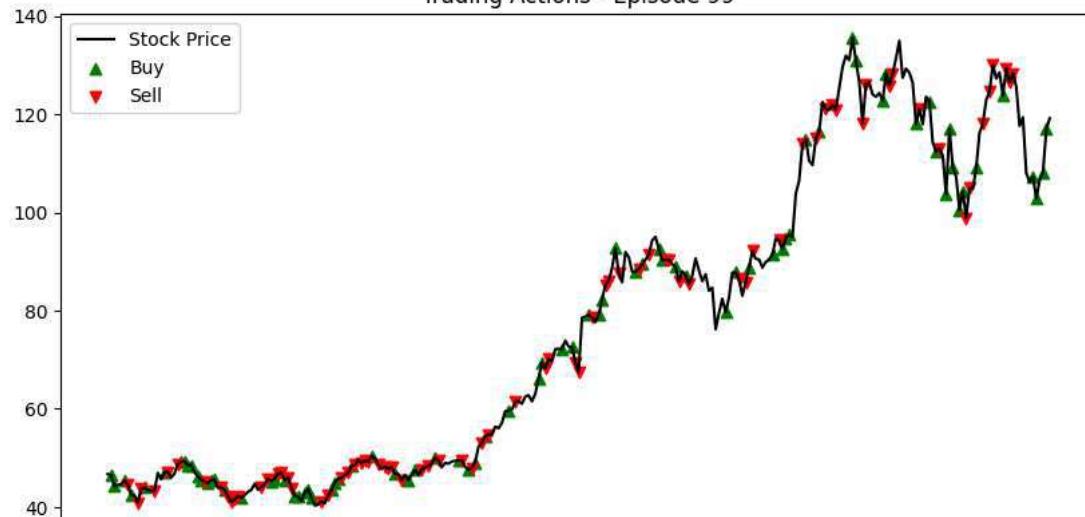
Trading Actions - Episode 98



Running Episode 99/500

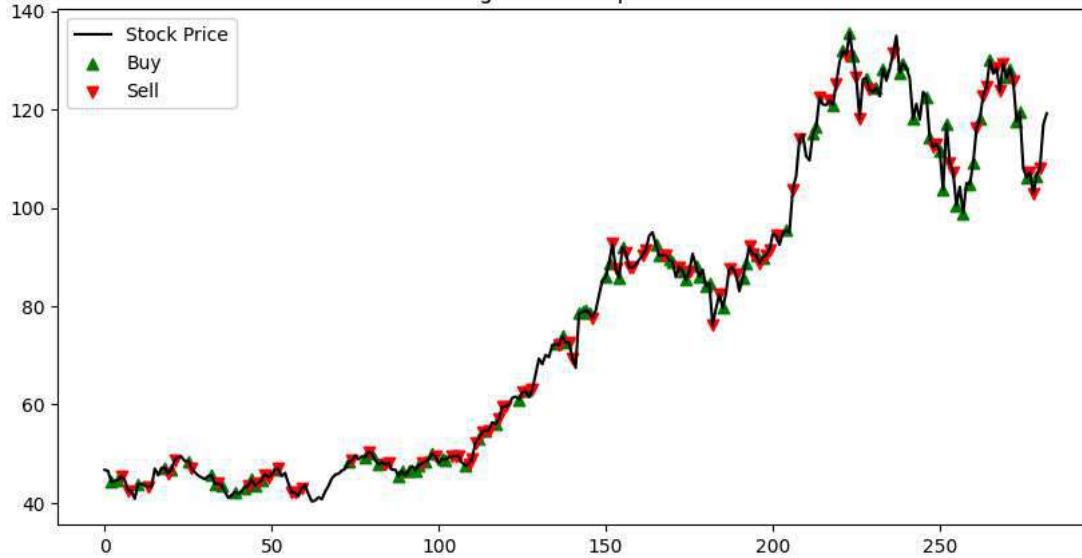
Episode 99 Metrics: {'Total Profit': '\$151.25', 'Win Rate': '59.21%', 'Profit Factor': '2.26', 'Sharpe Ratio': '0.25', 'Max Drawdown':

Trading Actions - Episode 99



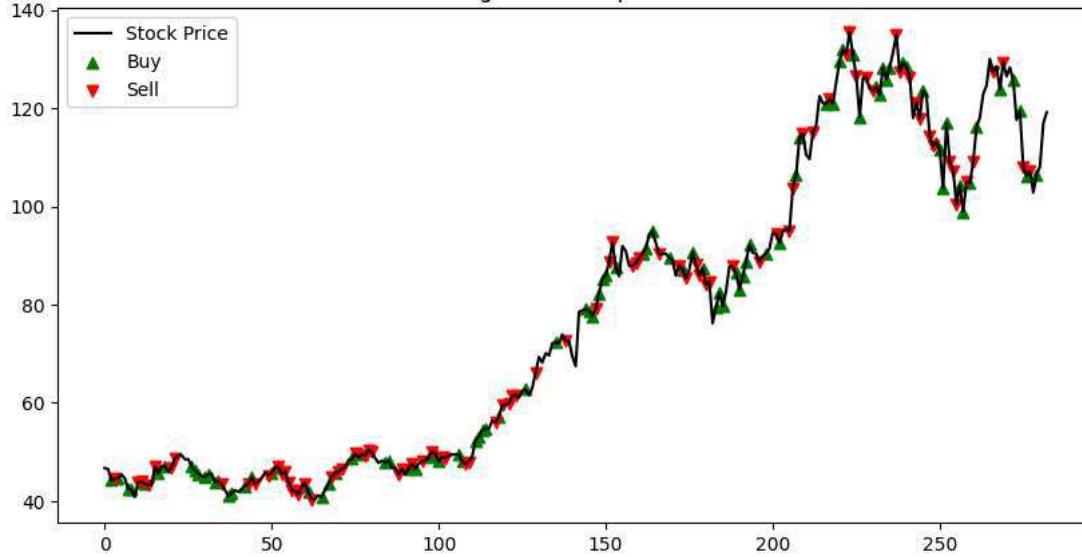
Running Episode 100/500
Episode 100 Metrics: {'Total Profit': '\$146.00', 'Win Rate': '57.83%', 'Profit Factor': '1.95', 'Sharpe Ratio': '0.22', 'Max Drawdown':

Trading Actions - Episode 100



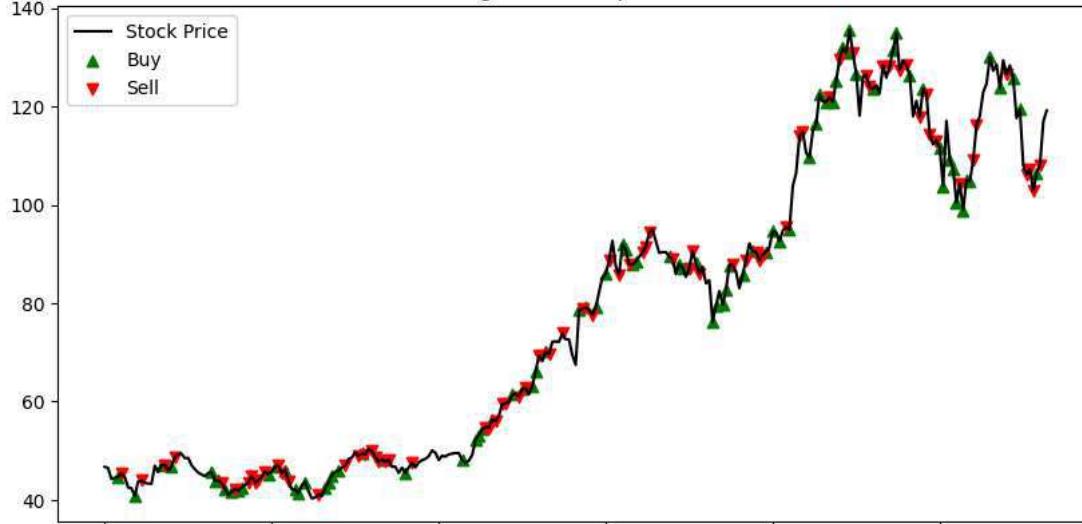
Running Episode 101/500
Episode 101 Metrics: {'Total Profit': '\$225.45', 'Win Rate': '62.35%', 'Profit Factor': '2.06', 'Sharpe Ratio': '0.22', 'Max Drawdown':

Trading Actions - Episode 101



Running Episode 102/500
Episode 102 Metrics: {'Total Profit': '\$188.99', 'Win Rate': '64.00%', 'Profit Factor': '2.17', 'Sharpe Ratio': '0.24', 'Max Drawdown':

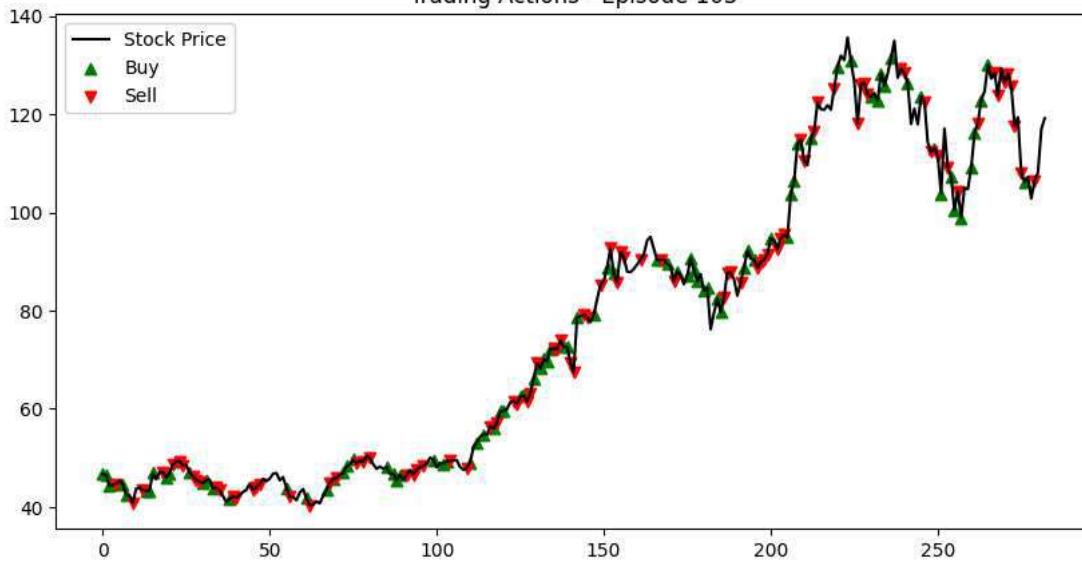
Trading Actions - Episode 102



0 50 100 150 200 250

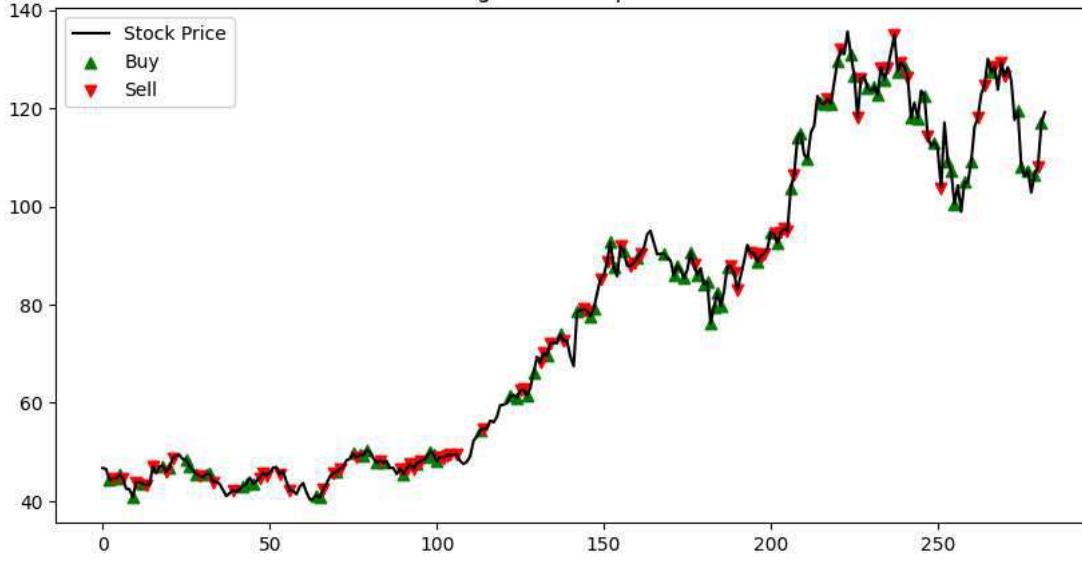
Running Episode 103/500
 Episode 103 Metrics: {'Total Profit': '\$339.74', 'Win Rate': '64.77%', 'Profit Factor': '3.05', 'Sharpe Ratio': '0.39', 'Max Drawdown'}

Trading Actions - Episode 103



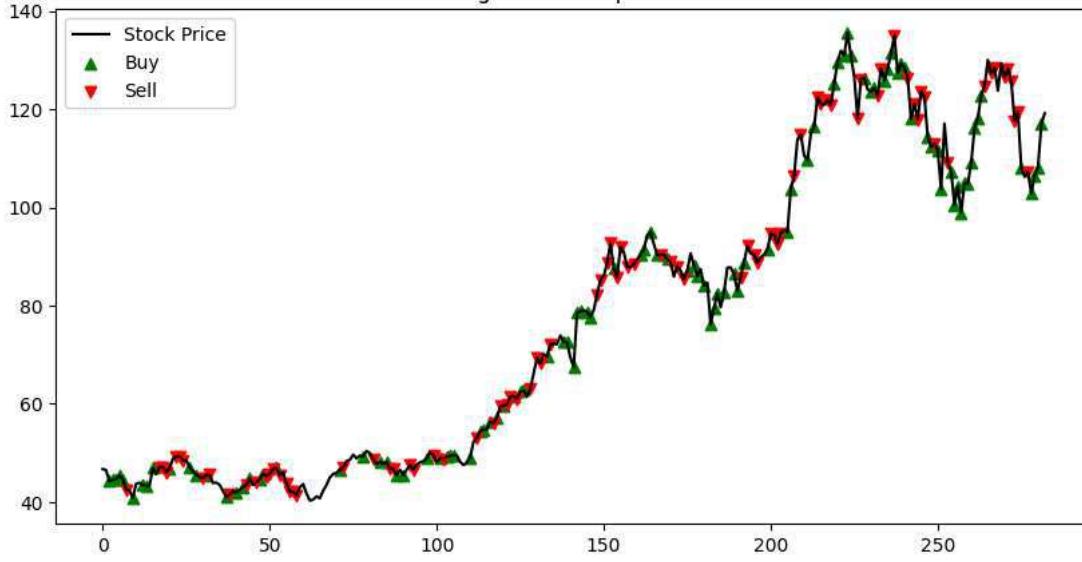
Running Episode 104/500
 Episode 104 Metrics: {'Total Profit': '\$255.02', 'Win Rate': '60.00%', 'Profit Factor': '3.51', 'Sharpe Ratio': '0.35', 'Max Drawdown'}

Trading Actions - Episode 104



Running Episode 105/500
 Episode 105 Metrics: {'Total Profit': '\$566.33', 'Win Rate': '67.06%', 'Profit Factor': '4.56', 'Sharpe Ratio': '0.48', 'Max Drawdown'}

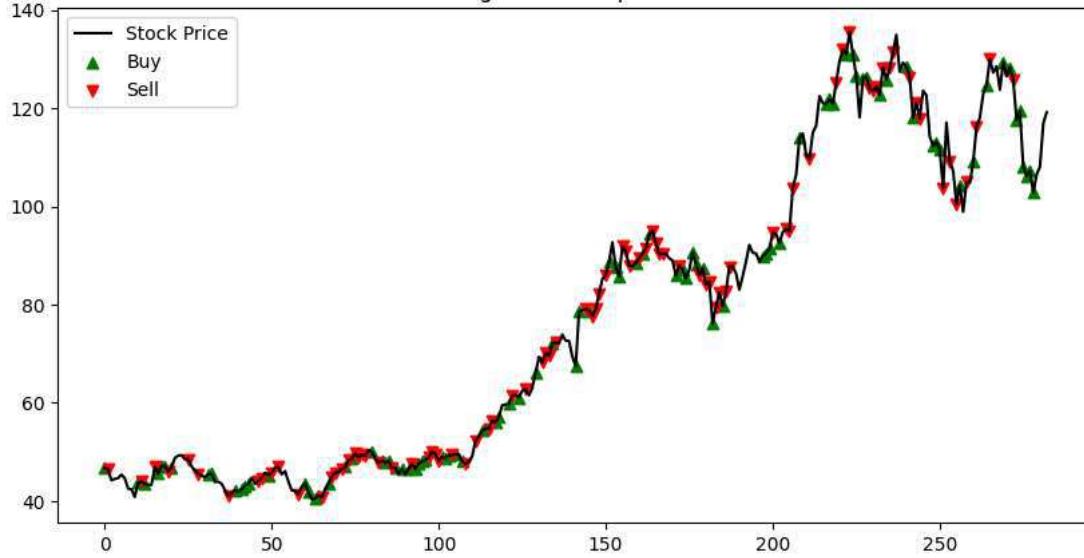
Trading Actions - Episode 105



Running Episode 106/500

Episode 106 Metrics: {'Total Profit': '\$321.07', 'Win Rate': '65.88%', 'Profit Factor': '4.20', 'Sharpe Ratio': '0.50', 'Max Drawdown': ''}

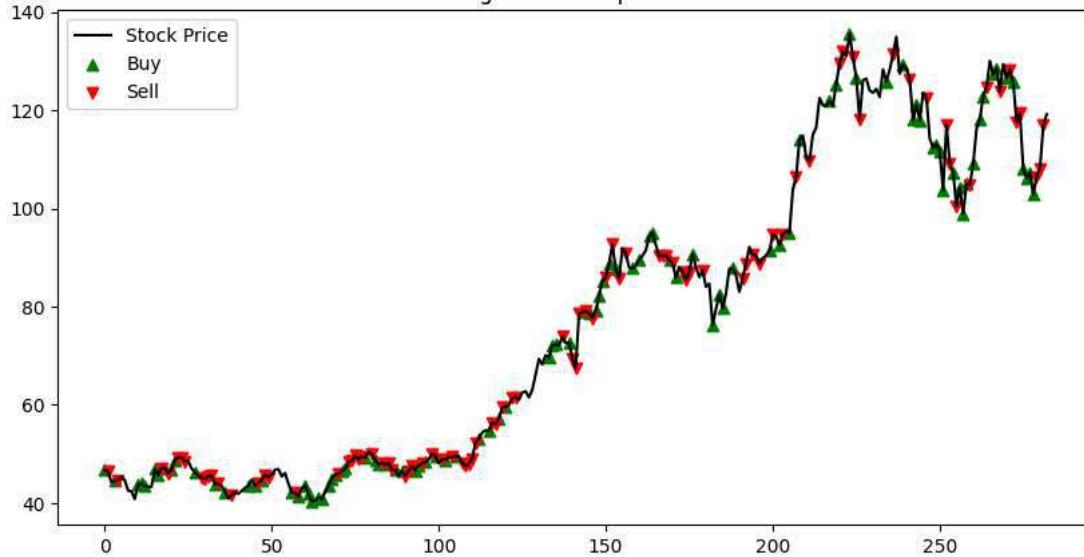
Trading Actions - Episode 106



Running Episode 107/500

Episode 107 Metrics: {'Total Profit': '\$204.64', 'Win Rate': '66.29%', 'Profit Factor': '3.06', 'Sharpe Ratio': '0.39', 'Max Drawdown': ''}

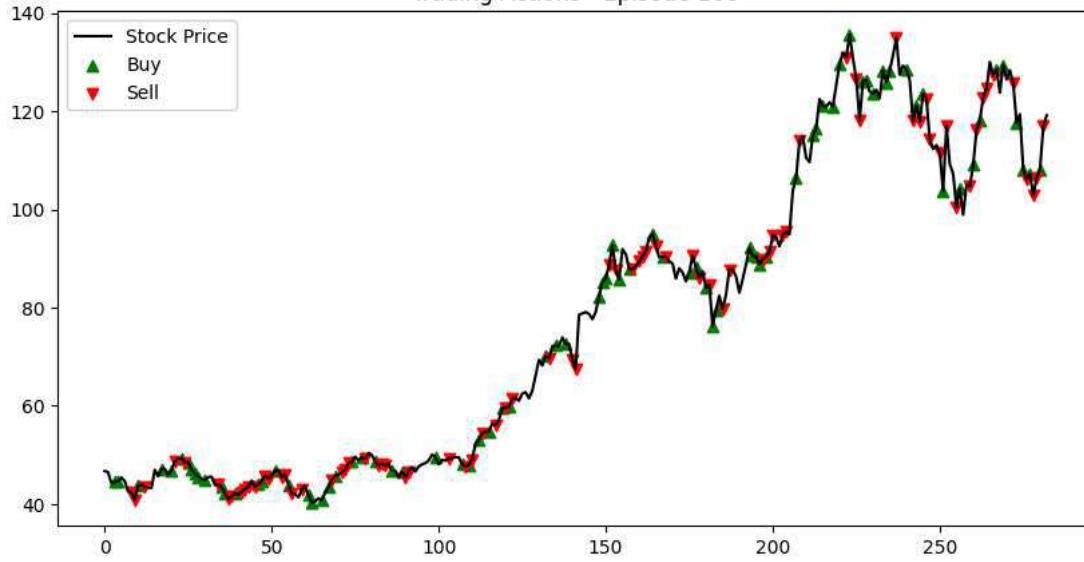
Trading Actions - Episode 107



Running Episode 108/500

Episode 108 Metrics: {'Total Profit': '-\$58.30', 'Win Rate': '50.00%', 'Profit Factor': '0.76', 'Sharpe Ratio': '-0.09', 'Max Drawdown': ''}

Trading Actions - Episode 108



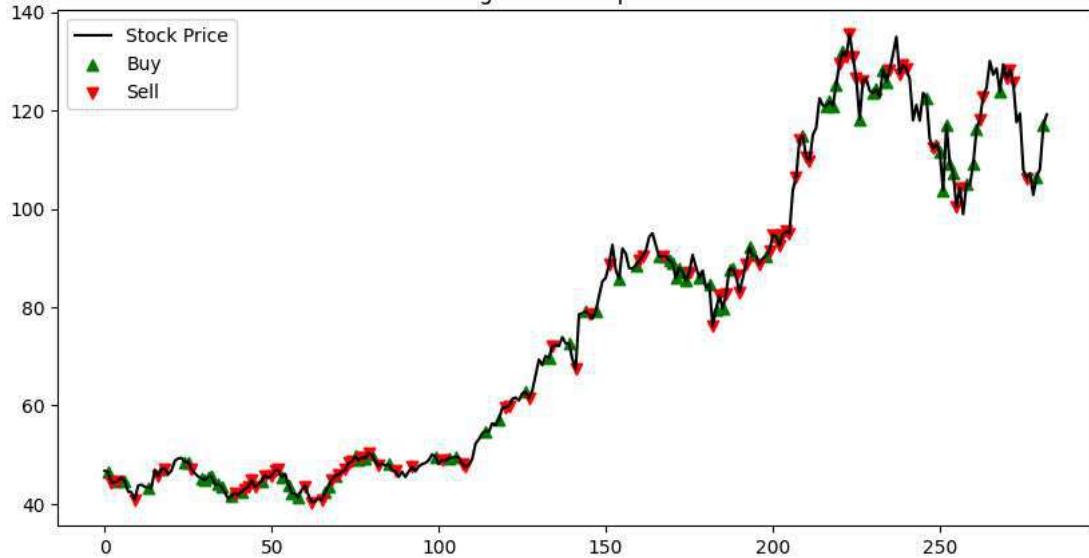
31/07/2025, 09:16

RL.ipynb - Colab

Running Episode 109/500

Episode 109 Metrics: {'Total Profit': '\$192.24', 'Win Rate': '57.69%', 'Profit Factor': '2.59', 'Sharpe Ratio': '0.34', 'Max Drawdown':

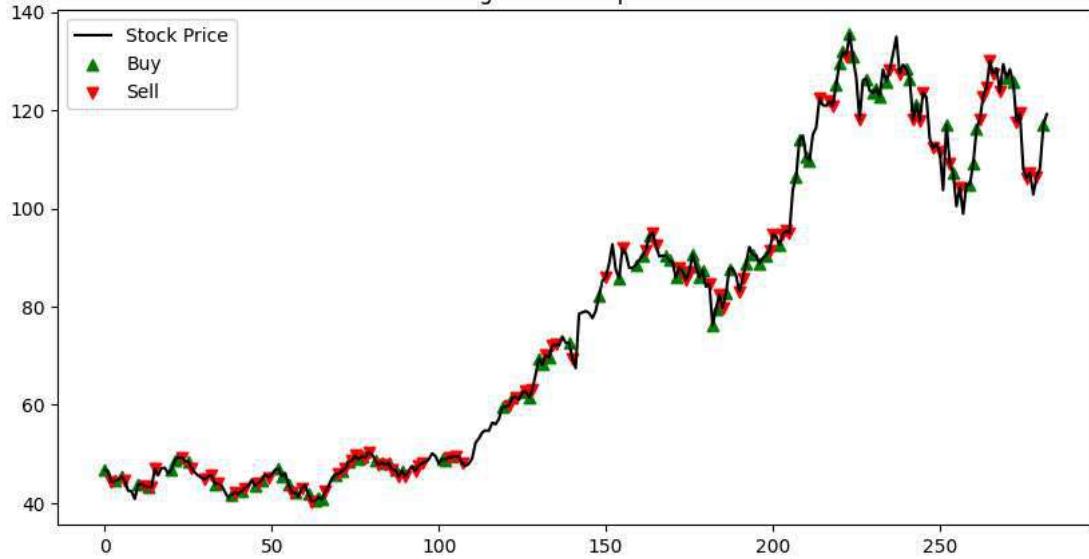
Trading Actions - Episode 109



Running Episode 110/500

Episode 110 Metrics: {'Total Profit': '\$135.86', 'Win Rate': '55.81%', 'Profit Factor': '1.71', 'Sharpe Ratio': '0.16', 'Max Drawdown':

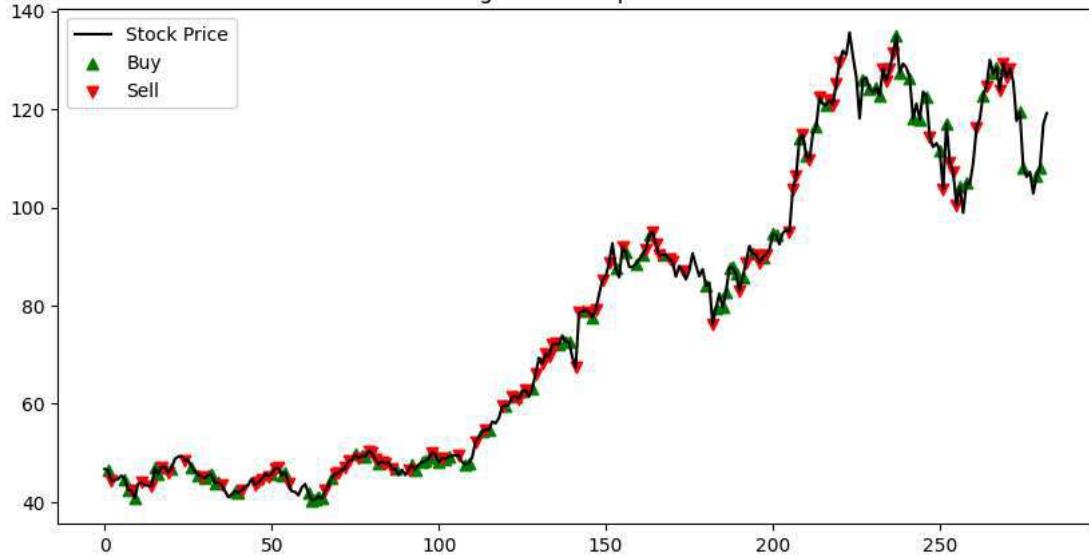
Trading Actions - Episode 110



Running Episode 111/500

Episode 111 Metrics: {'Total Profit': '\$462.57', 'Win Rate': '73.33%', 'Profit Factor': '4.30', 'Sharpe Ratio': '0.54', 'Max Drawdown':

Trading Actions - Episode 111



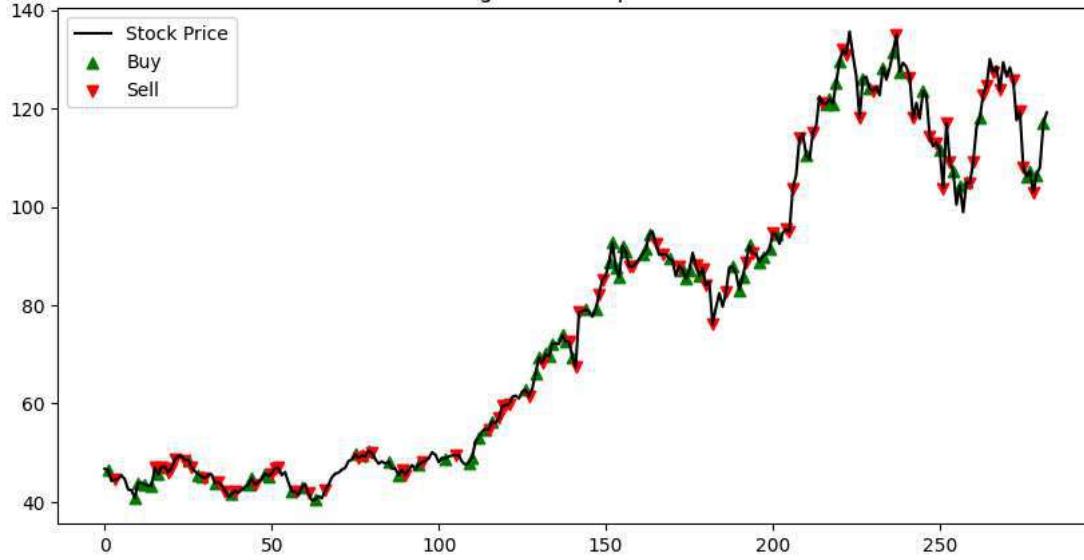
Running Episode 112/500

31/07/2025, 09:16

RL.ipynb - Colab

Episode 112 Metrics: {'Total Profit': '\$394.81', 'Win Rate': '58.23%', 'Profit Factor': '3.62', 'Sharpe Ratio': '0.37', 'Max Drawdown'}

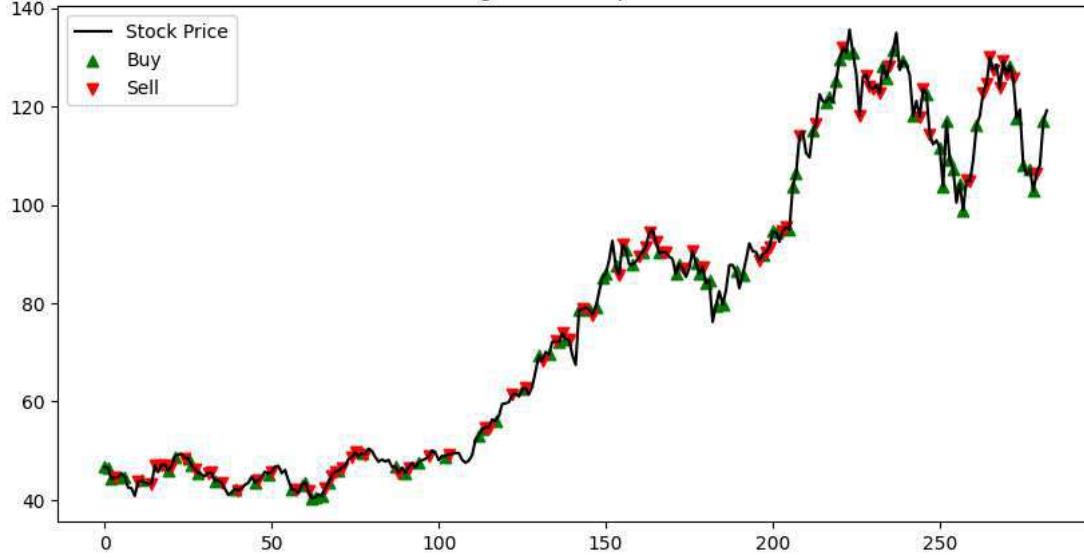
Trading Actions - Episode 112



Running Episode 113/500

Episode 113 Metrics: {'Total Profit': '\$296.88', 'Win Rate': '66.23%', 'Profit Factor': '3.86', 'Sharpe Ratio': '0.37', 'Max Drawdown'}

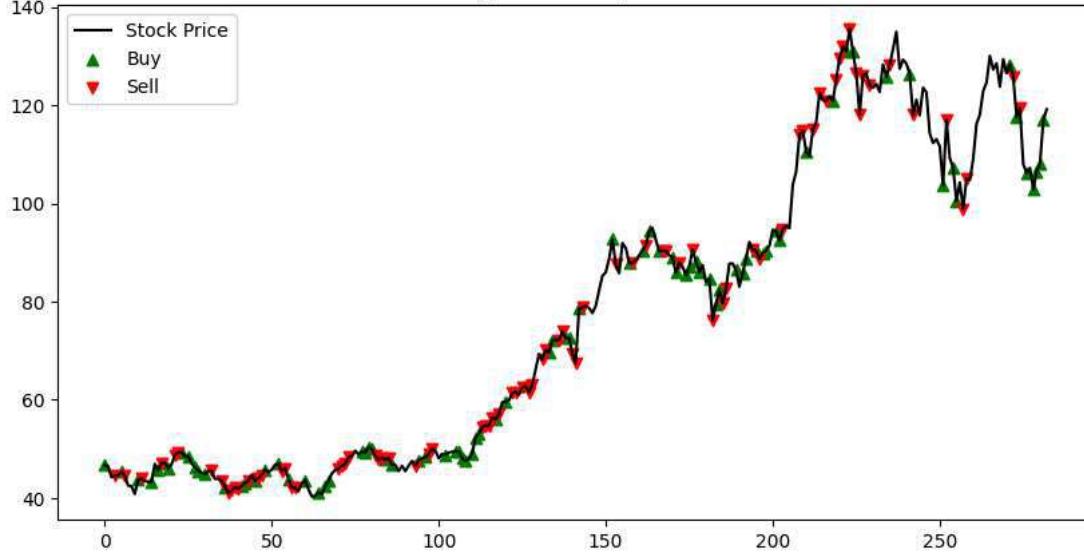
Trading Actions - Episode 113



Running Episode 114/500

Episode 114 Metrics: {'Total Profit': '\$402.89', 'Win Rate': '62.50%', 'Profit Factor': '4.47', 'Sharpe Ratio': '0.43', 'Max Drawdown'}

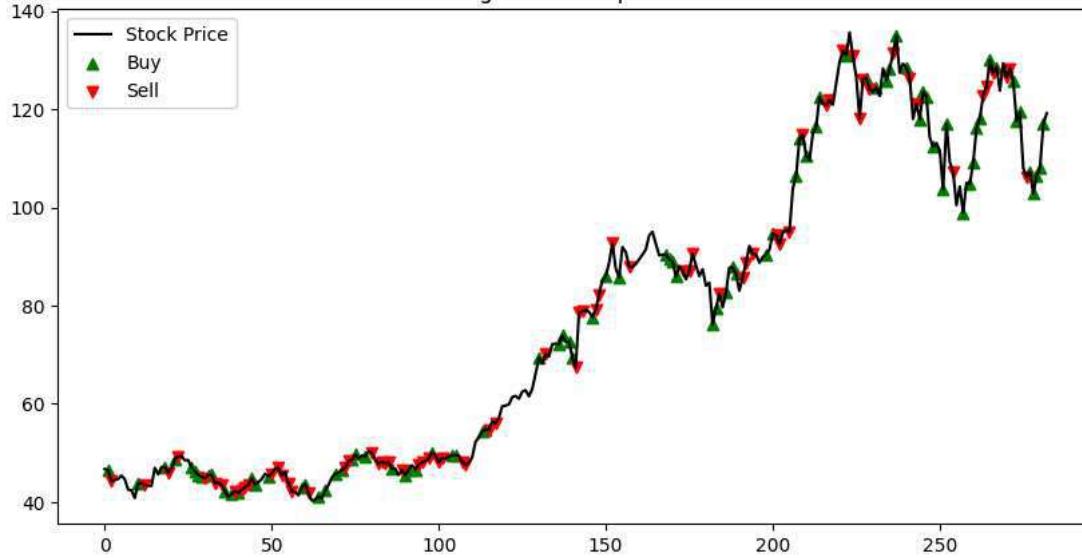
Trading Actions - Episode 114



Running Episode 115/500

Episode 115 Metrics: {'Total Profit': '\$143.65', 'Win Rate': '61.43%', 'Profit Factor': '2.47', 'Sharpe Ratio': '0.30', 'Max Drawdown'}

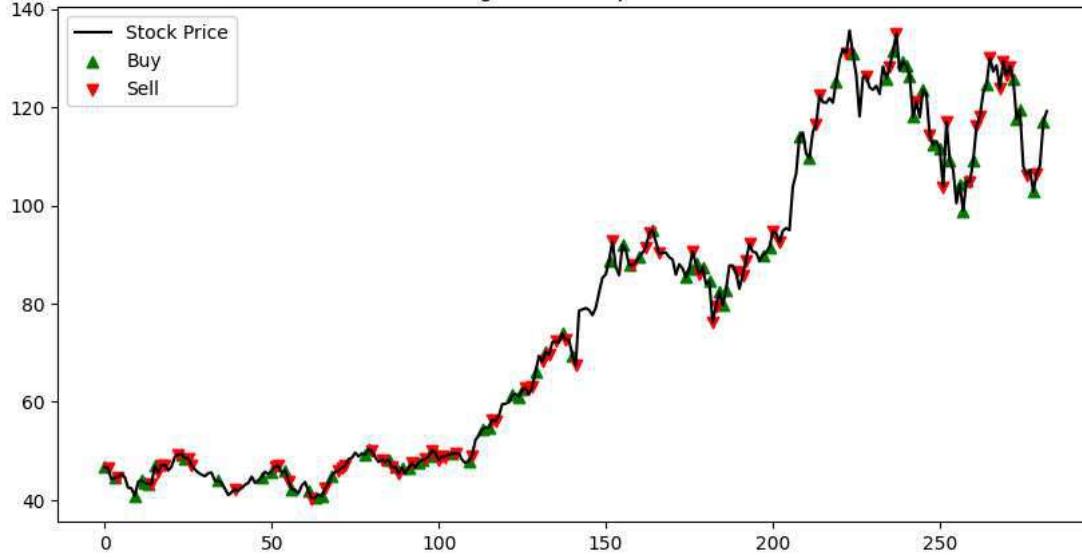
Trading Actions - Episode 115



Running Episode 116/500

Episode 116 Metrics: {'Total Profit': '\$99.06', 'Win Rate': '66.22%', 'Profit Factor': '1.65', 'Sharpe Ratio': '0.16', 'Max Drawdown':

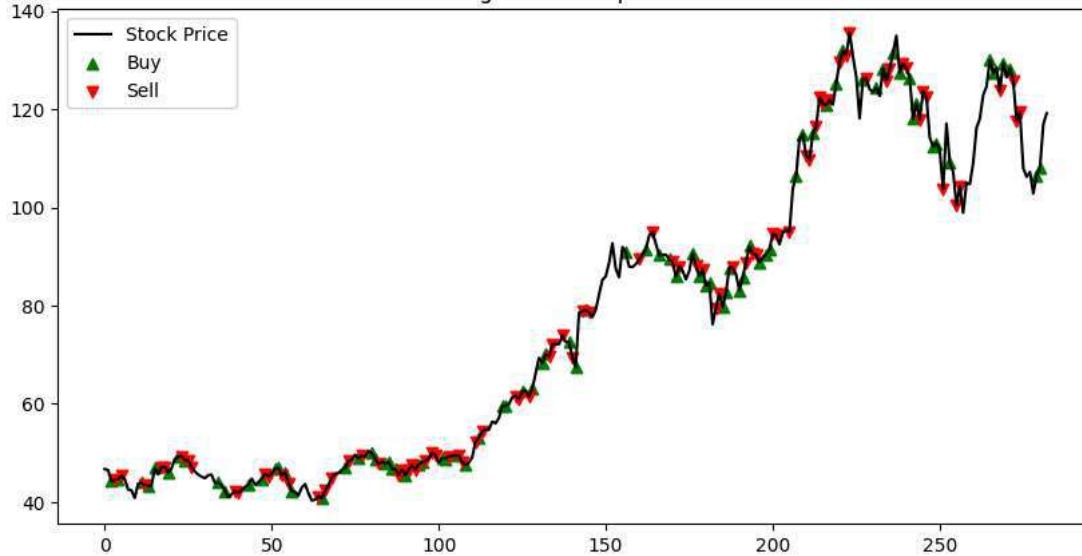
Trading Actions - Episode 116



Running Episode 117/500

Episode 117 Metrics: {'Total Profit': '\$126.73', 'Win Rate': '59.26%', 'Profit Factor': '2.16', 'Sharpe Ratio': '0.25', 'Max Drawdown':

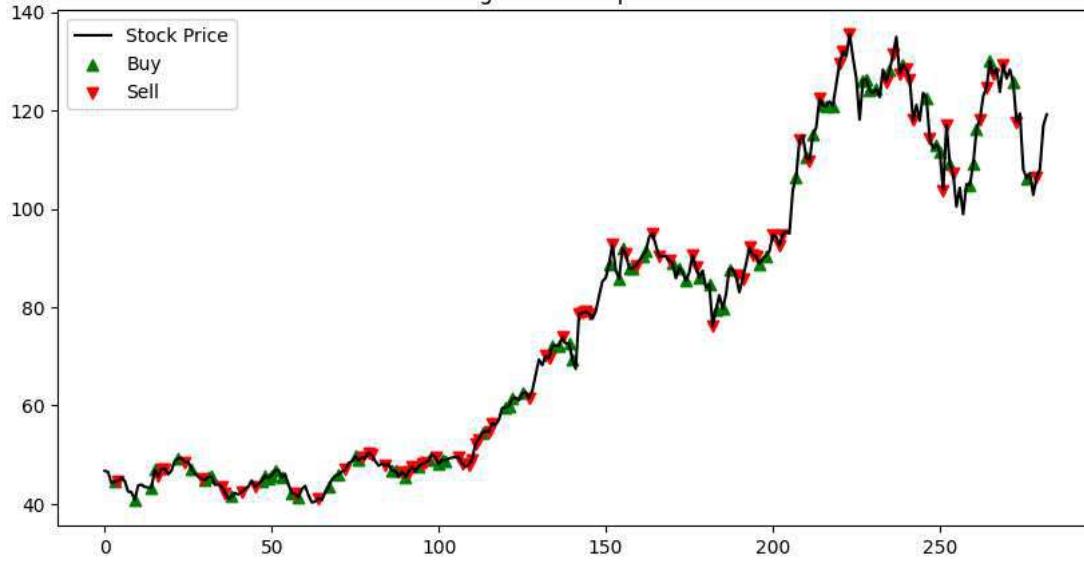
Trading Actions - Episode 117



Running Episode 118/500

Episode 118 Metrics: {'Total Profit': '\$216.56', 'Win Rate': '69.23%', 'Profit Factor': '3.70', 'Sharpe Ratio': '0.50', 'Max Drawdown':

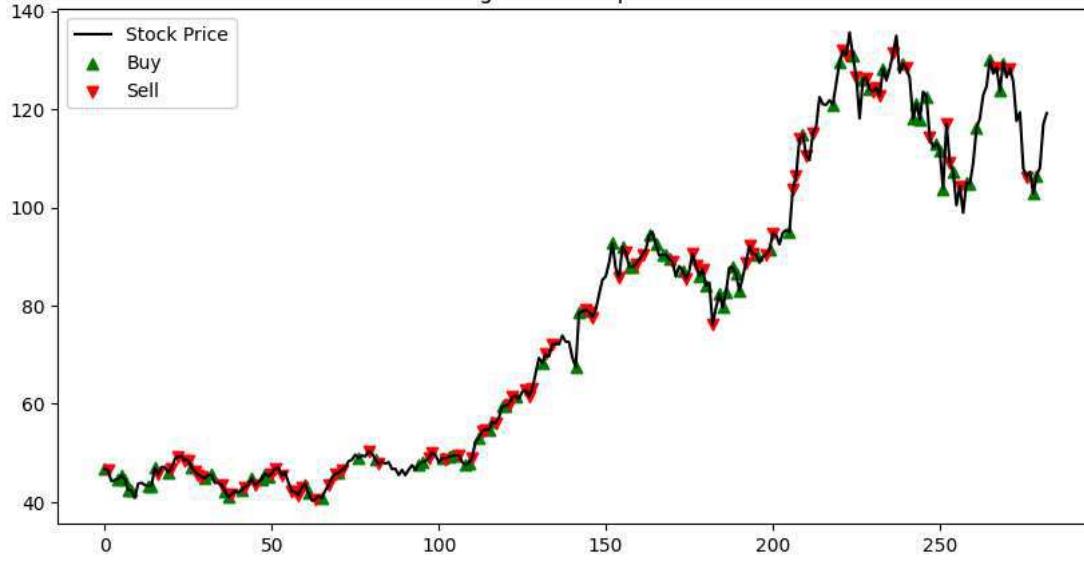
Trading Actions - Episode 118



Running Episode 119/500

Episode 119 Metrics: {'Total Profit': '\$254.44', 'Win Rate': '61.25%', 'Profit Factor': '3.19', 'Sharpe Ratio': '0.37', 'Max Drawdown':

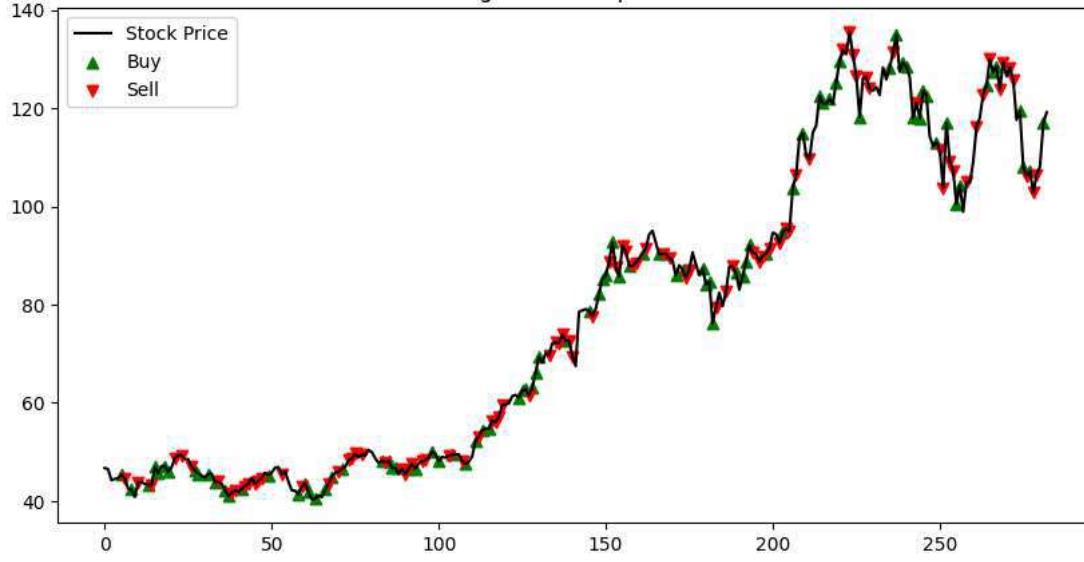
Trading Actions - Episode 119



Running Episode 120/500

Episode 120 Metrics: {'Total Profit': '\$91.65', 'Win Rate': '61.80%', 'Profit Factor': '1.49', 'Sharpe Ratio': '0.13', 'Max Drawdown':

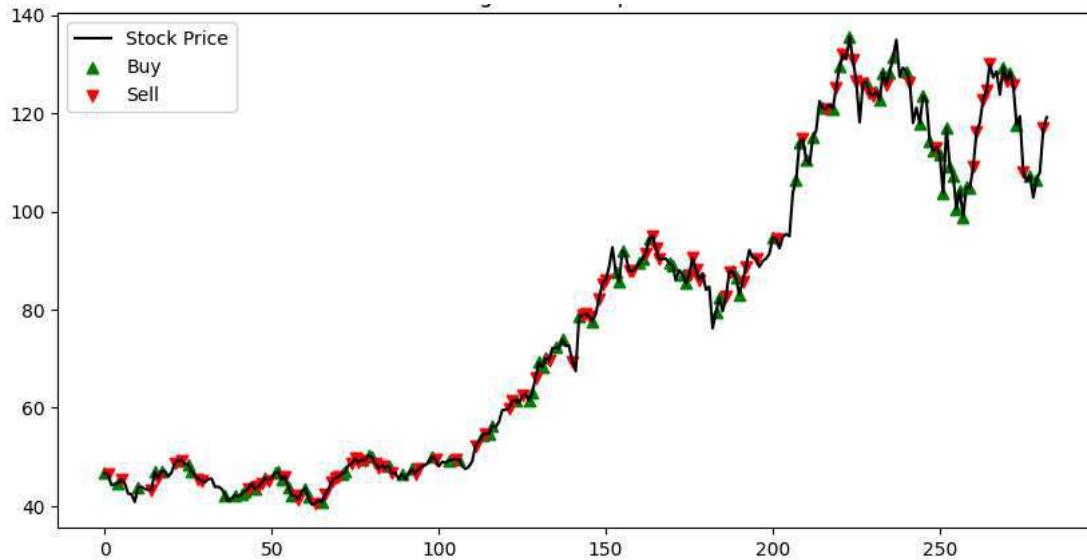
Trading Actions - Episode 120

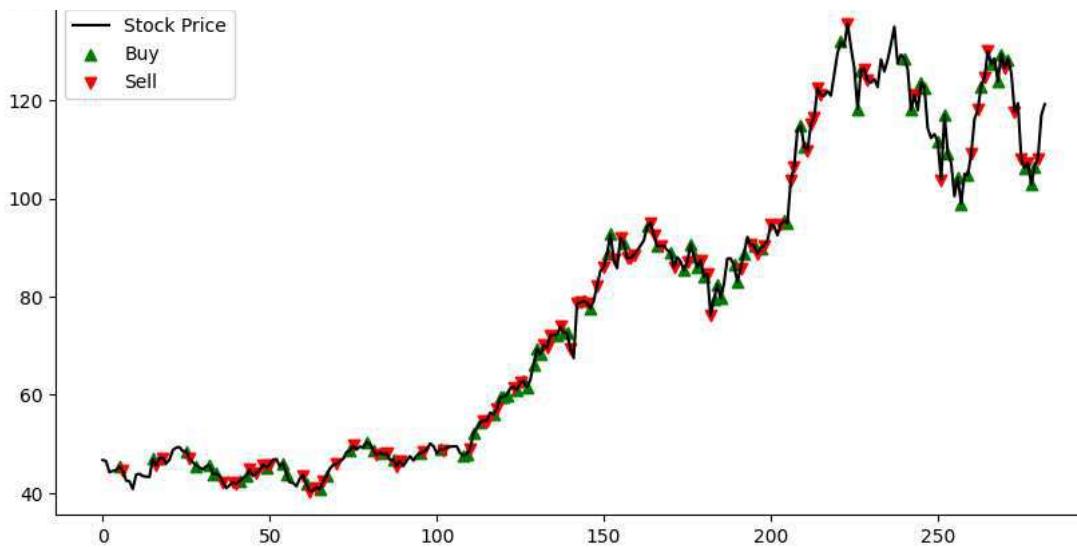


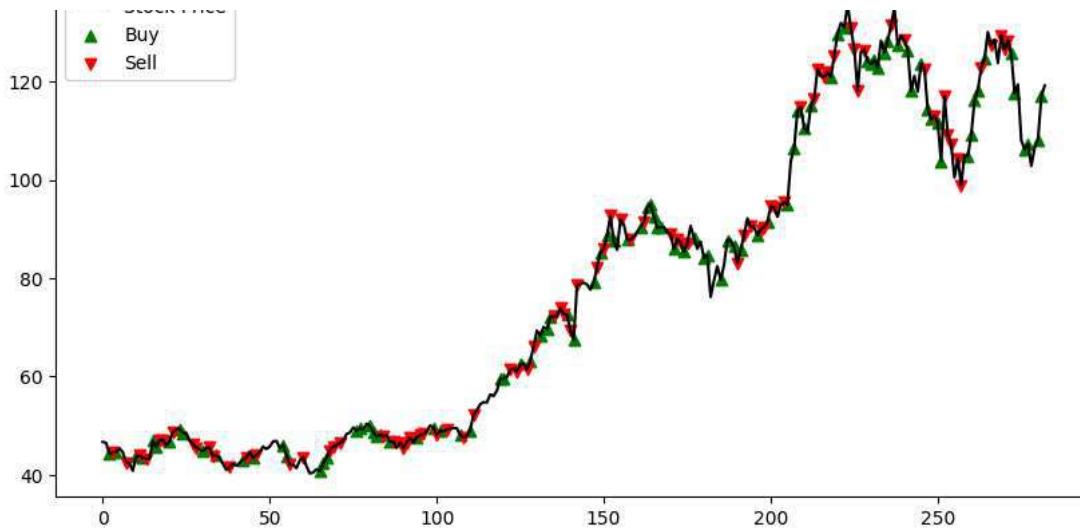
Running Episode 121/500

Episode 121 Metrics: {'Total Profit': '\$148.15', 'Win Rate': '67.47%', 'Profit Factor': '2.25', 'Sharpe Ratio': '0.29', 'Max Drawdown':

Trading Actions - Episode 121



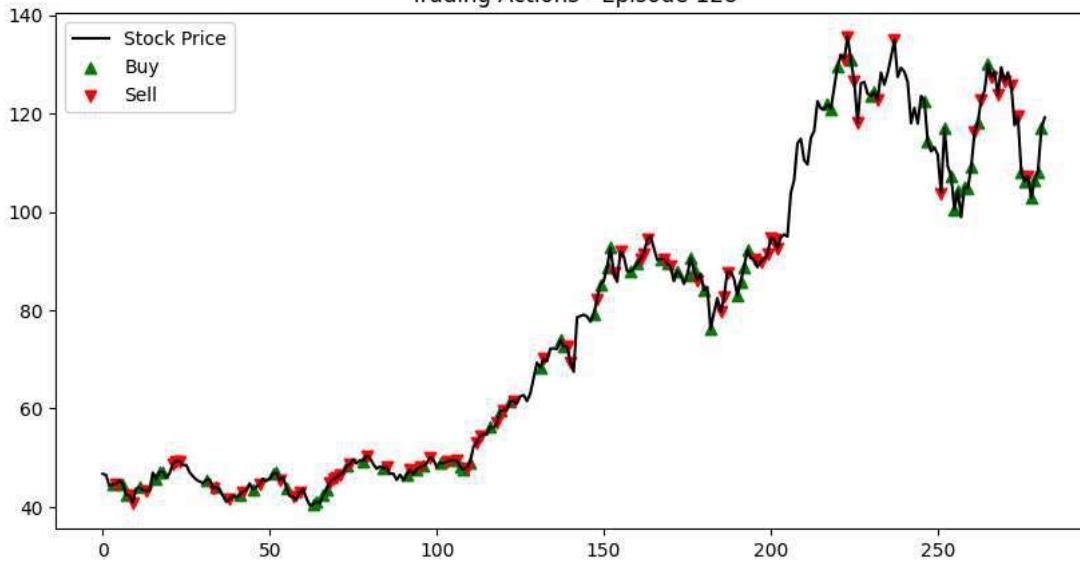




Running Episode 128/500

Episode 128 Metrics: {'Total Profit': '\$169.15', 'Win Rate': '66.18%', 'Profit Factor': '3.16', 'Sharpe Ratio': '0.35', 'Max Drawdown':

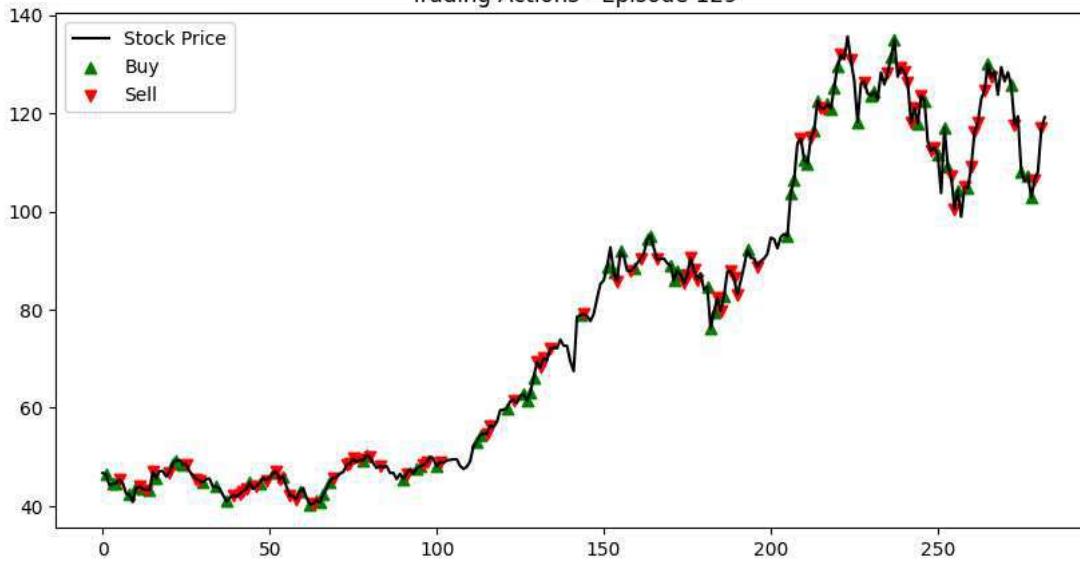
Trading Actions - Episode 128



Running Episode 129/500

Episode 129 Metrics: {'Total Profit': '\$98.92', 'Win Rate': '58.75%', 'Profit Factor': '1.55', 'Sharpe Ratio': '0.16', 'Max Drawdown':

Trading Actions - Episode 129

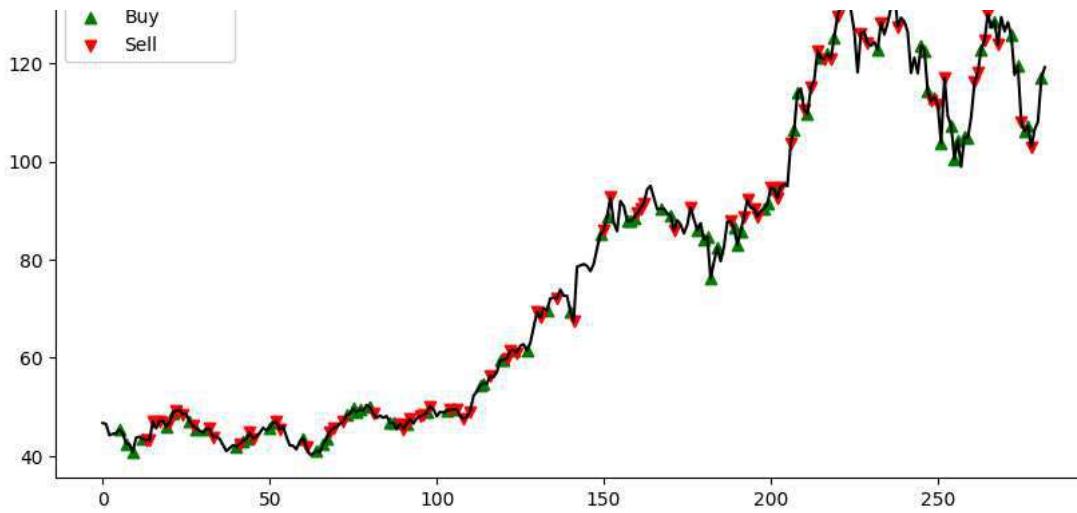


Running Episode 130/500

Episode 130 Metrics: {'Total Profit': '\$267.84', 'Win Rate': '74.67%', 'Profit Factor': '4.79', 'Sharpe Ratio': '0.50', 'Max Drawdown':

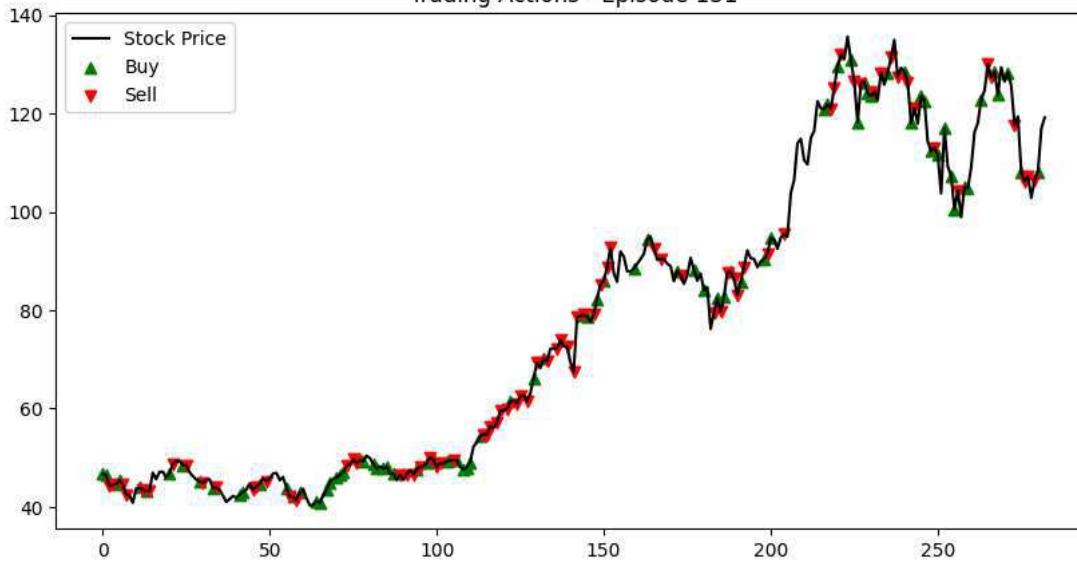
Trading Actions - Episode 130





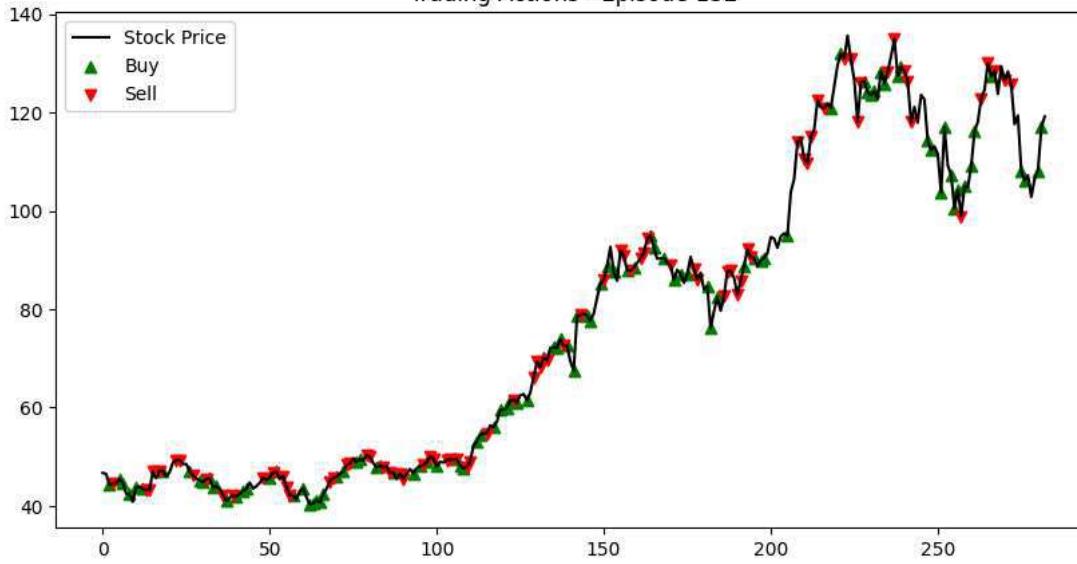
Running Episode 131/500

Episode 131 Metrics: {'Total Profit': '\$301.05', 'Win Rate': '70.13%', 'Profit Factor': '5.07', 'Sharpe Ratio': '0.52', 'Max Drawdown':

Trading Actions - Episode 131

Running Episode 132/500

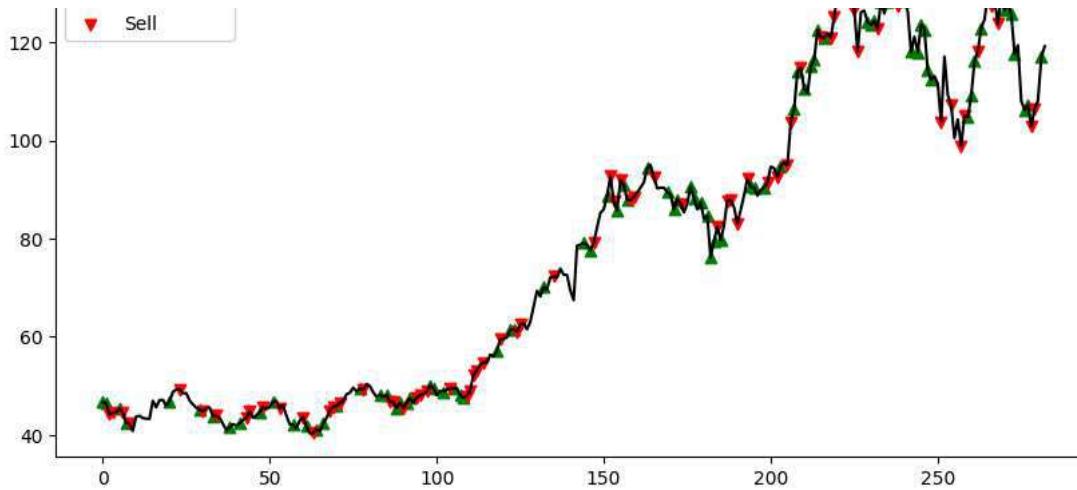
Episode 132 Metrics: {'Total Profit': '\$1093.36', 'Win Rate': '88.75%', 'Profit Factor': '75.03', 'Sharpe Ratio': '0.96', 'Max Drawdown':

Trading Actions - Episode 132

Running Episode 133/500

Episode 133 Metrics: {'Total Profit': '\$152.01', 'Win Rate': '57.14%', 'Profit Factor': '1.91', 'Sharpe Ratio': '0.19', 'Max Drawdown':

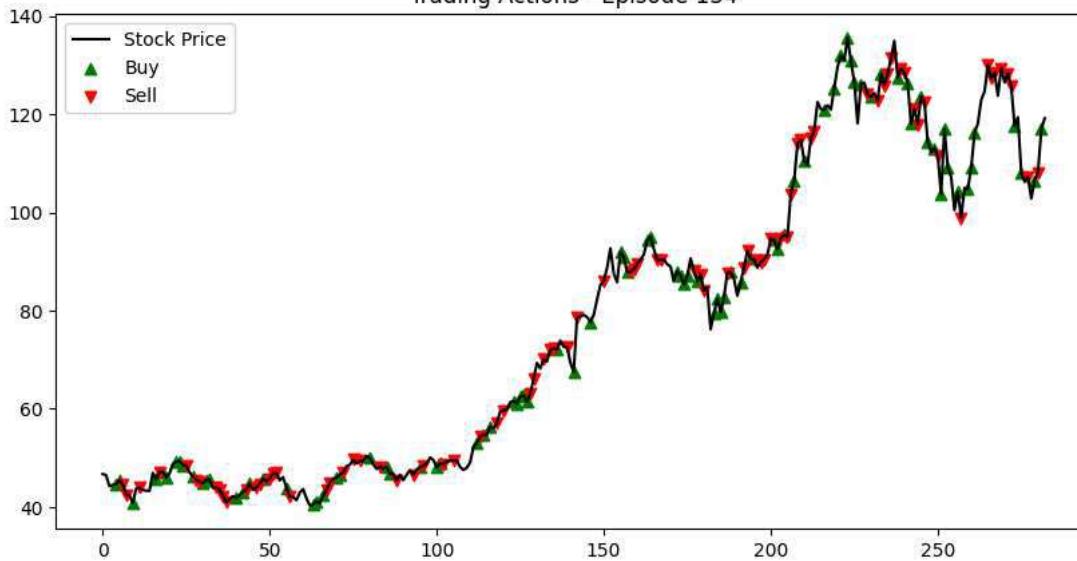
Trading Actions - Episode 133



Running Episode 134/500

Episode 134 Metrics: {'Total Profit': '\$207.99', 'Win Rate': '67.07%', 'Profit Factor': '2.74', 'Sharpe Ratio': '0.35', 'Max Drawdown': ''}

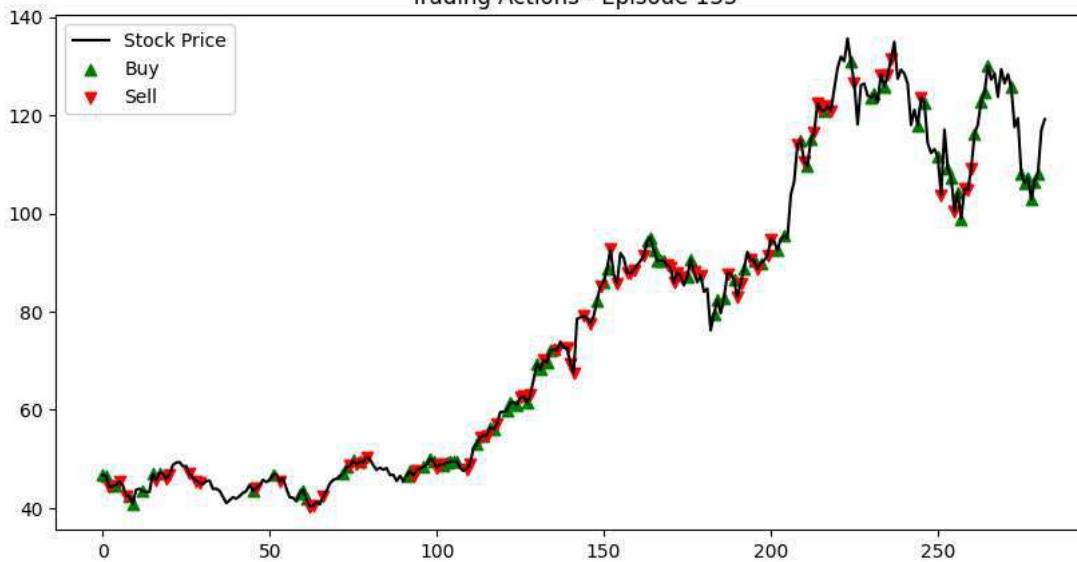
Trading Actions - Episode 134



Running Episode 135/500

Episode 135 Metrics: {'Total Profit': '\$280.18', 'Win Rate': '68.00%', 'Profit Factor': '4.17', 'Sharpe Ratio': '0.49', 'Max Drawdown': ''}

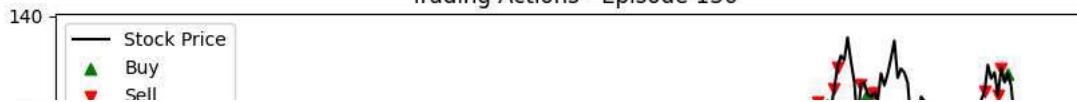
Trading Actions - Episode 135

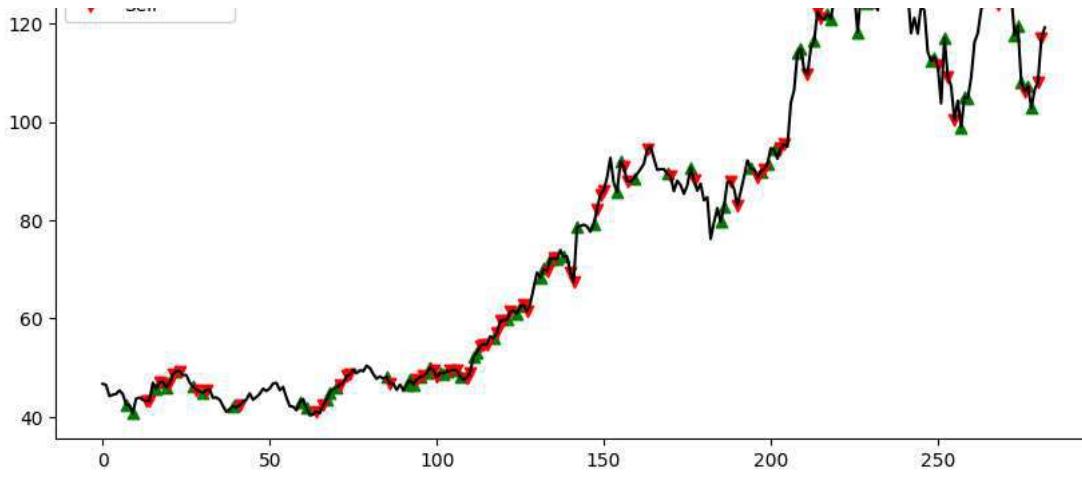


Running Episode 136/500

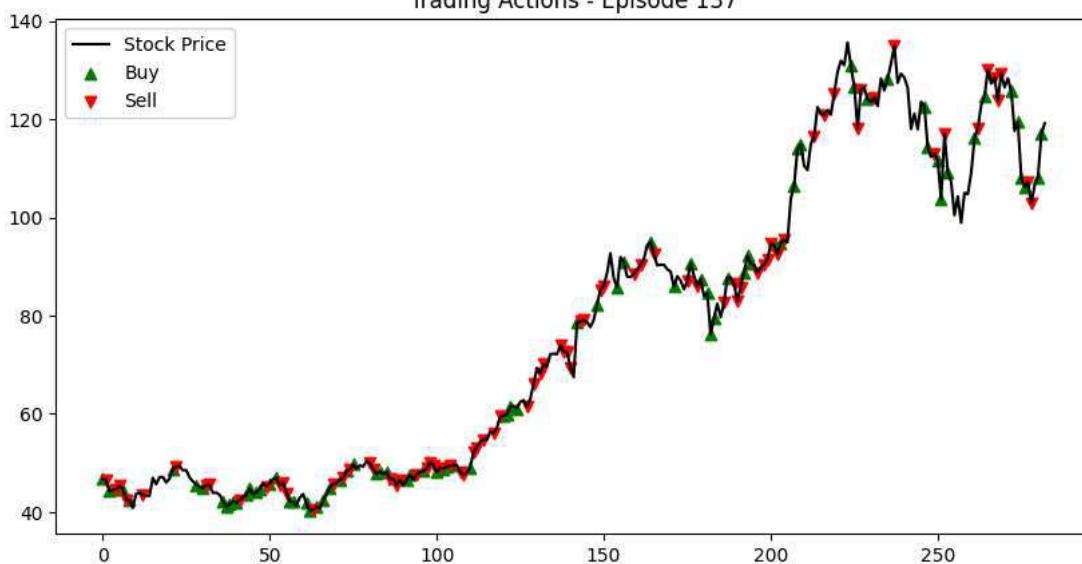
Episode 136 Metrics: {'Total Profit': '\$129.33', 'Win Rate': '69.70%', 'Profit Factor': '2.57', 'Sharpe Ratio': '0.29', 'Max Drawdown': ''}

Trading Actions - Episode 136

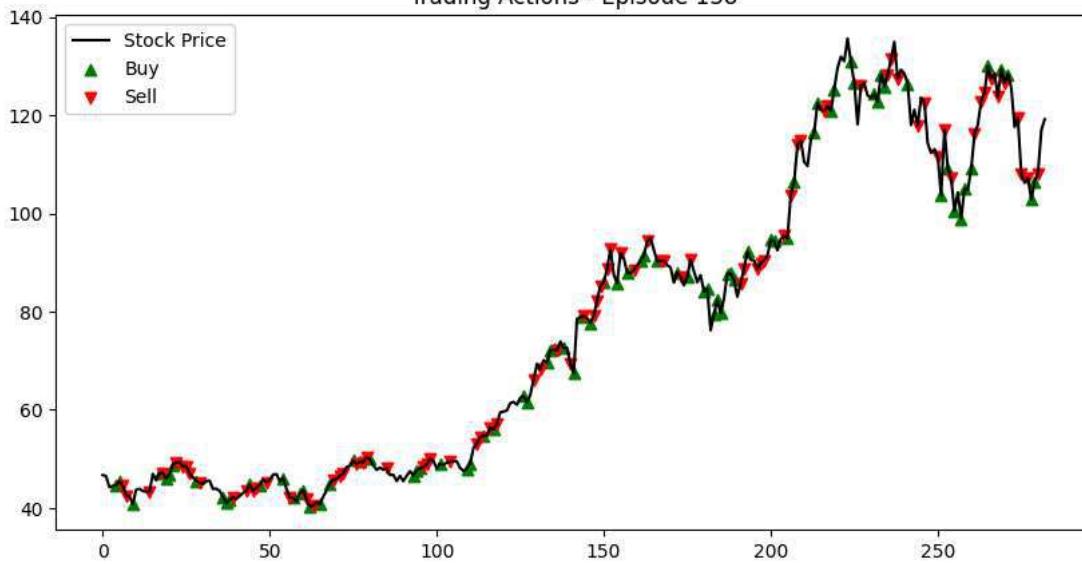




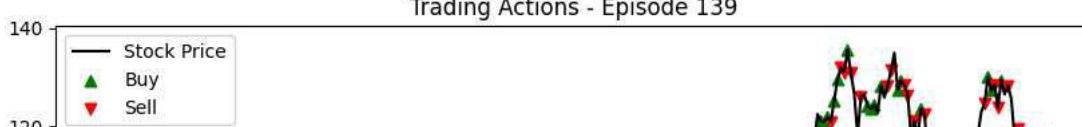
Trading Actions - Episode 137

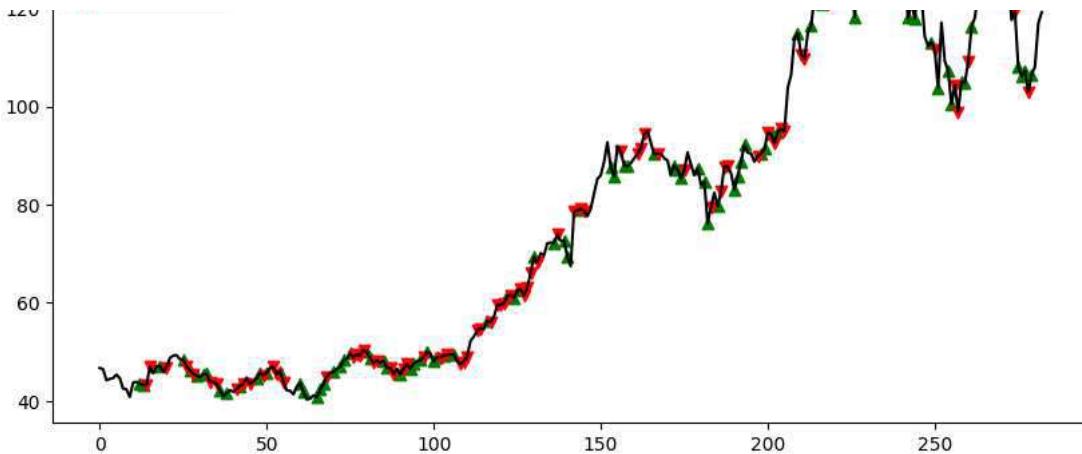


Trading Actions - Episode 138



Trading Actions - Episode 139

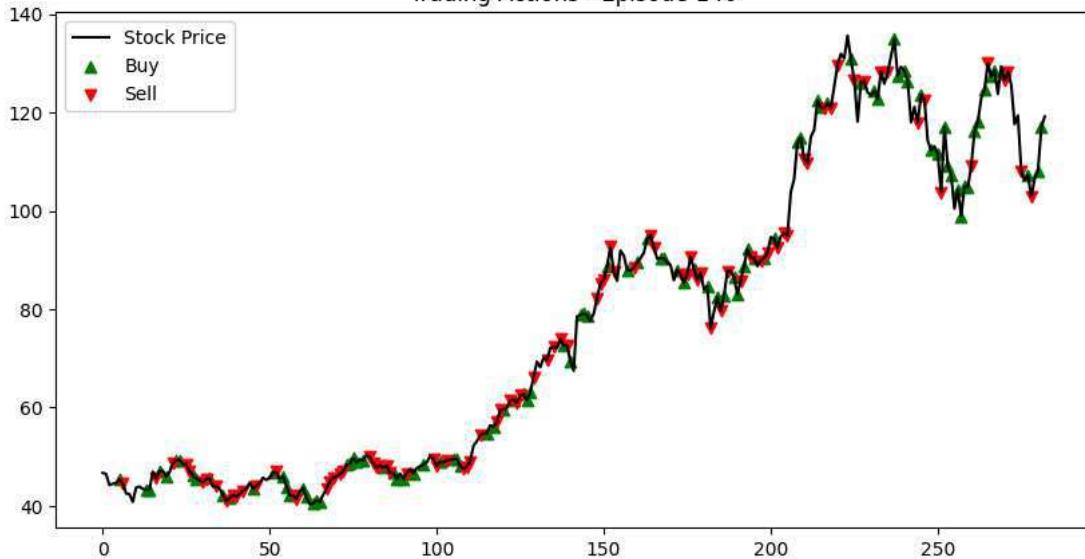




Running Episode 140/500

Episode 140 Metrics: {'Total Profit': '\$97.98', 'Win Rate': '58.14%', 'Profit Factor': '1.65', 'Sharpe Ratio': '0.18', 'Max Drawdown':

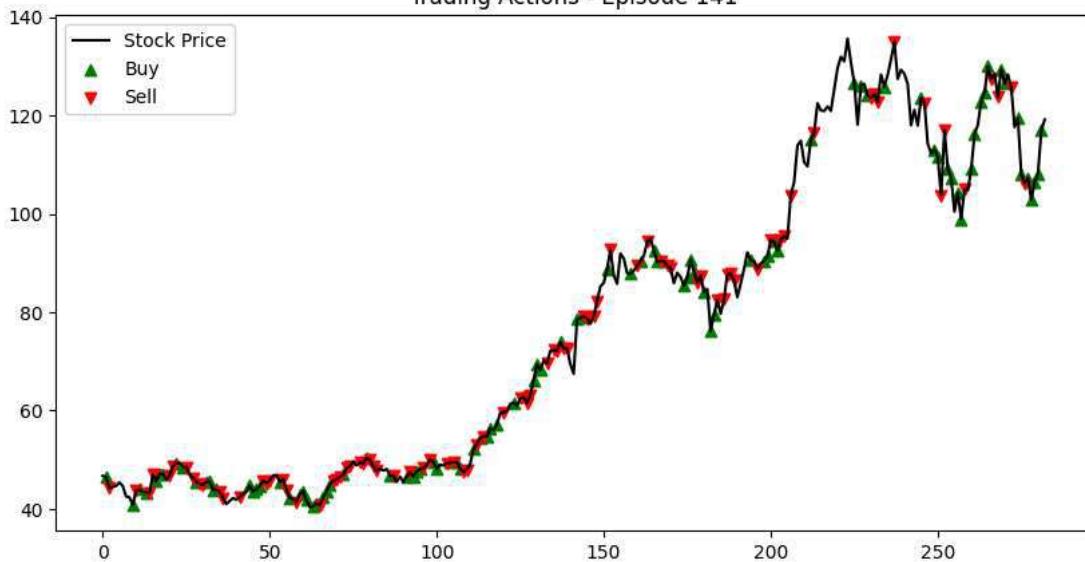
Trading Actions - Episode 140



Running Episode 141/500

Episode 141 Metrics: {'Total Profit': '\$233.38', 'Win Rate': '65.48%', 'Profit Factor': '4.29', 'Sharpe Ratio': '0.48', 'Max Drawdown':

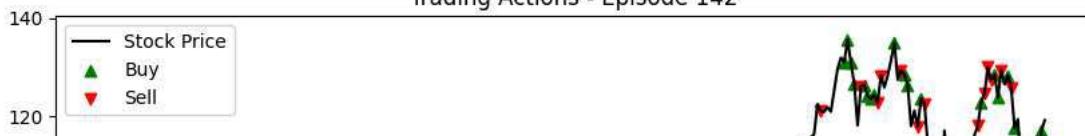
Trading Actions - Episode 141

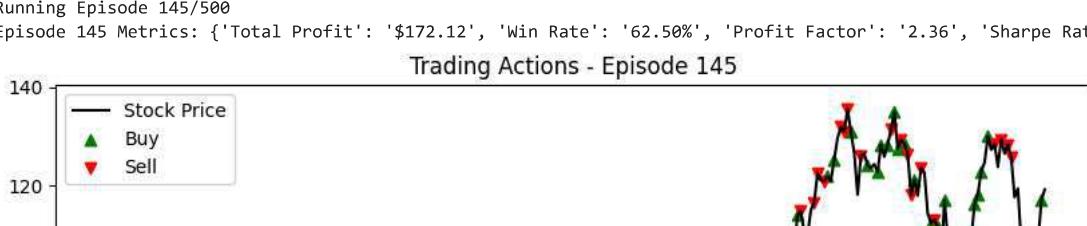
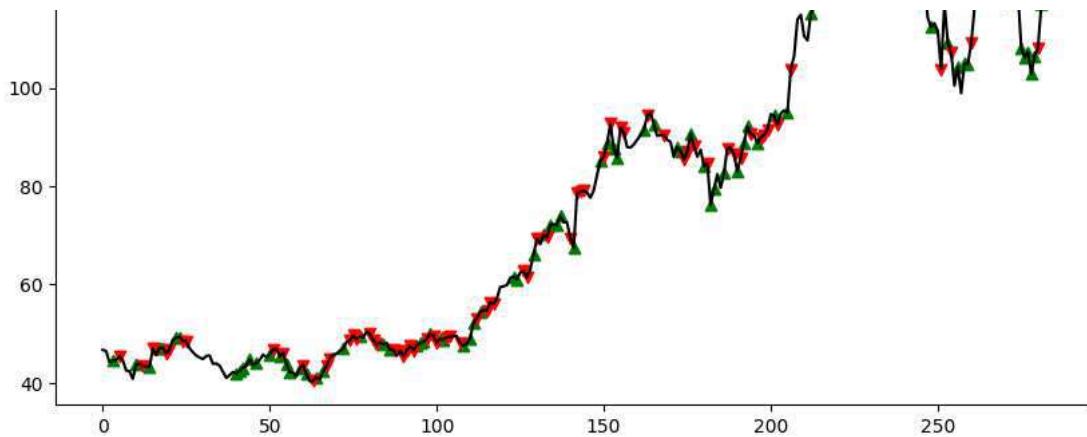


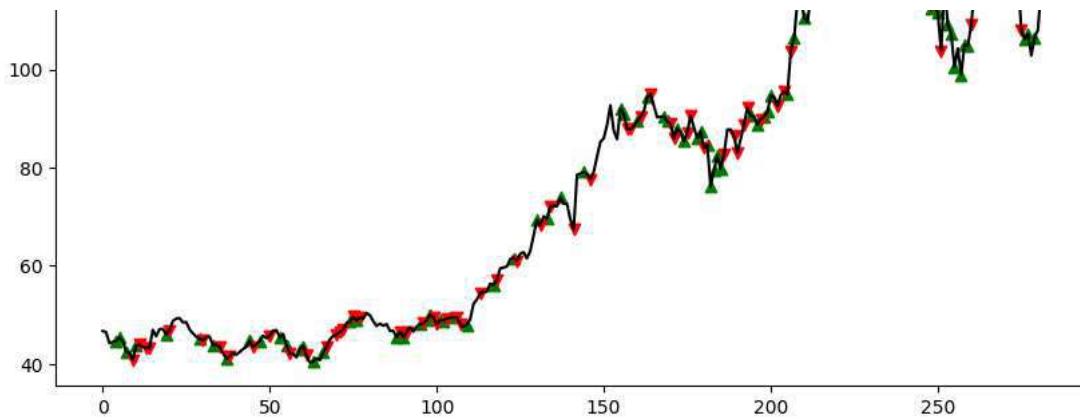
Running Episode 142/500

Episode 142 Metrics: {'Total Profit': '\$100.05', 'Win Rate': '56.96%', 'Profit Factor': '1.73', 'Sharpe Ratio': '0.18', 'Max Drawdown':

Trading Actions - Episode 142



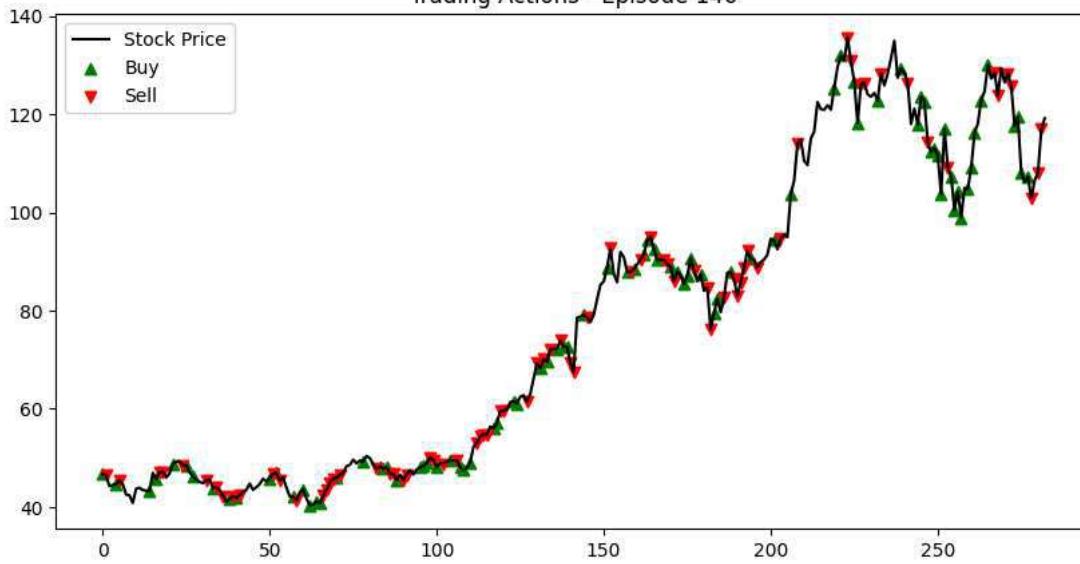




Running Episode 146/500

Episode 146 Metrics: {'Total Profit': '\$88.89', 'Win Rate': '53.33%', 'Profit Factor': '1.90', 'Sharpe Ratio': '0.23', 'Max Drawdown':

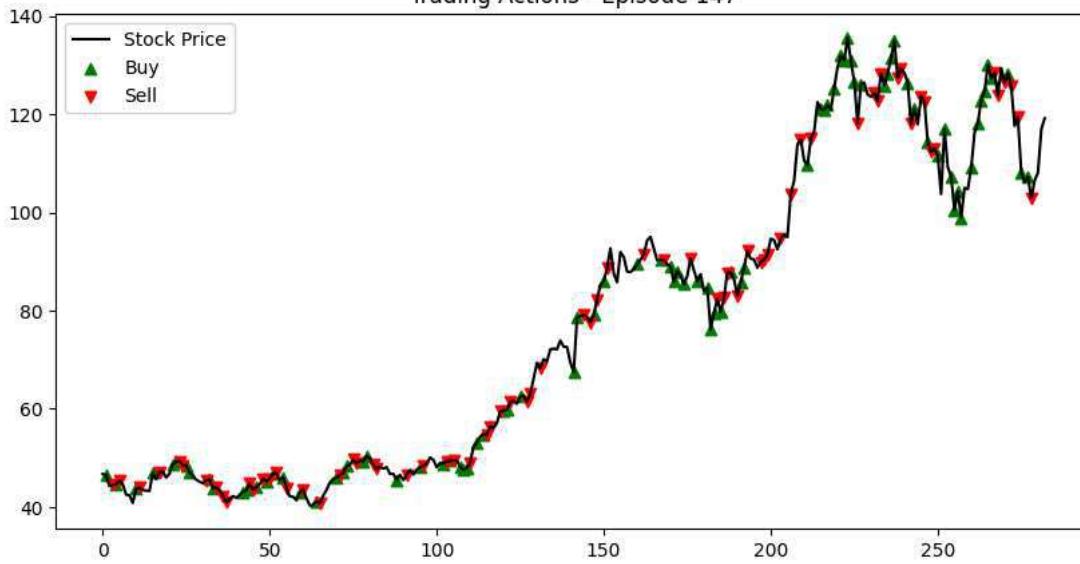
Trading Actions - Episode 146



Running Episode 147/500

Episode 147 Metrics: {'Total Profit': '\$55.67', 'Win Rate': '61.97%', 'Profit Factor': '1.43', 'Sharpe Ratio': '0.12', 'Max Drawdown':

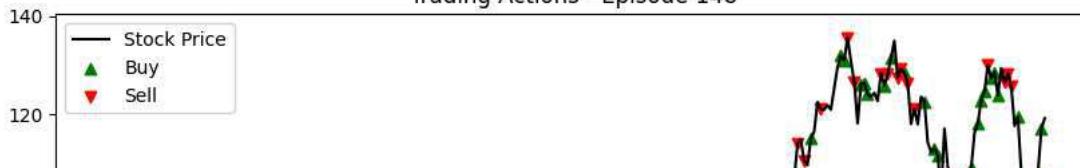
Trading Actions - Episode 147

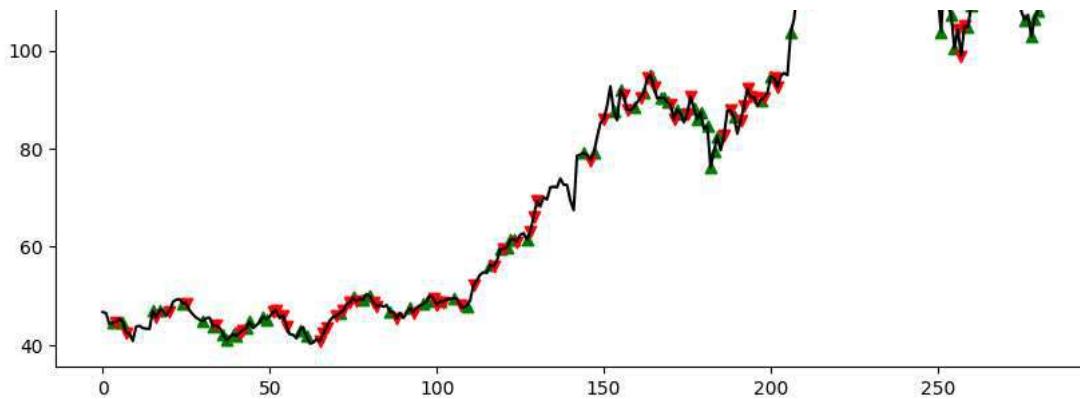


Running Episode 148/500

Episode 148 Metrics: {'Total Profit': '\$157.48', 'Win Rate': '56.16%', 'Profit Factor': '2.57', 'Sharpe Ratio': '0.29', 'Max Drawdown':

Trading Actions - Episode 148

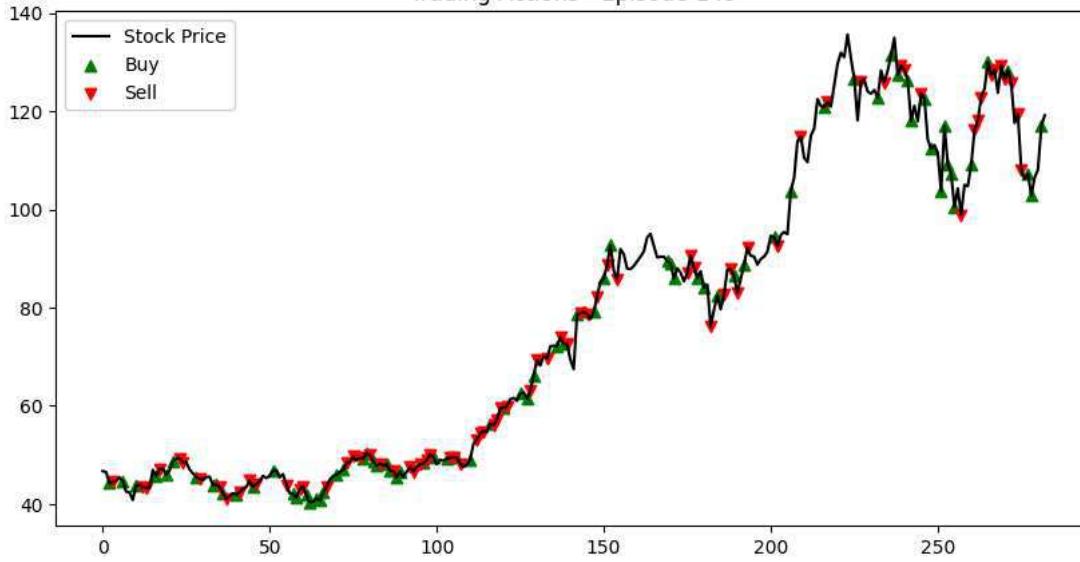




Running Episode 149/500

Episode 149 Metrics: {'Total Profit': '\$157.67', 'Win Rate': '64.86%', 'Profit Factor': '2.53', 'Sharpe Ratio': '0.29', 'Max Drawdown':

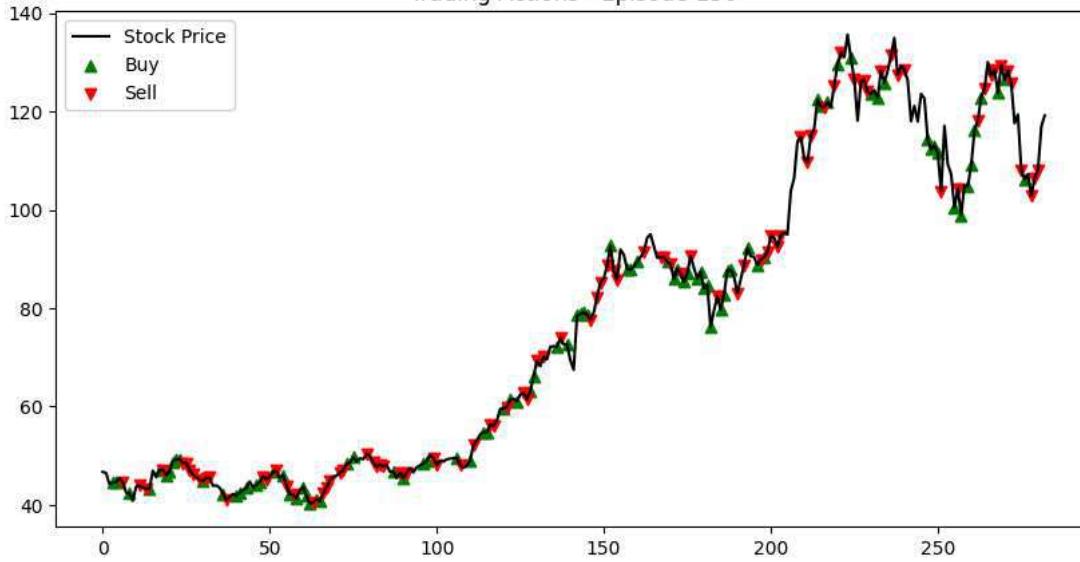
Trading Actions - Episode 149



Running Episode 150/500

Episode 150 Metrics: {'Total Profit': '\$398.95', 'Win Rate': '71.91%', 'Profit Factor': '4.16', 'Sharpe Ratio': '0.42', 'Max Drawdown':

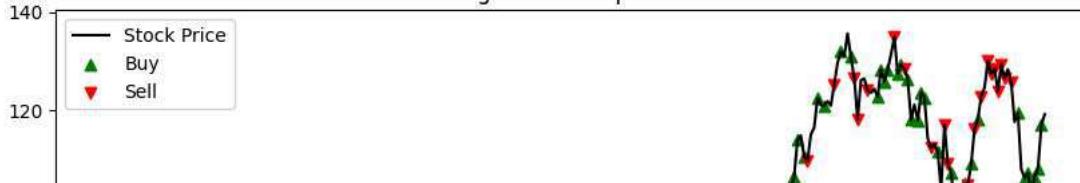
Trading Actions - Episode 150

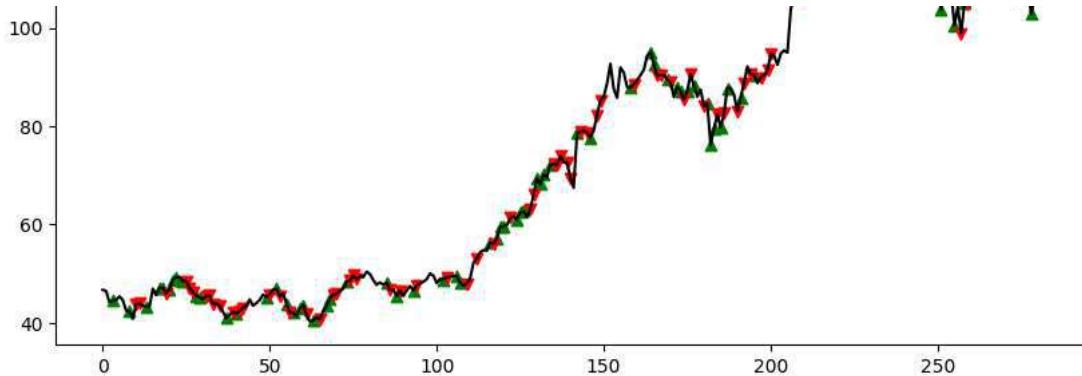


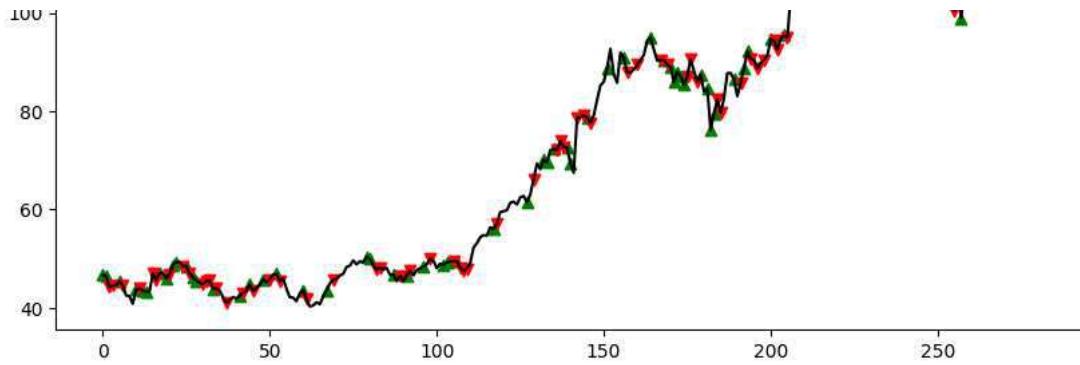
Running Episode 151/500

Episode 151 Metrics: {'Total Profit': '\$116.13', 'Win Rate': '60.26%', 'Profit Factor': '1.72', 'Sharpe Ratio': '0.19', 'Max Drawdown':

Trading Actions - Episode 151

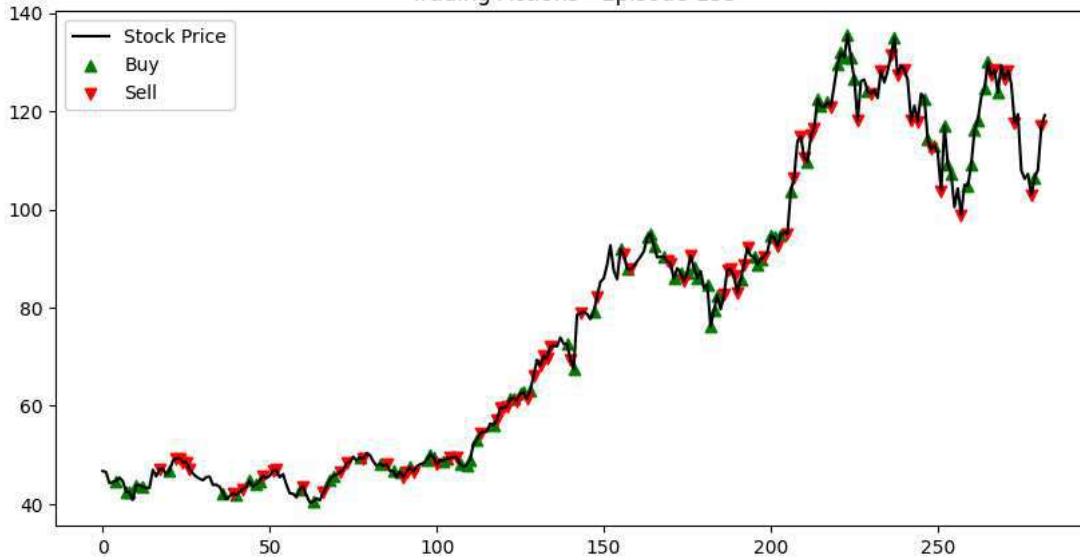






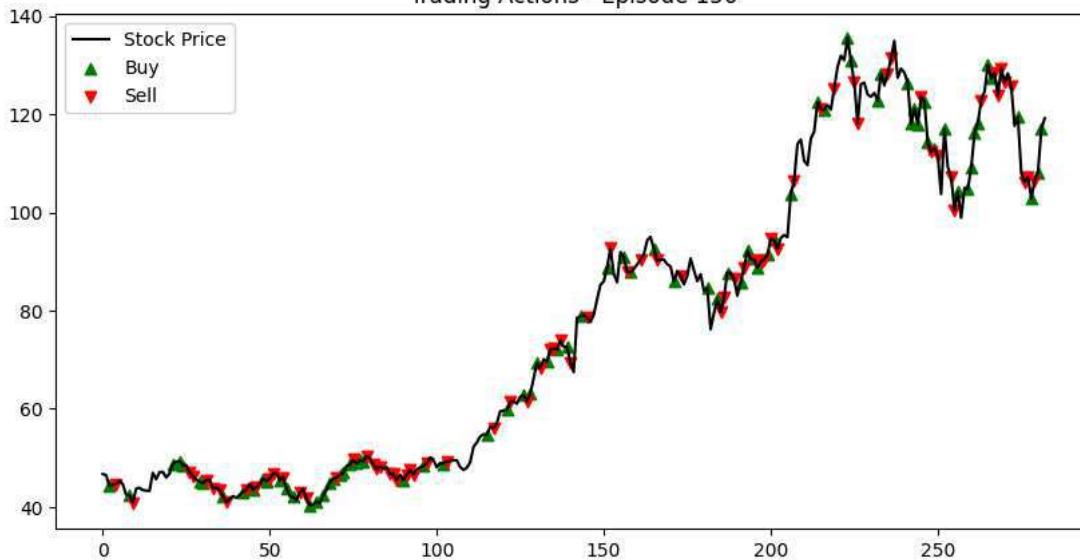
Running Episode 155/500

Episode 155 Metrics: {'Total Profit': '\$255.44', 'Win Rate': '67.95%', 'Profit Factor': '2.59', 'Sharpe Ratio': '0.33', 'Max Drawdown':

Trading Actions - Episode 155

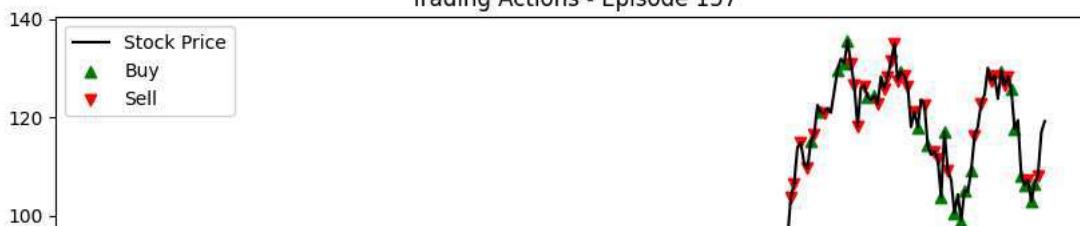
Running Episode 156/500

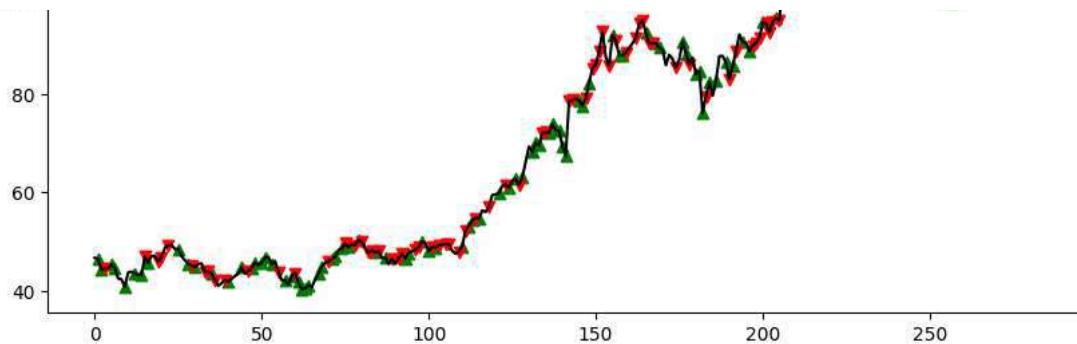
Episode 156 Metrics: {'Total Profit': '\$12.83', 'Win Rate': '52.05%', 'Profit Factor': '1.08', 'Sharpe Ratio': '0.02', 'Max Drawdown':

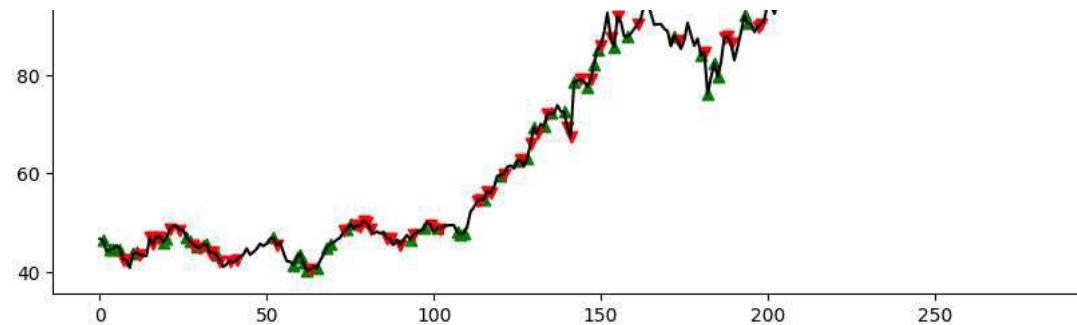
Trading Actions - Episode 156

Running Episode 157/500

Episode 157 Metrics: {'Total Profit': '\$1189.42', 'Win Rate': '83.16%', 'Profit Factor': '13.17', 'Sharpe Ratio': '0.85', 'Max Drawdown':

Trading Actions - Episode 157

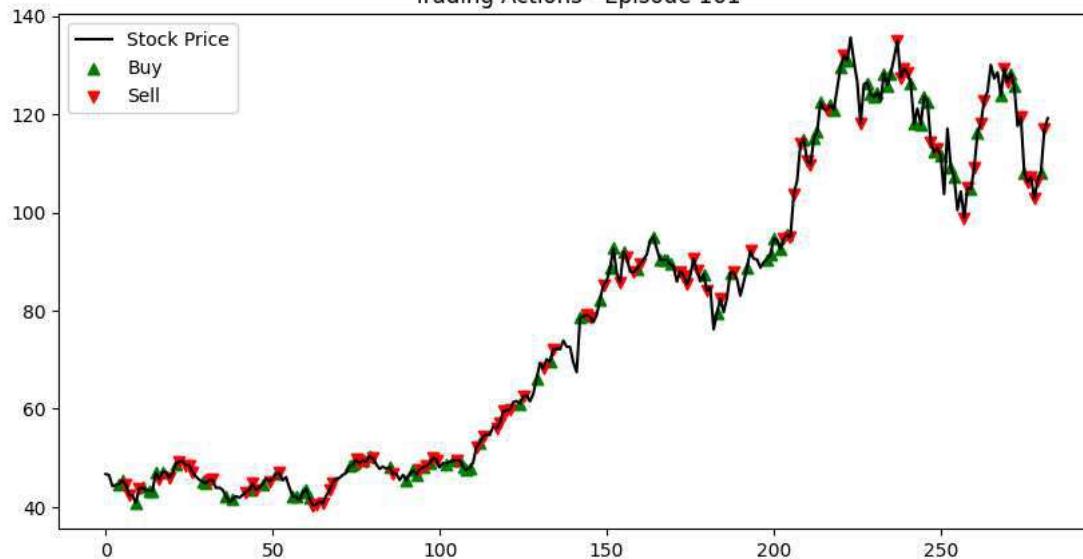




Running Episode 161/500

Episode 161 Metrics: {'Total Profit': '\$21.58', 'Win Rate': '60.00%', 'Profit Factor': '1.11', 'Sharpe Ratio': '0.03', 'Max Drawdown':

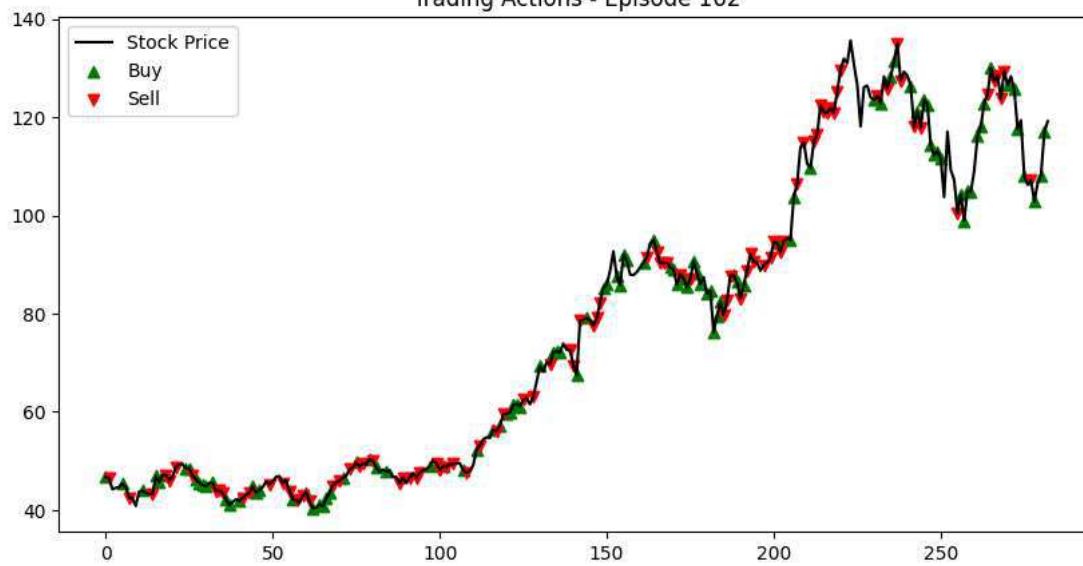
Trading Actions - Episode 161



Running Episode 162/500

Episode 162 Metrics: {'Total Profit': '\$508.20', 'Win Rate': '69.66%', 'Profit Factor': '5.83', 'Sharpe Ratio': '0.51', 'Max Drawdown':

Trading Actions - Episode 162

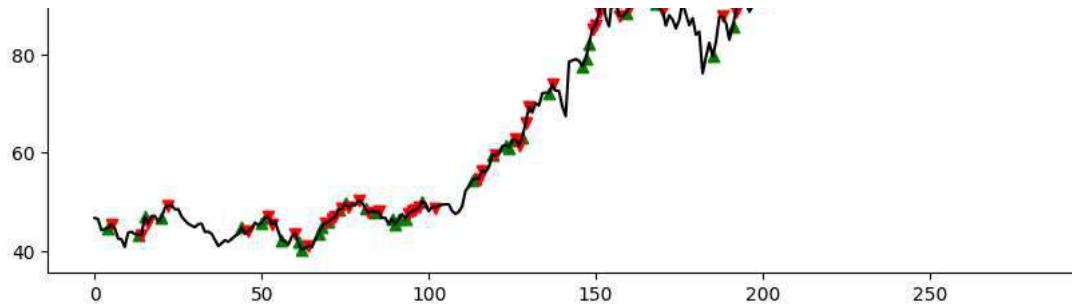


Running Episode 163/500

Episode 163 Metrics: {'Total Profit': '\$44.86', 'Win Rate': '66.13%', 'Profit Factor': '1.27', 'Sharpe Ratio': '0.07', 'Max Drawdown':

Trading Actions - Episode 163

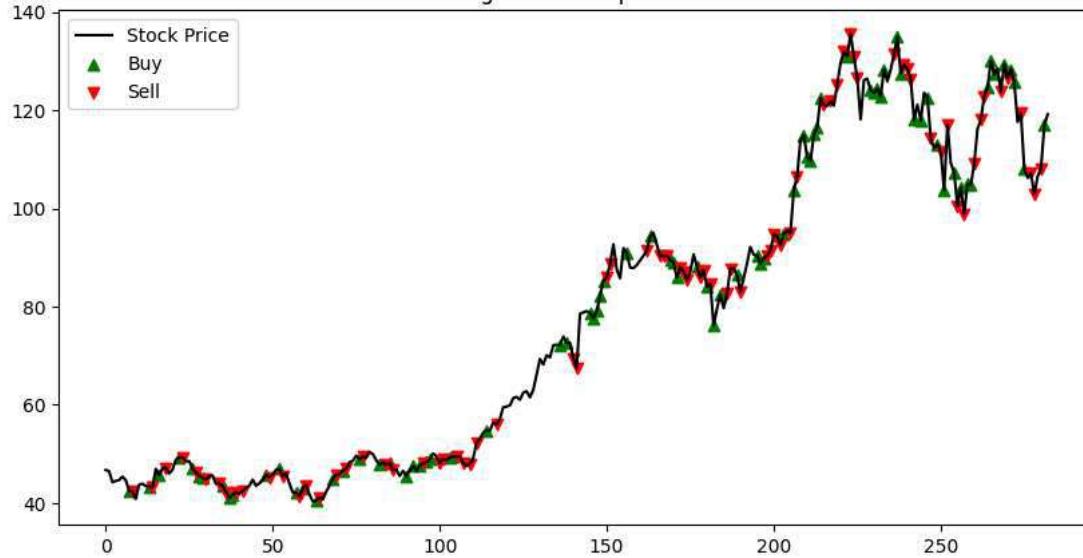




Running Episode 164/500

Episode 164 Metrics: {'Total Profit': '\$78.08', 'Win Rate': '59.21%', 'Profit Factor': '1.43', 'Sharpe Ratio': '0.12', 'Max Drawdown':

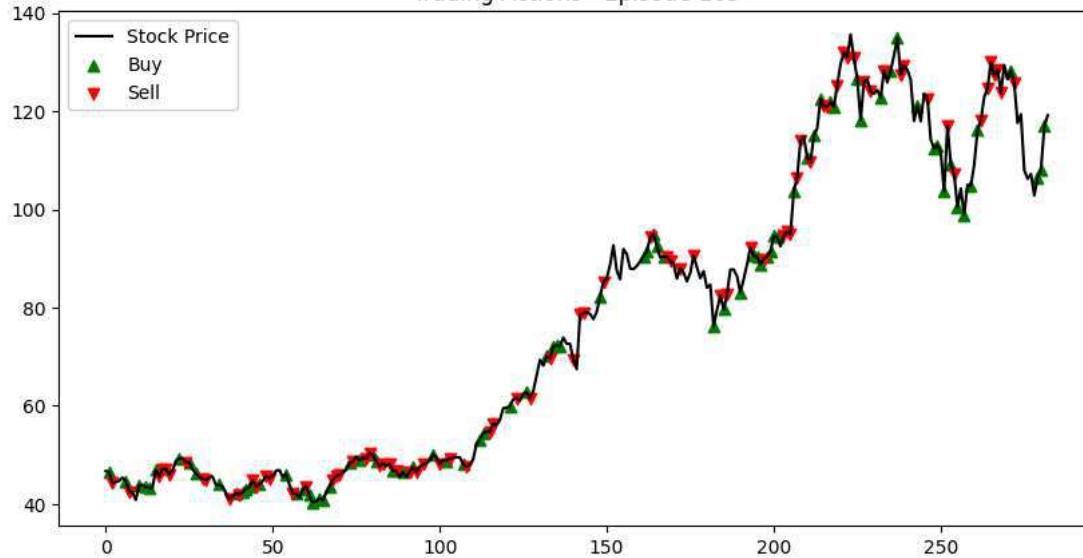
Trading Actions - Episode 164



Running Episode 165/500

Episode 165 Metrics: {'Total Profit': '\$307.38', 'Win Rate': '64.10%', 'Profit Factor': '6.36', 'Sharpe Ratio': '0.55', 'Max Drawdown':

Trading Actions - Episode 165

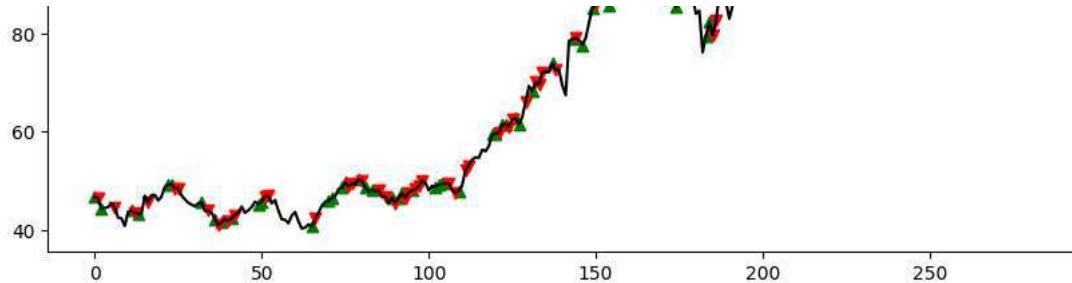


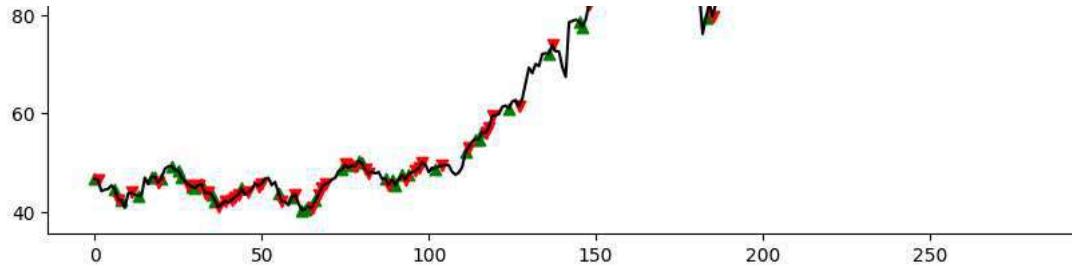
Running Episode 166/500

Episode 166 Metrics: {'Total Profit': '\$69.26', 'Win Rate': '66.20%', 'Profit Factor': '1.55', 'Sharpe Ratio': '0.12', 'Max Drawdown':

Trading Actions - Episode 166



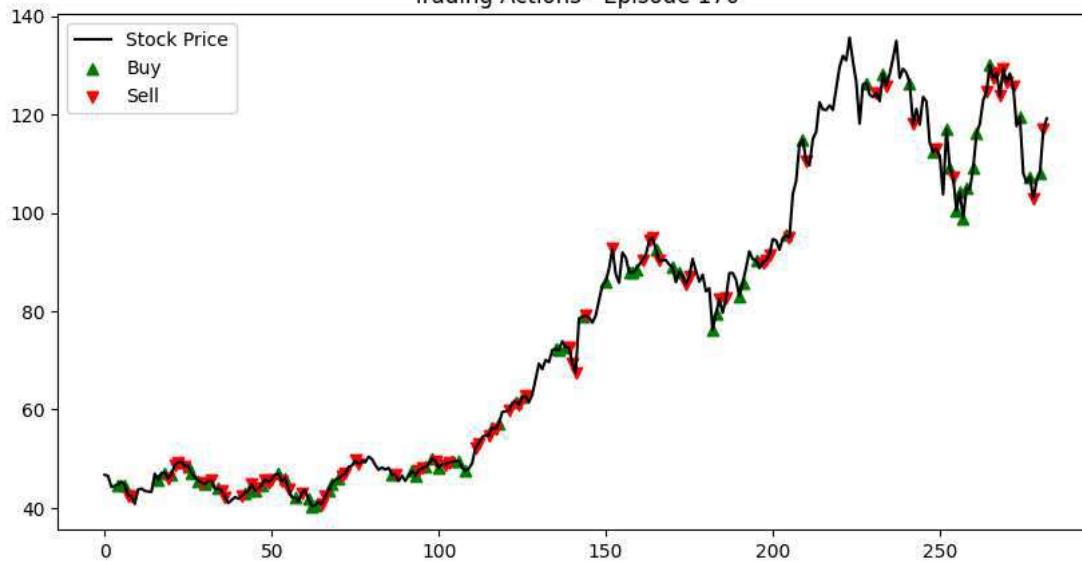




Running Episode 170/500

Episode 170 Metrics: {'Total Profit': '\$143.37', 'Win Rate': '60.00%', 'Profit Factor': '2.49', 'Sharpe Ratio': '0.26', 'Max Drawdown': ''}

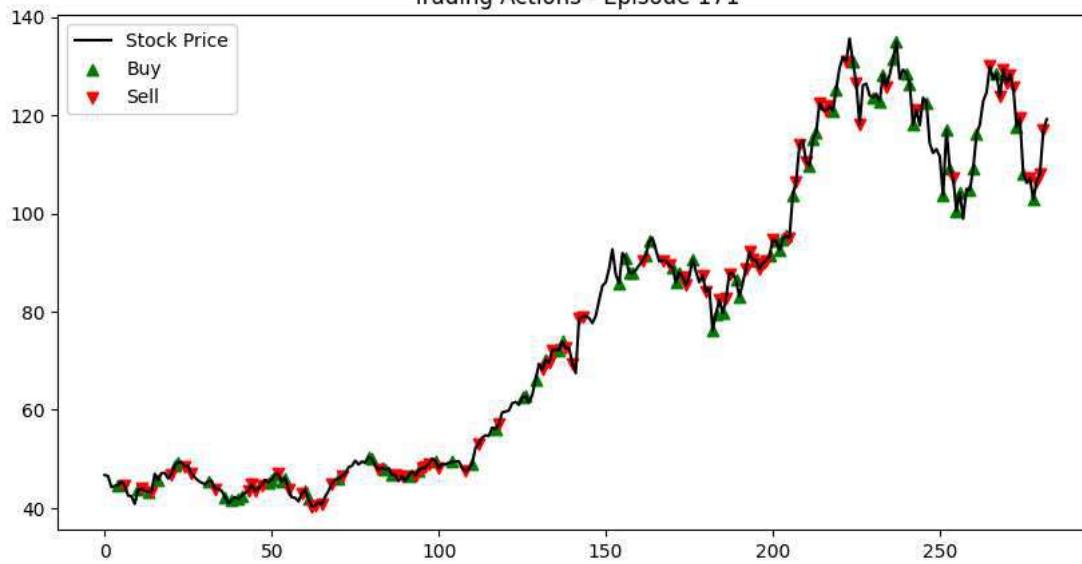
Trading Actions - Episode 170



Running Episode 171/500

Episode 171 Metrics: {'Total Profit': '\$119.54', 'Win Rate': '53.85%', 'Profit Factor': '1.93', 'Sharpe Ratio': '0.24', 'Max Drawdown': ''}

Trading Actions - Episode 171

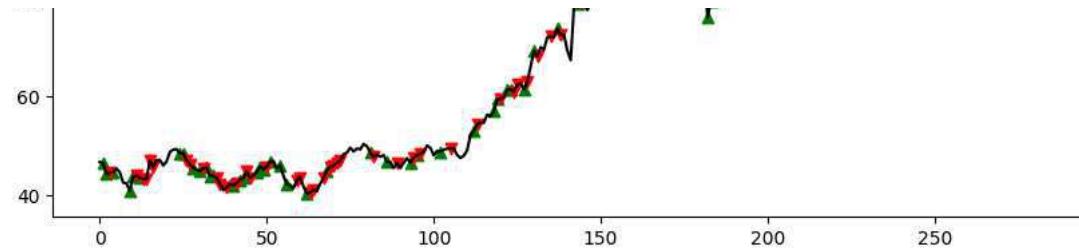


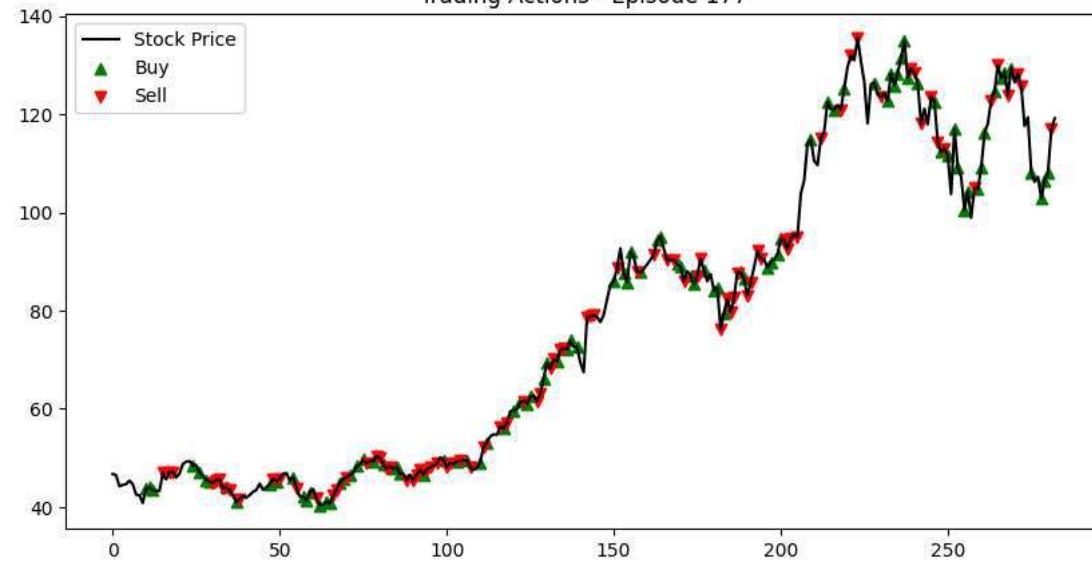
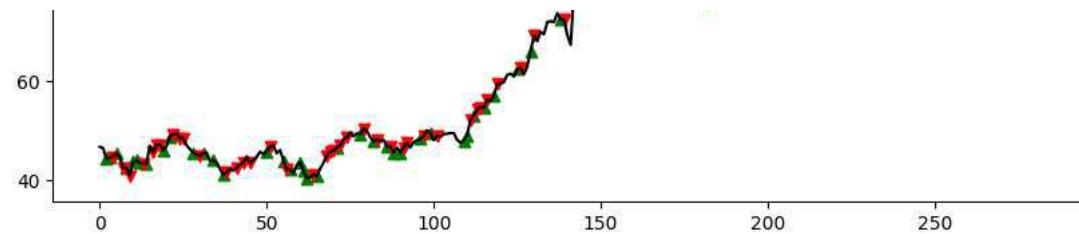
Running Episode 172/500

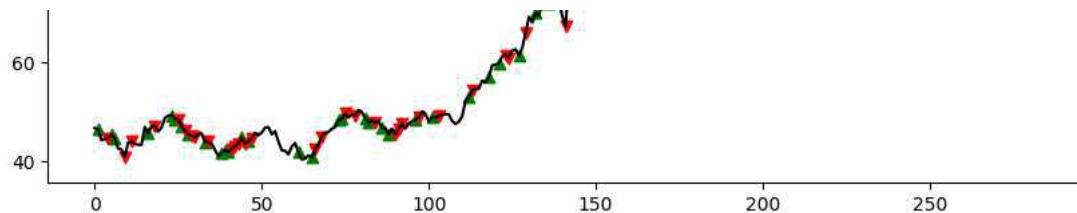
Episode 172 Metrics: {'Total Profit': '\$77.91', 'Win Rate': '56.25%', 'Profit Factor': '1.56', 'Sharpe Ratio': '0.15', 'Max Drawdown': ''}

Trading Actions - Episode 172



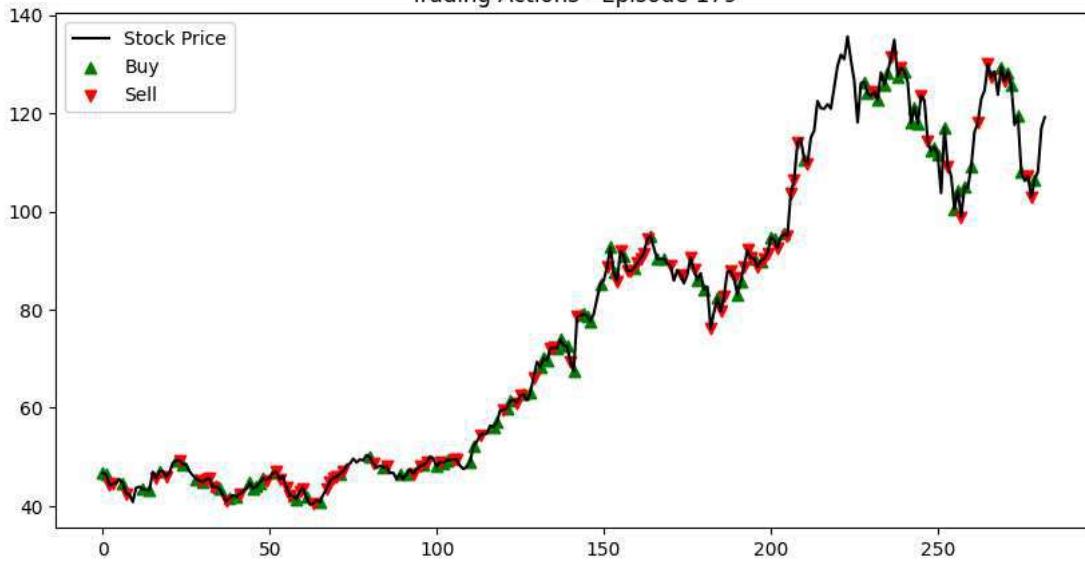






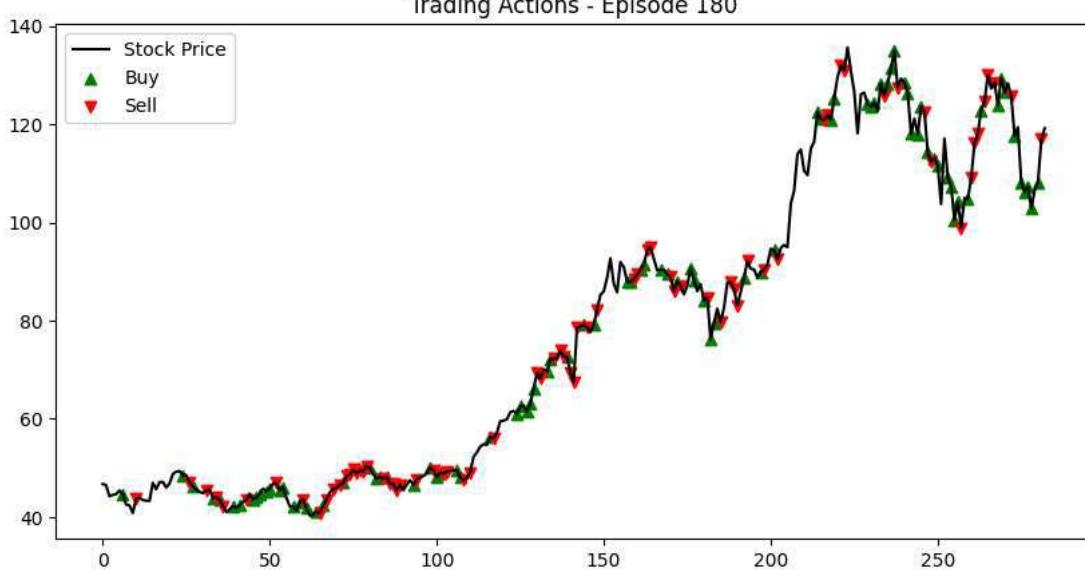
Running Episode 179/500

Episode 179 Metrics: {'Total Profit': '\$244.72', 'Win Rate': '67.06%', 'Profit Factor': '2.54', 'Sharpe Ratio': '0.34', 'Max Drawdown': ''}



Running Episode 180/500

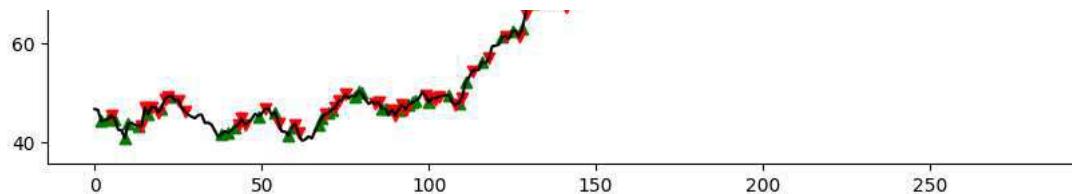
Episode 180 Metrics: {'Total Profit': '\$37.22', 'Win Rate': '58.90%', 'Profit Factor': '1.25', 'Sharpe Ratio': '0.07', 'Max Drawdown': ''}



Running Episode 181/500

Episode 181 Metrics: {'Total Profit': '\$122.75', 'Win Rate': '64.71%', 'Profit Factor': '1.74', 'Sharpe Ratio': '0.18', 'Max Drawdown': ''}

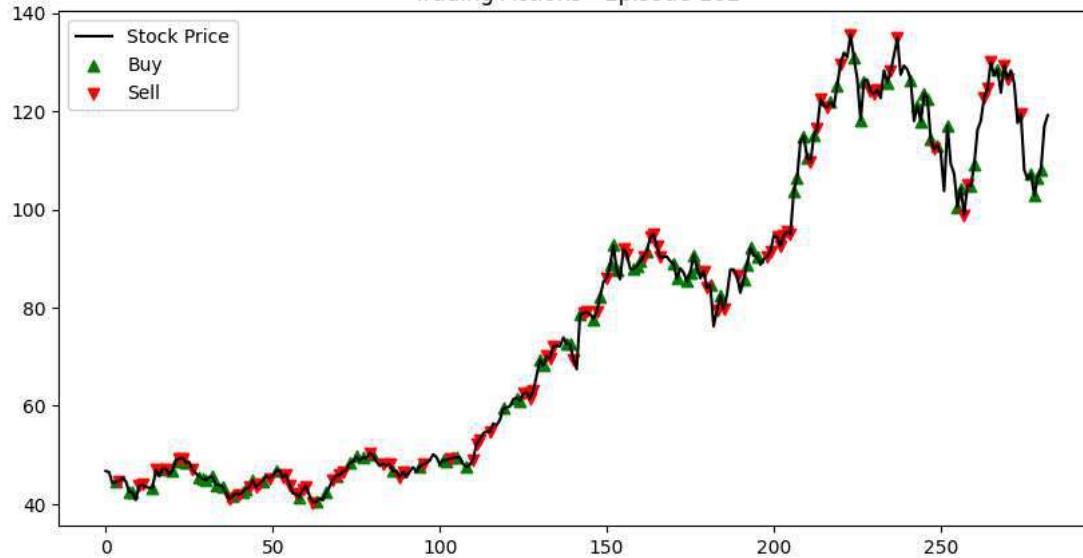




Running Episode 182/500

Episode 182 Metrics: {'Total Profit': '\$165.22', 'Win Rate': '67.06%', 'Profit Factor': '2.45', 'Sharpe Ratio': '0.31', 'Max Drawdown'}

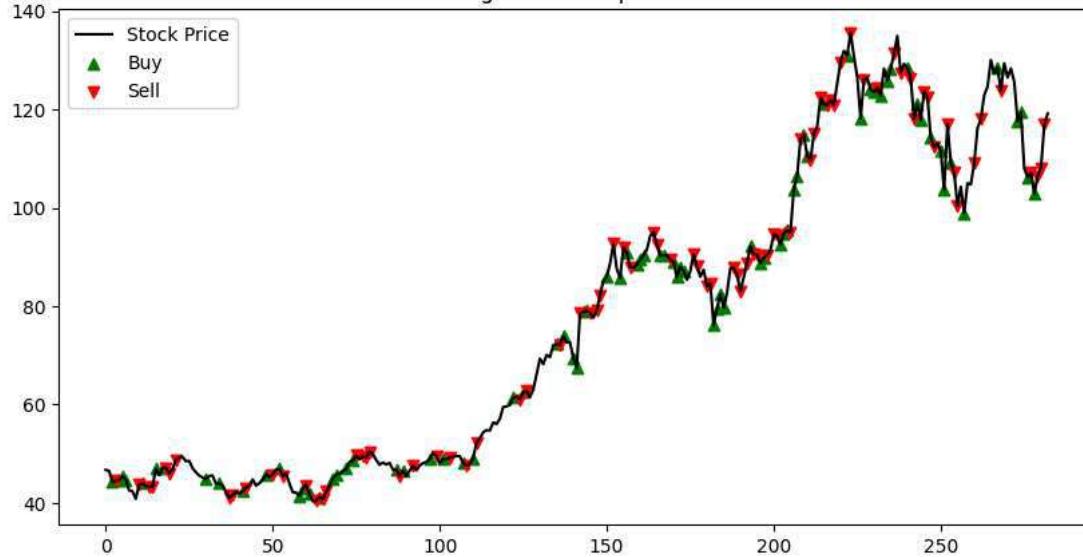
Trading Actions - Episode 182



Running Episode 183/500

Episode 183 Metrics: {'Total Profit': '\$230.31', 'Win Rate': '66.67%', 'Profit Factor': '3.46', 'Sharpe Ratio': '0.42', 'Max Drawdown'}

Trading Actions - Episode 183

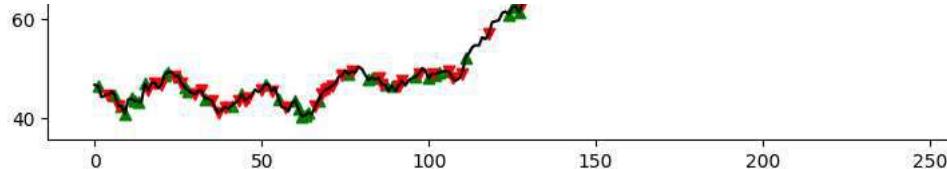


Running Episode 184/500

Episode 184 Metrics: {'Total Profit': '\$131.07', 'Win Rate': '59.21%', 'Profit Factor': '2.41', 'Sharpe Ratio': '0.28', 'Max Drawdown'}

Trading Actions - Episode 184

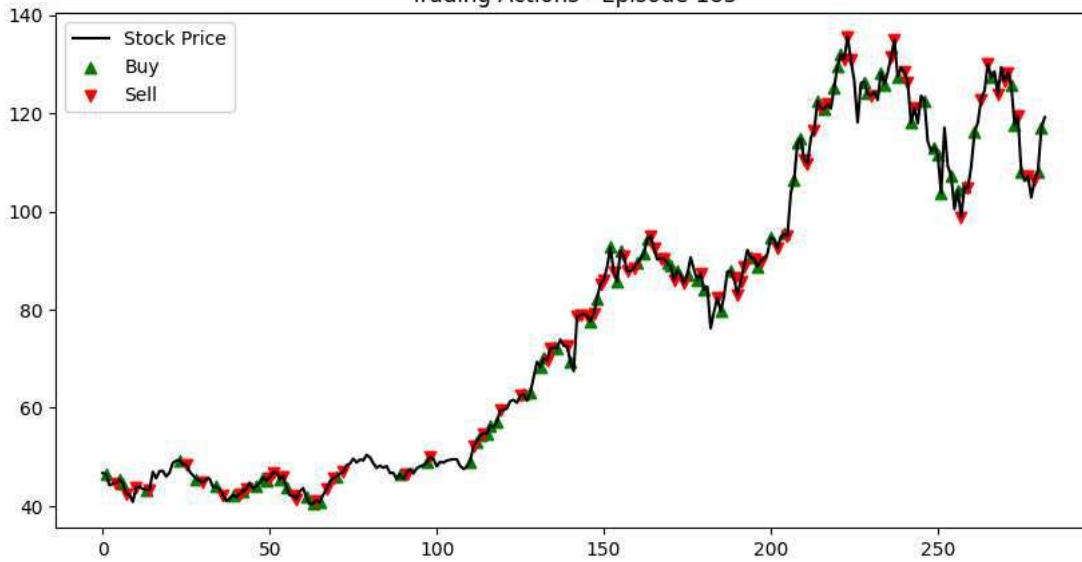




Running Episode 185/500

Episode 185 Metrics: {'Total Profit': '\$195.32', 'Win Rate': '61.04%', 'Profit Factor': '2.59', 'Sharpe Ratio': '0.31', 'Max Drawdown': ''}

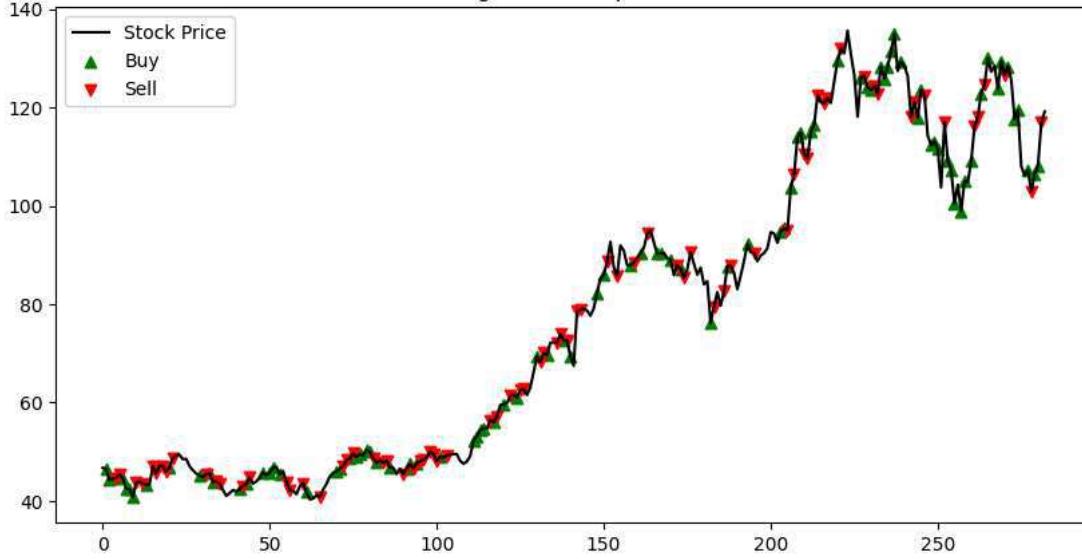
Trading Actions - Episode 185



Running Episode 186/500

Episode 186 Metrics: {'Total Profit': '\$67.58', 'Win Rate': '64.47%', 'Profit Factor': '1.54', 'Sharpe Ratio': '0.16', 'Max Drawdown': ''}

Trading Actions - Episode 186

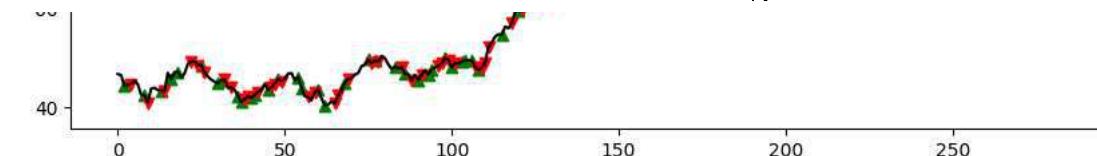


Running Episode 187/500

Episode 187 Metrics: {'Total Profit': '\$11.29', 'Win Rate': '54.29%', 'Profit Factor': '1.09', 'Sharpe Ratio': '0.02', 'Max Drawdown': ''}

Trading Actions - Episode 187

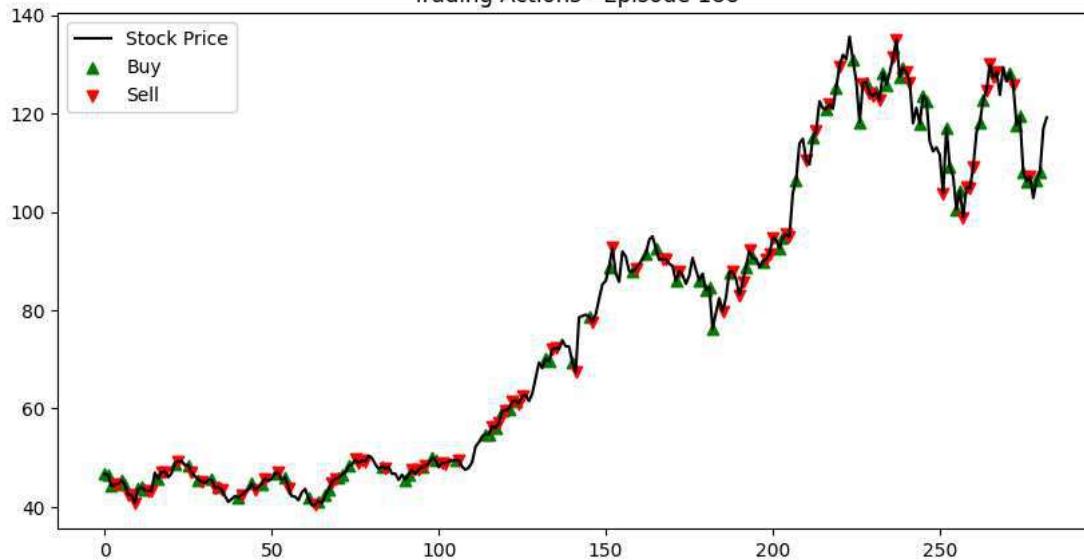




Running Episode 188/500

Episode 188 Metrics: {'Total Profit': '\$43.32', 'Win Rate': '56.79%', 'Profit Factor': '1.33', 'Sharpe Ratio': '0.08', 'Max Drawdown':

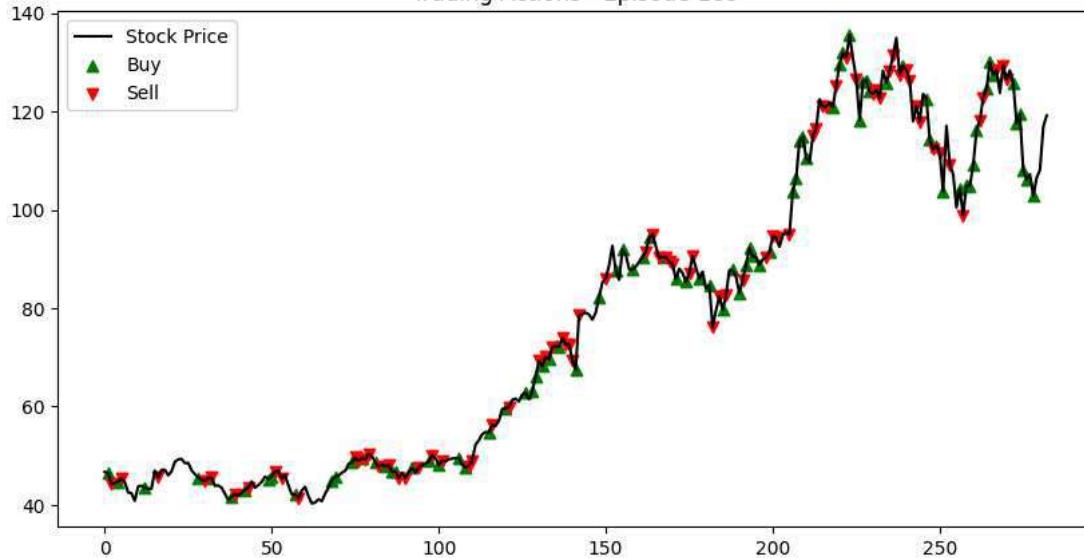
Trading Actions - Episode 188



Running Episode 189/500

Episode 189 Metrics: {'Total Profit': '\$245.67', 'Win Rate': '68.42%', 'Profit Factor': '3.69', 'Sharpe Ratio': '0.41', 'Max Drawdown':

Trading Actions - Episode 189



Running Episode 190/500

Episode 190 Metrics: {'Total Profit': '\$149.11', 'Win Rate': '64.86%', 'Profit Factor': '2.69', 'Sharpe Ratio': '0.33', 'Max Drawdown':

Trading Actions - Episode 190

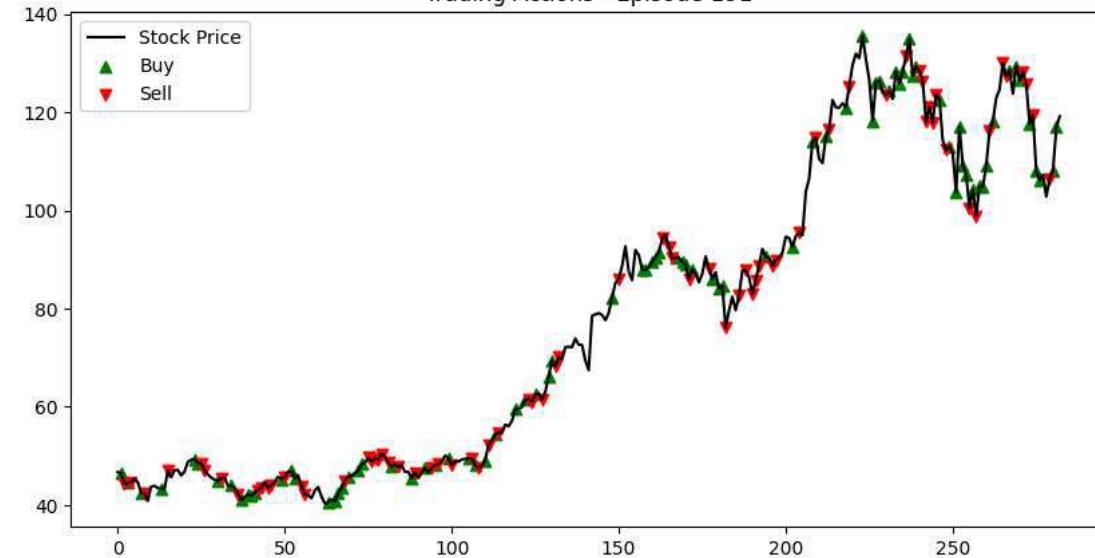




Running Episode 191/500

Episode 191 Metrics: {'Total Profit': '\$10.69', 'Win Rate': '58.33%', 'Profit Factor': '1.06', 'Sharpe Ratio': '0.02', 'Max Drawdown': ''}

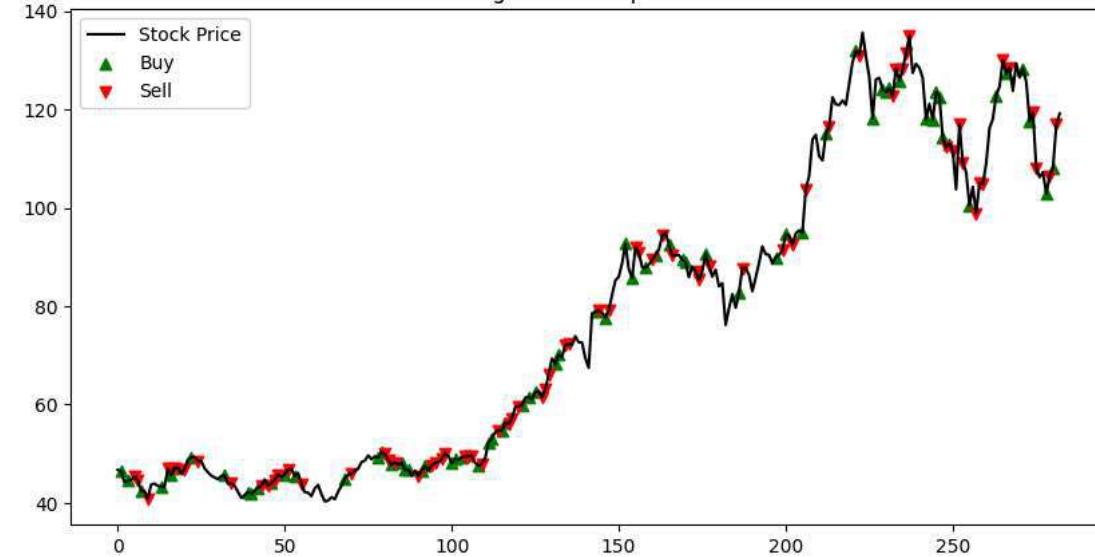
Trading Actions - Episode 191



Running Episode 192/500

Episode 192 Metrics: {'Total Profit': '\$32.32', 'Win Rate': '67.14%', 'Profit Factor': '1.32', 'Sharpe Ratio': '0.10', 'Max Drawdown': ''}

Trading Actions - Episode 192



Running Episode 193/500

Episode 193 Metrics: {'Total Profit': '\$127.92', 'Win Rate': '57.83%', 'Profit Factor': '1.95', 'Sharpe Ratio': '0.22', 'Max Drawdown': ''}

Trading Actions - Episode 193

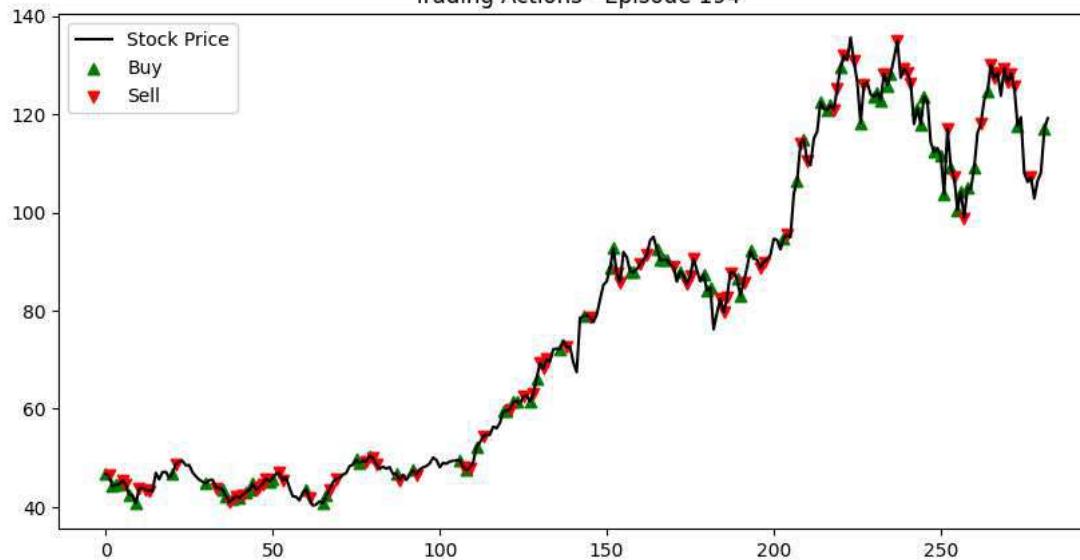




Running Episode 194/500

Episode 194 Metrics: {'Total Profit': '\$161.27', 'Win Rate': '60.53%', 'Profit Factor': '2.41', 'Sharpe Ratio': '0.26', 'Max Drawdown'}

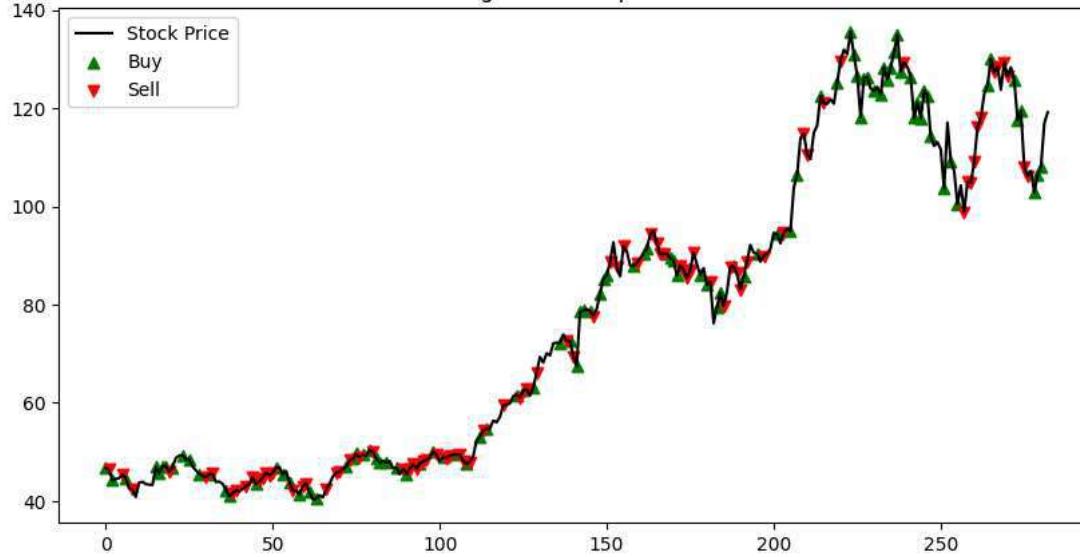
Trading Actions - Episode 194



Running Episode 195/500

Episode 195 Metrics: {'Total Profit': '-\$70.49', 'Win Rate': '48.78%', 'Profit Factor': '0.70', 'Sharpe Ratio': '-0.11', 'Max Drawdown'}

Trading Actions - Episode 195



Running Episode 196/500

Episode 196 Metrics: {'Total Profit': '\$169.90', 'Win Rate': '63.95%', 'Profit Factor': '2.45', 'Sharpe Ratio': '0.29', 'Max Drawdown'}

Trading Actions - Episode 196

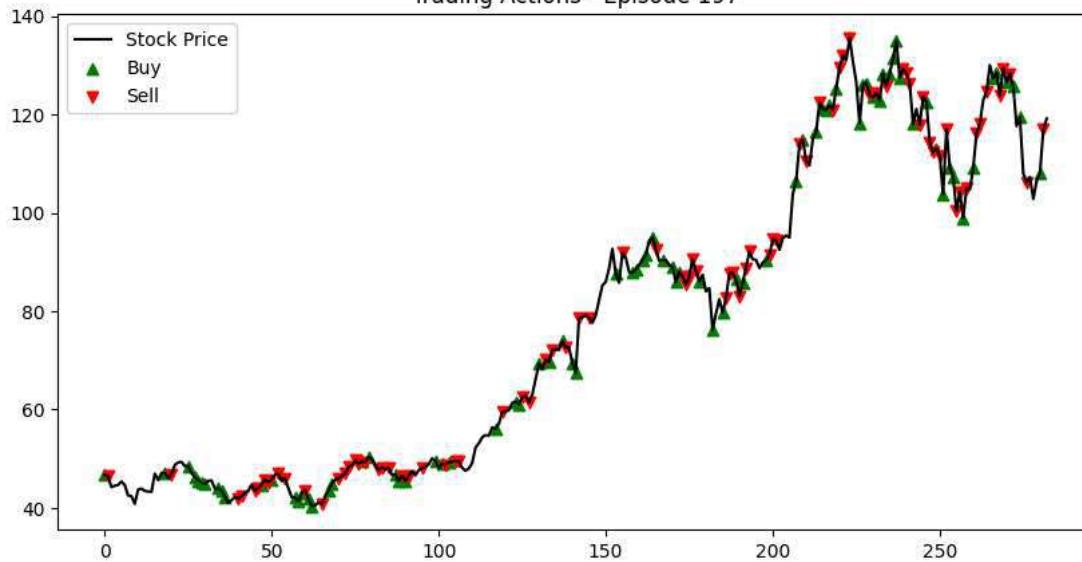




Running Episode 197/500

Episode 197 Metrics: {'Total Profit': '\$73.06', 'Win Rate': '54.32%', 'Profit Factor': '1.43', 'Sharpe Ratio': '0.13', 'Max Drawdown': ''}

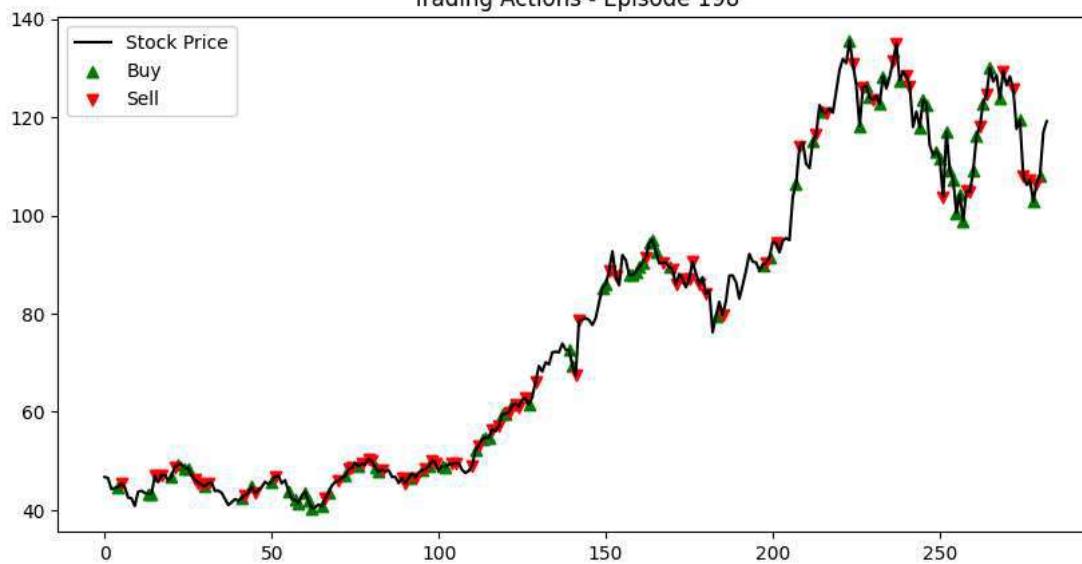
Trading Actions - Episode 197



Running Episode 198/500

Episode 198 Metrics: {'Total Profit': '\$91.08', 'Win Rate': '69.44%', 'Profit Factor': '1.81', 'Sharpe Ratio': '0.21', 'Max Drawdown': ''}

Trading Actions - Episode 198



Running Episode 199/500

Episode 199 Metrics: {'Total Profit': '\$141.17', 'Win Rate': '58.23%', 'Profit Factor': '2.18', 'Sharpe Ratio': '0.27', 'Max Drawdown': ''}

Trading Actions - Episode 199

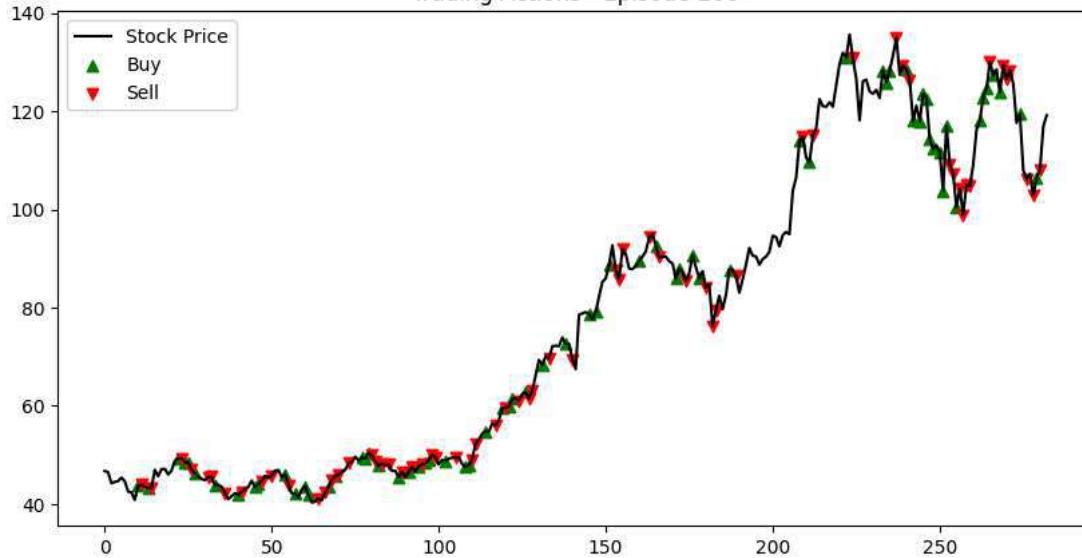




Running Episode 200/500

Episode 200 Metrics: {'Total Profit': '-\$30.02', 'Win Rate': '57.81%', 'Profit Factor': '0.83', 'Sharpe Ratio': '-0.06', 'Max Drawdown': '10.00'}

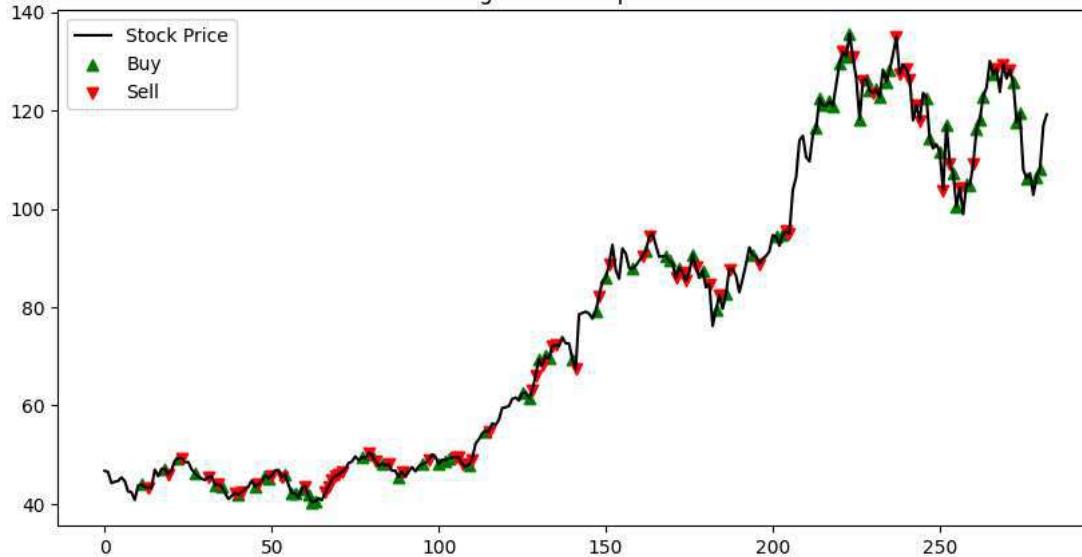
Trading Actions - Episode 200



Running Episode 201/500

Episode 201 Metrics: {'Total Profit': '\$4.46', 'Win Rate': '60.94%', 'Profit Factor': '1.04', 'Sharpe Ratio': '0.01', 'Max Drawdown': '10.00'}

Trading Actions - Episode 201

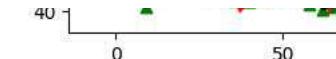


Running Episode 202/500

Episode 202 Metrics: {'Total Profit': '\$270.94', 'Win Rate': '58.62%', 'Profit Factor': '2.95', 'Sharpe Ratio': '0.35', 'Max Drawdown': '10.00'}

Trading Actions - Episode 202

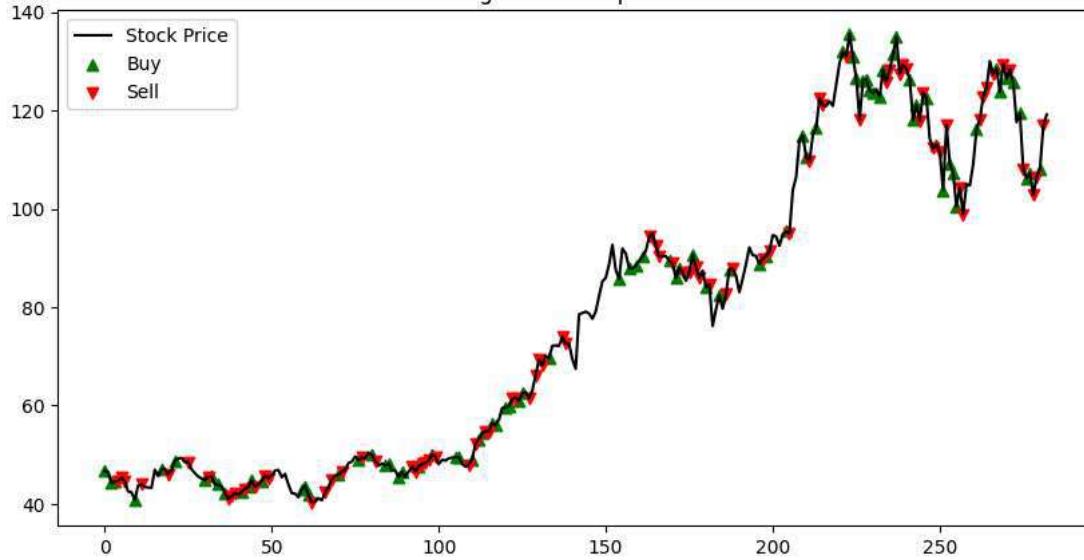




Running Episode 203/500

Episode 203 Metrics: {'Total Profit': '\$11.12', 'Win Rate': '60.76%', 'Profit Factor': '1.05', 'Sharpe Ratio': '0.02', 'Max Drawdown': ''}

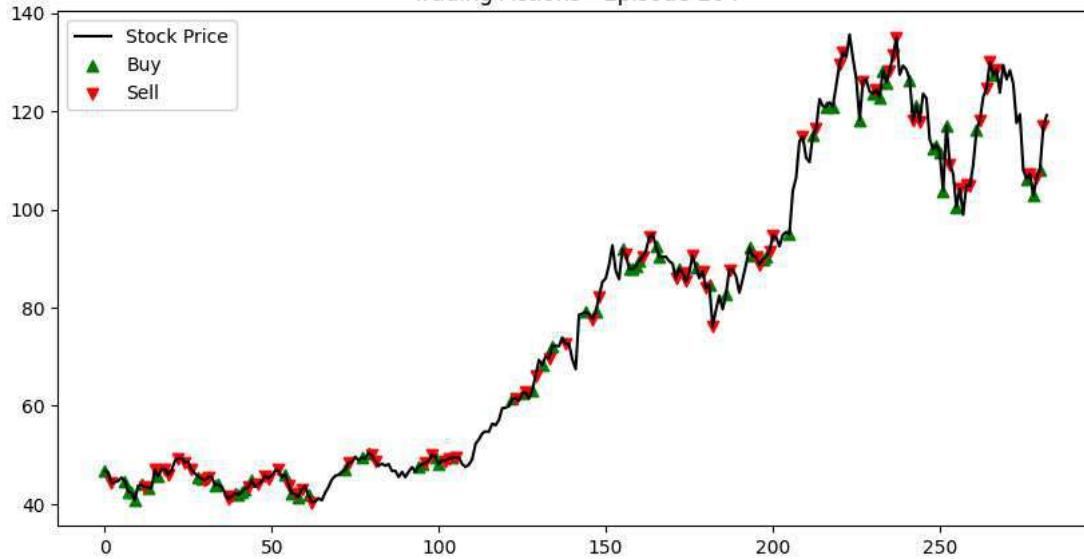
Trading Actions - Episode 203



Running Episode 204/500

Episode 204 Metrics: {'Total Profit': '\$119.06', 'Win Rate': '65.75%', 'Profit Factor': '2.55', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

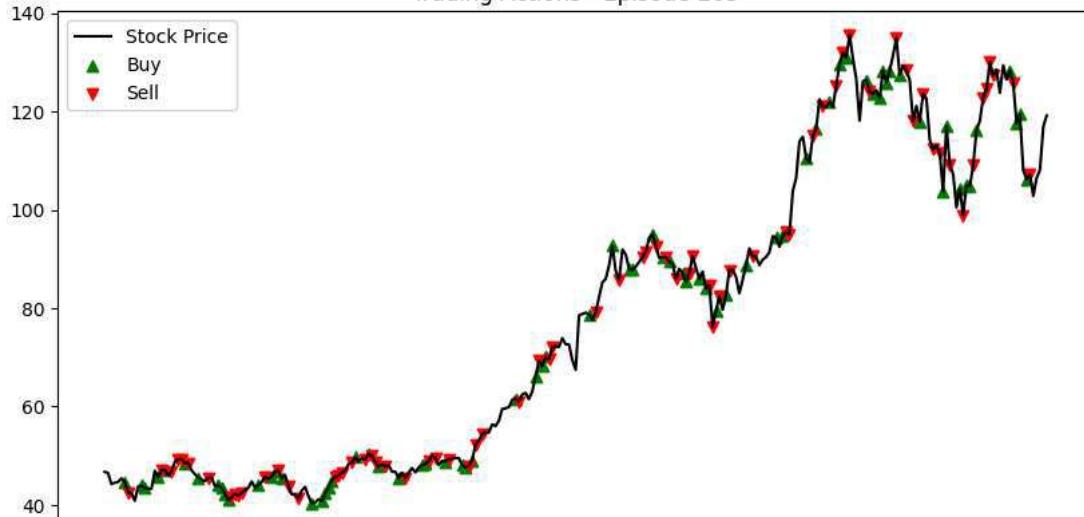
Trading Actions - Episode 204



Running Episode 205/500

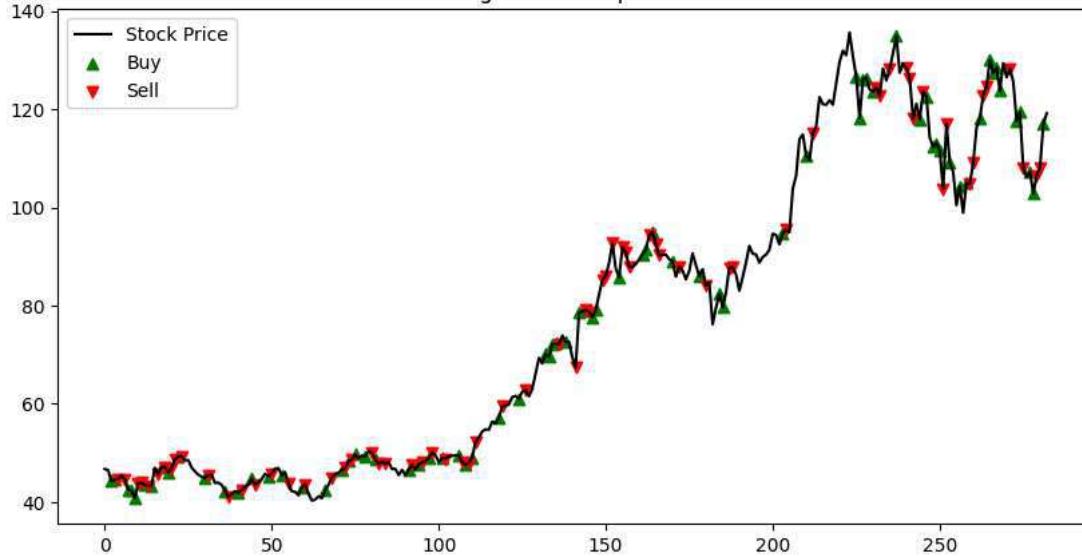
Episode 205 Metrics: {'Total Profit': '\$75.01', 'Win Rate': '61.97%', 'Profit Factor': '1.63', 'Sharpe Ratio': '0.16', 'Max Drawdown': ''}

Trading Actions - Episode 205



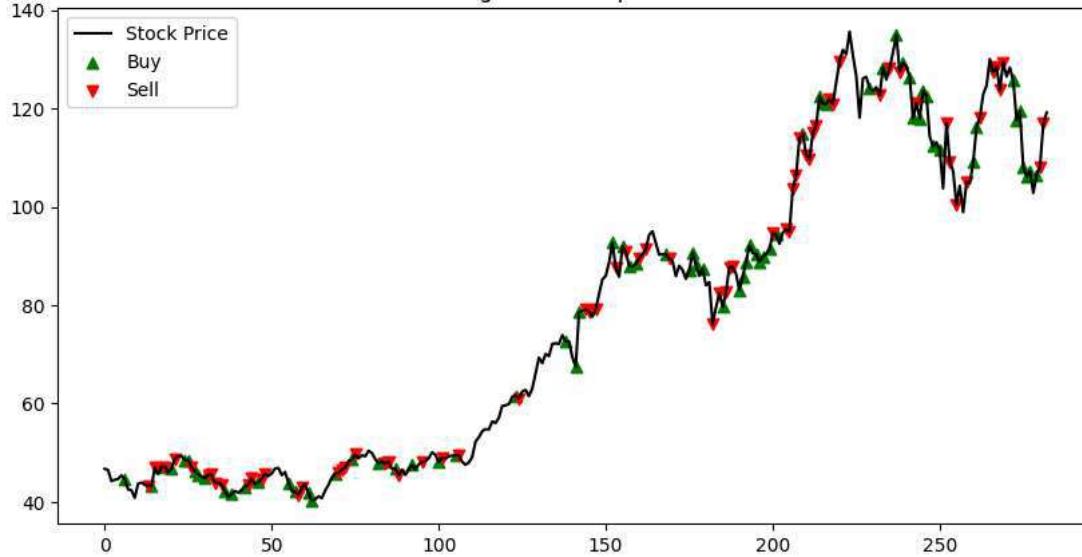
Running Episode 206/500
Episode 206 Metrics: {'Total Profit': '\$91.43', 'Win Rate': '70.59%', 'Profit Factor': '1.76', 'Sharpe Ratio': '0.18', 'Max Drawdown':

Trading Actions - Episode 206



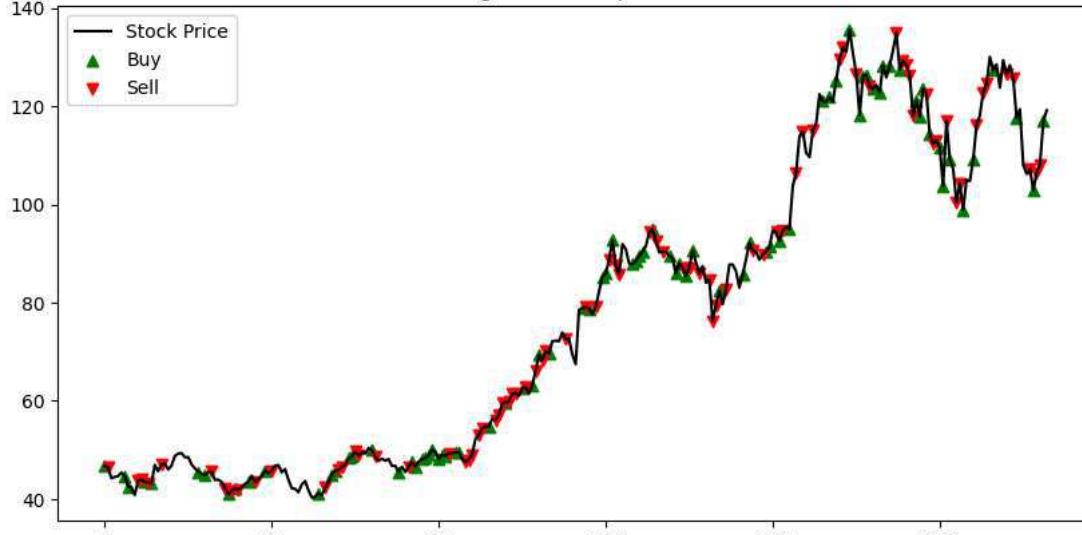
Running Episode 207/500
Episode 207 Metrics: {'Total Profit': '\$129.08', 'Win Rate': '55.22%', 'Profit Factor': '1.92', 'Sharpe Ratio': '0.22', 'Max Drawdown':

Trading Actions - Episode 207



Running Episode 208/500
Episode 208 Metrics: {'Total Profit': '\$132.36', 'Win Rate': '67.50%', 'Profit Factor': '1.74', 'Sharpe Ratio': '0.19', 'Max Drawdown':

Trading Actions - Episode 208

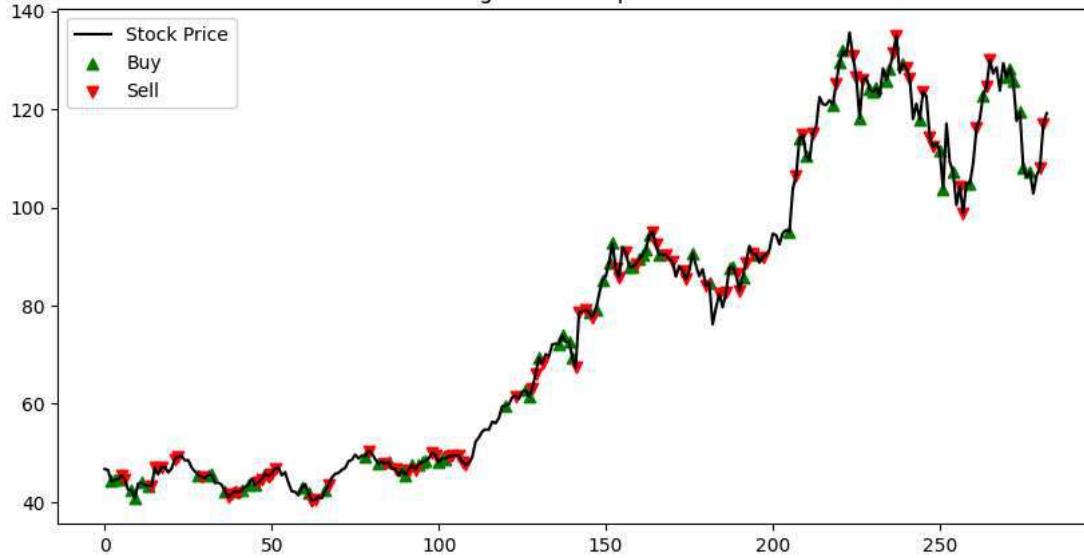


0 50 100 150 200 250

Running Episode 209/500

Episode 209 Metrics: {'Total Profit': '\$60.16', 'Win Rate': '62.82%', 'Profit Factor': '1.44', 'Sharpe Ratio': '0.13', 'Max Drawdown':

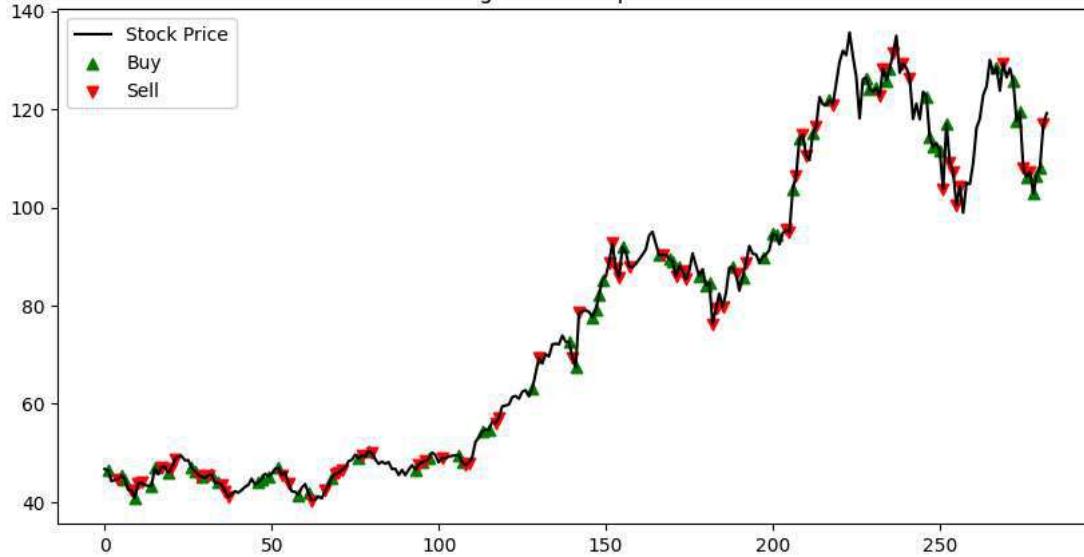
Trading Actions - Episode 209



Running Episode 210/500

Episode 210 Metrics: {'Total Profit': '-\$33.79', 'Win Rate': '45.45%', 'Profit Factor': '0.79', 'Sharpe Ratio': '-0.09', 'Max Drawdown':

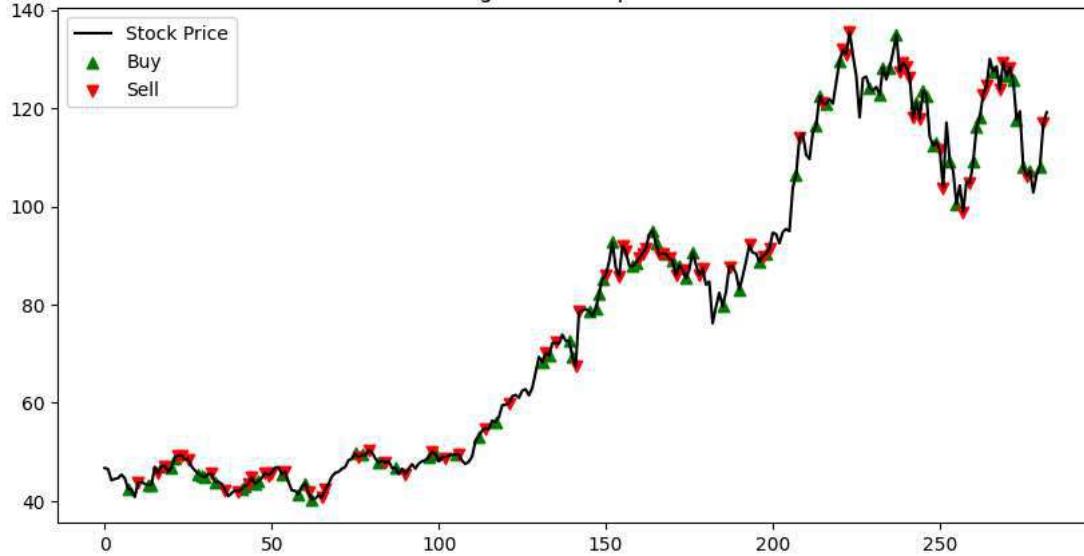
Trading Actions - Episode 210



Running Episode 211/500

Episode 211 Metrics: {'Total Profit': '\$82.39', 'Win Rate': '63.38%', 'Profit Factor': '1.59', 'Sharpe Ratio': '0.16', 'Max Drawdown':

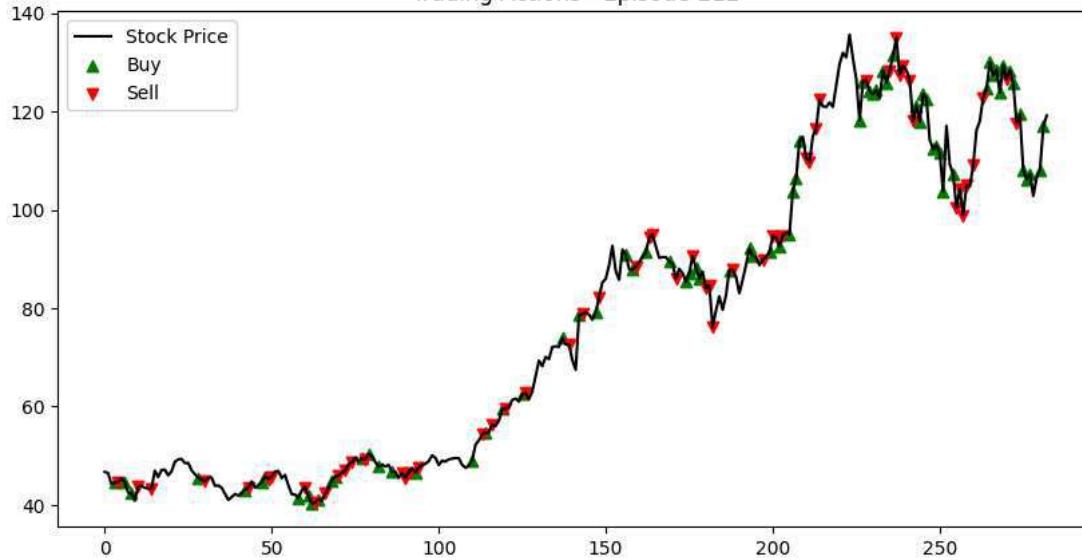
Trading Actions - Episode 211



Running Episode 212/500

Episode 212 Metrics: {'Total Profit': '\$8.52', 'Win Rate': '63.16%', 'Profit Factor': '1.06', 'Sharpe Ratio': '0.02', 'Max Drawdown': ''}

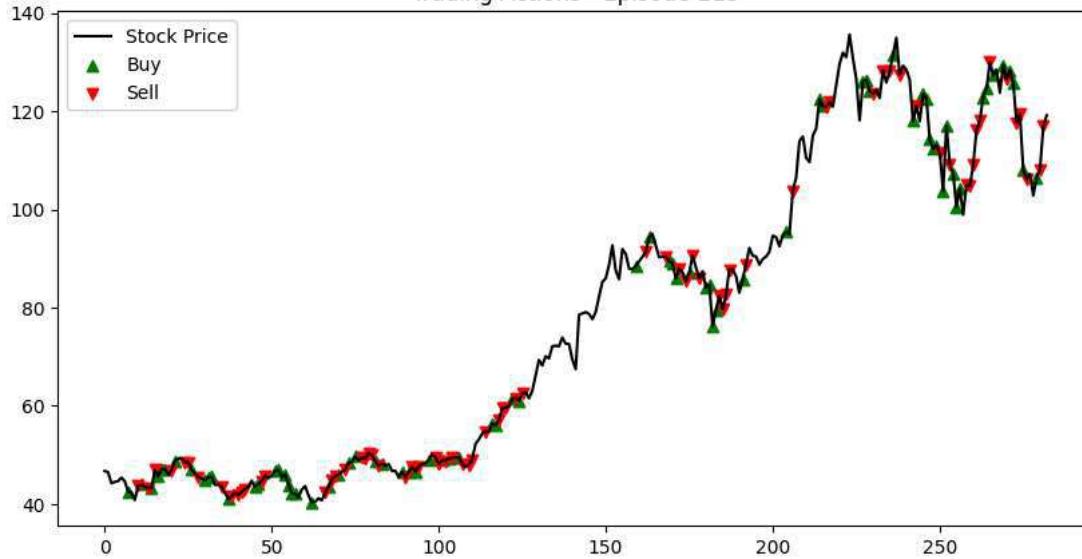
Trading Actions - Episode 212



Running Episode 213/500

Episode 213 Metrics: {'Total Profit': '\$41.73', 'Win Rate': '54.17%', 'Profit Factor': '1.27', 'Sharpe Ratio': '0.08', 'Max Drawdown': ''}

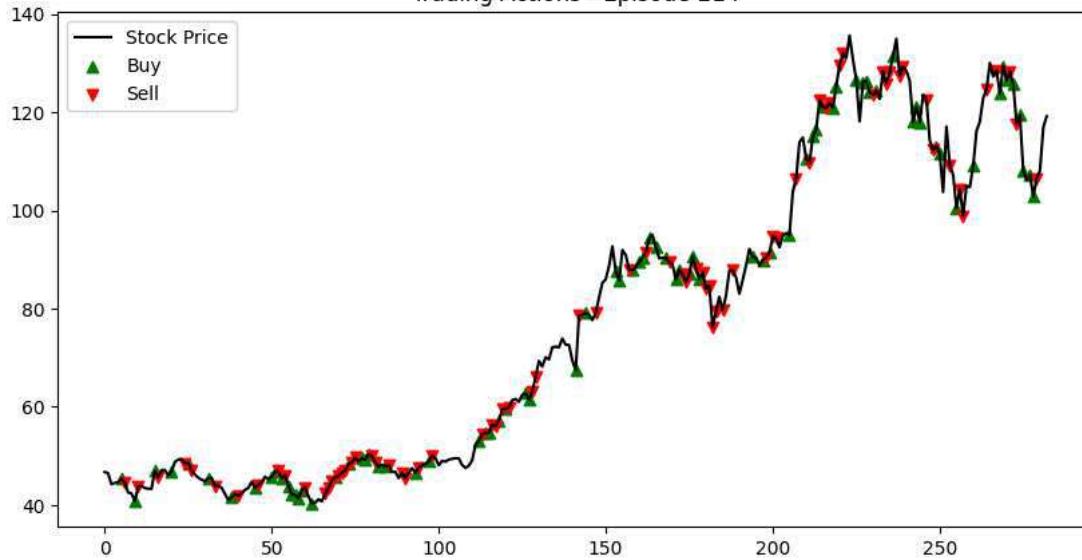
Trading Actions - Episode 213



Running Episode 214/500

Episode 214 Metrics: {'Total Profit': '\$24.63', 'Win Rate': '58.11%', 'Profit Factor': '1.16', 'Sharpe Ratio': '0.05', 'Max Drawdown': ''}

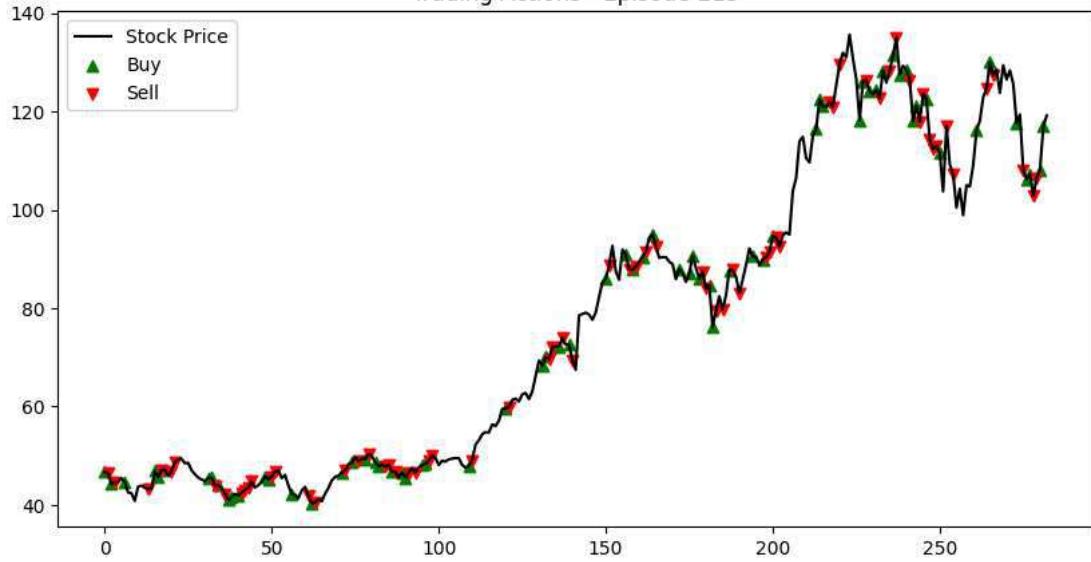
Trading Actions - Episode 214



Running Episode 215/500

Episode 215 Metrics: {'Total Profit': '-\$27.55', 'Win Rate': '55.22%', 'Profit Factor': '0.77', 'Sharpe Ratio': '-0.09', 'Max Drawdown':

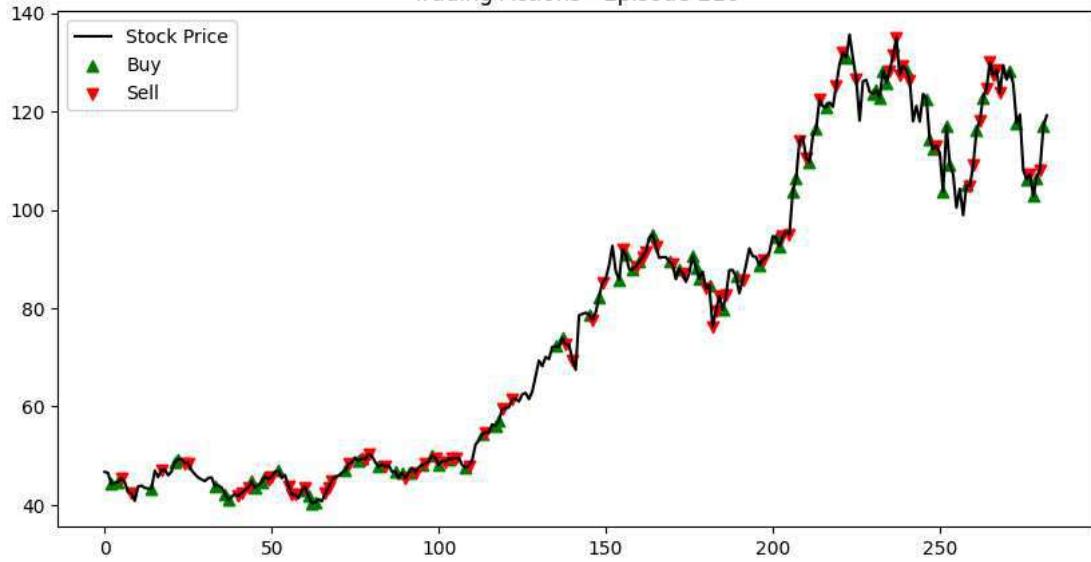
Trading Actions - Episode 215



Running Episode 216/500

Episode 216 Metrics: {'Total Profit': '\$92.18', 'Win Rate': '62.67%', 'Profit Factor': '1.79', 'Sharpe Ratio': '0.19', 'Max Drawdown':

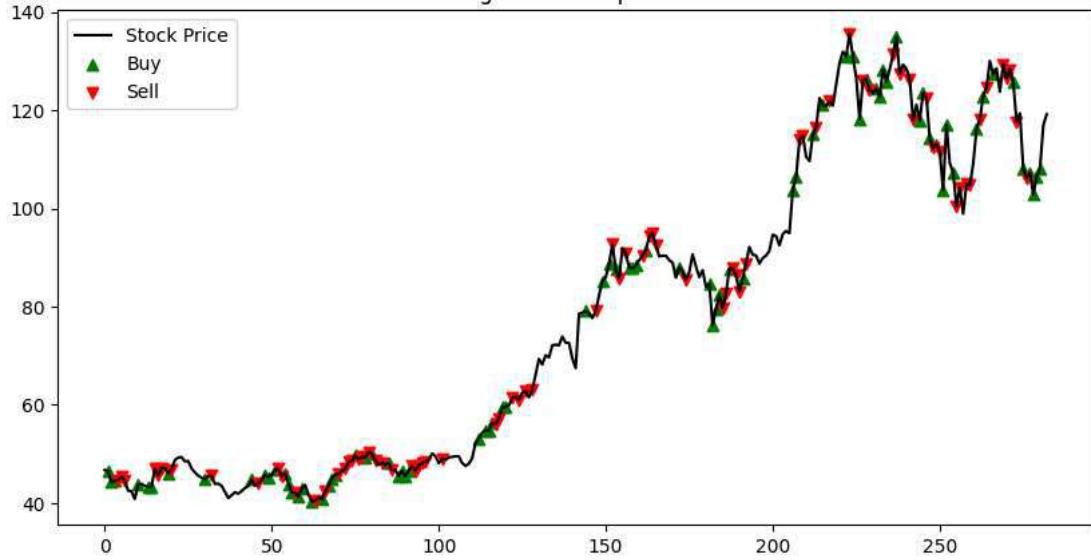
Trading Actions - Episode 216



Running Episode 217/500

Episode 217 Metrics: {'Total Profit': '\$84.42', 'Win Rate': '69.74%', 'Profit Factor': '1.62', 'Sharpe Ratio': '0.18', 'Max Drawdown':

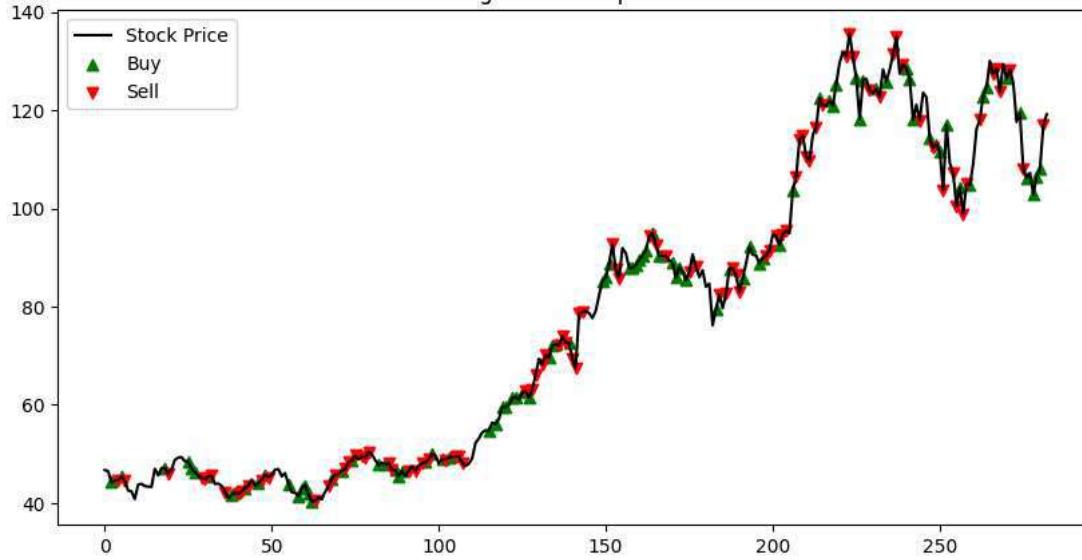
Trading Actions - Episode 217



Running Episode 218/500

Episode 218 Metrics: {'Total Profit': '\$247.95', 'Win Rate': '63.33%', 'Profit Factor': '2.51', 'Sharpe Ratio': '0.33', 'Max Drawdown':

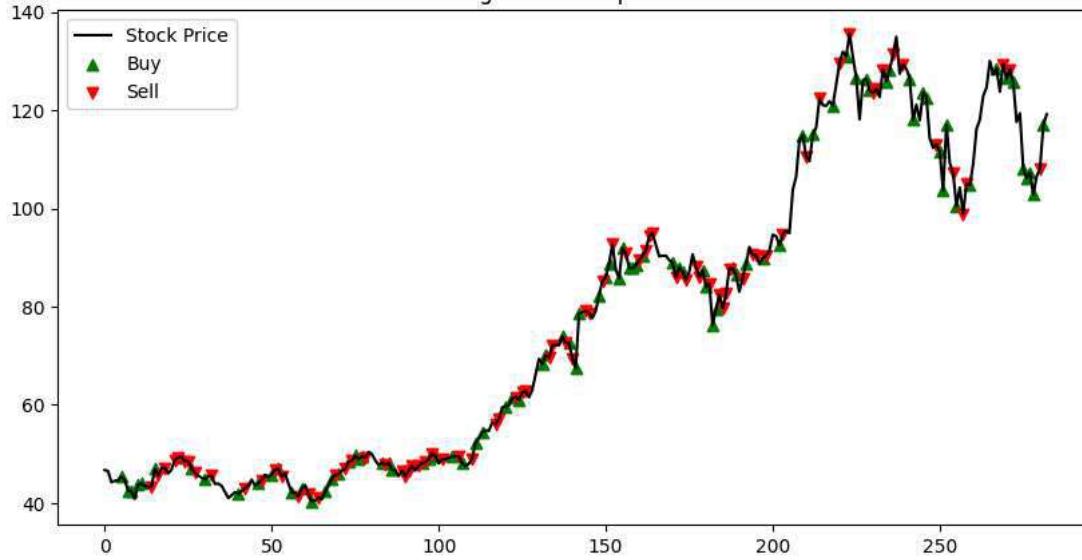
Trading Actions - Episode 218



Running Episode 219/500

Episode 219 Metrics: {'Total Profit': '\$57.44', 'Win Rate': '60.76%', 'Profit Factor': '1.44', 'Sharpe Ratio': '0.12', 'Max Drawdown':

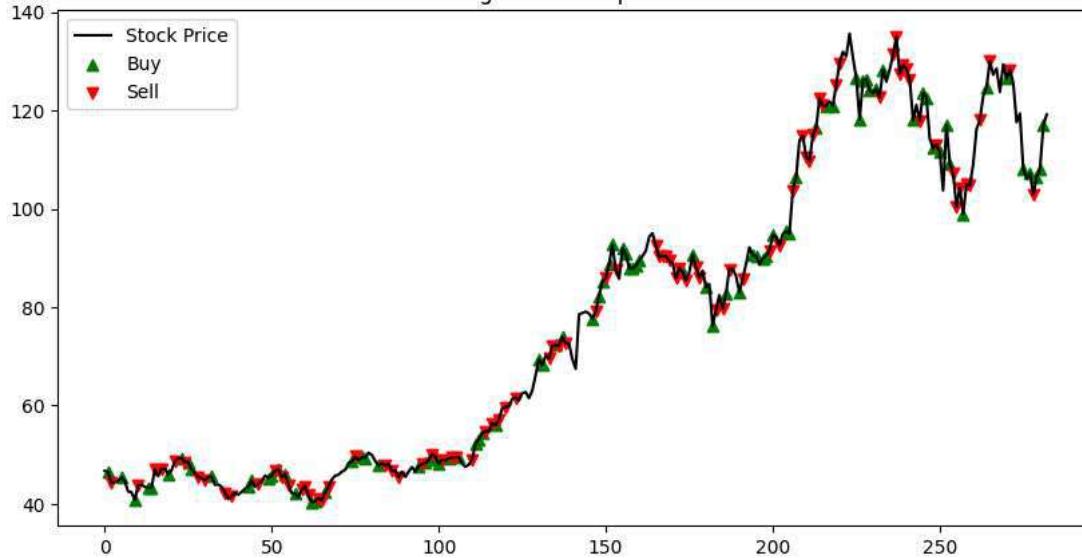
Trading Actions - Episode 219



Running Episode 220/500

Episode 220 Metrics: {'Total Profit': '\$135.63', 'Win Rate': '58.82%', 'Profit Factor': '2.05', 'Sharpe Ratio': '0.24', 'Max Drawdown':

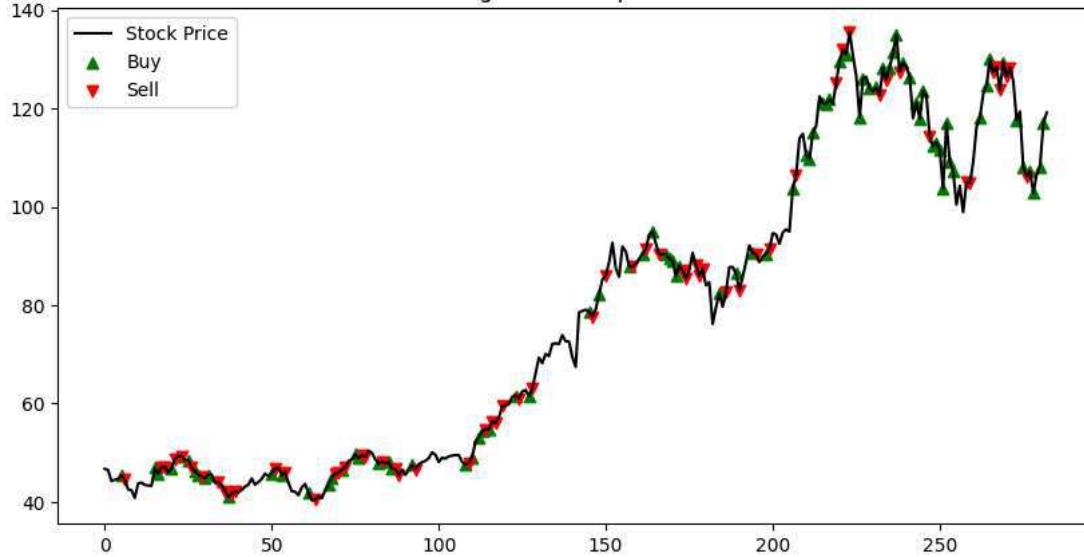
Trading Actions - Episode 220



Running Episode 221/500

Episode 221 Metrics: {'Total Profit': '-\$4.79', 'Win Rate': '55.00%', 'Profit Factor': '0.96', 'Sharpe Ratio': '-0.01', 'Max Drawdown':

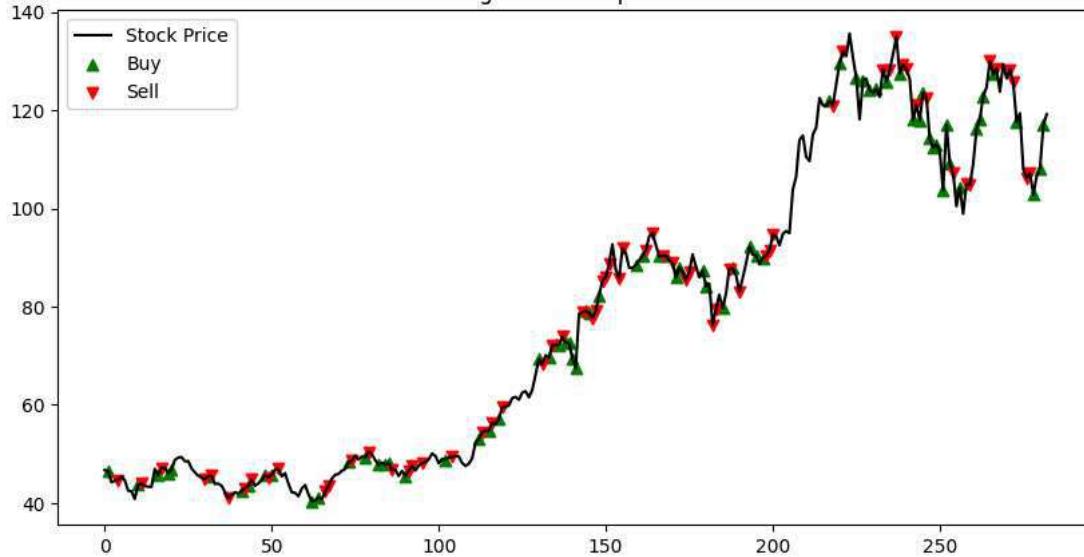
Trading Actions - Episode 221



Running Episode 222/500

Episode 222 Metrics: {'Total Profit': '\$134.51', 'Win Rate': '65.62%', 'Profit Factor': '2.54', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

Trading Actions - Episode 222



Running Episode 223/500

Episode 223 Metrics: {'Total Profit': '\$77.32', 'Win Rate': '53.75%', 'Profit Factor': '1.51', 'Sharpe Ratio': '0.13', 'Max Drawdown': ''}

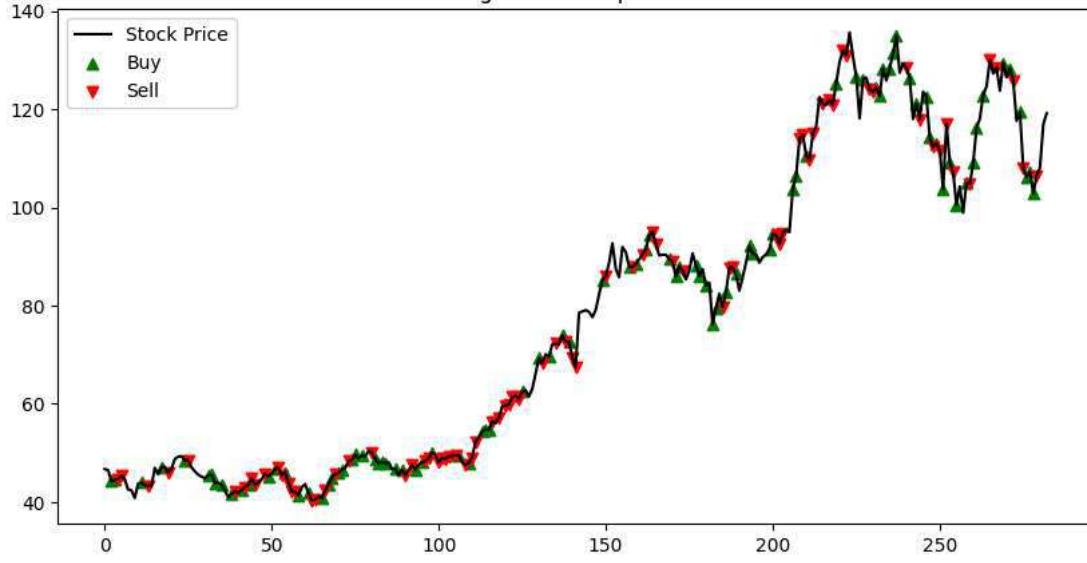
Trading Actions - Episode 223



Running Episode 224/500

Episode 224 Metrics: {'Total Profit': '\$233.23', 'Win Rate': '60.49%', 'Profit Factor': '2.45', 'Sharpe Ratio': '0.28', 'Max Drawdown': ''}

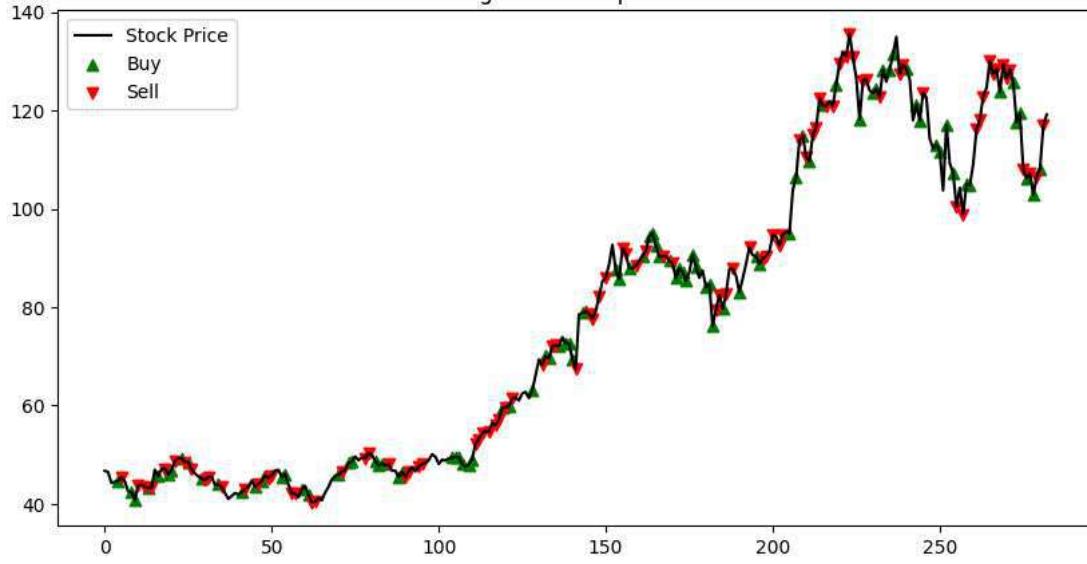
Trading Actions - Episode 224



Running Episode 225/500

Episode 225 Metrics: {'Total Profit': '\$422.78', 'Win Rate': '70.33%', 'Profit Factor': '3.17', 'Sharpe Ratio': '0.36', 'Max Drawdown': ''}

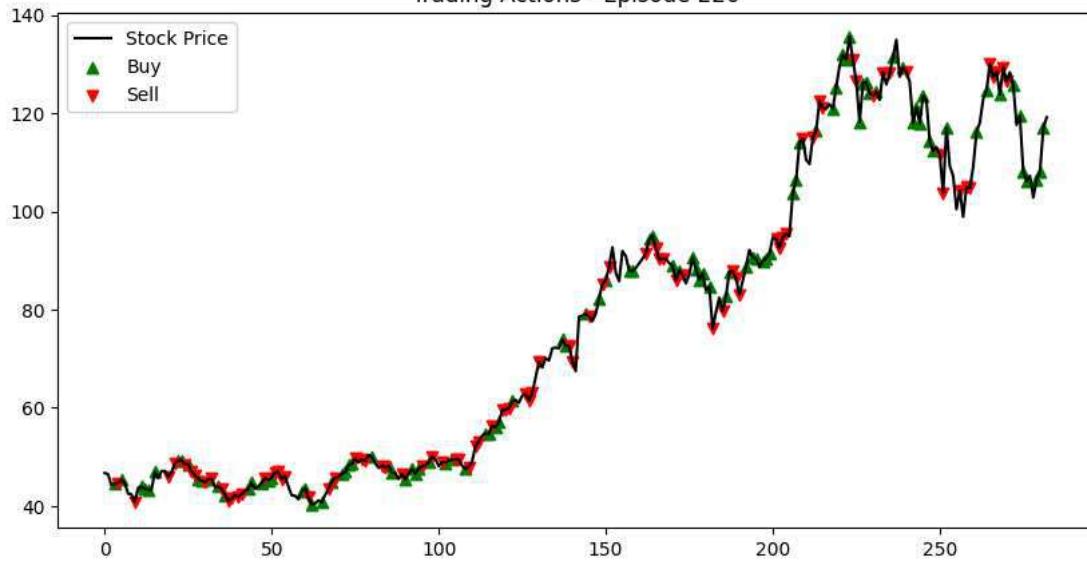
Trading Actions - Episode 225



Running Episode 226/500

Episode 226 Metrics: {'Total Profit': '\$175.61', 'Win Rate': '63.10%', 'Profit Factor': '1.90', 'Sharpe Ratio': '0.21', 'Max Drawdown': ''}

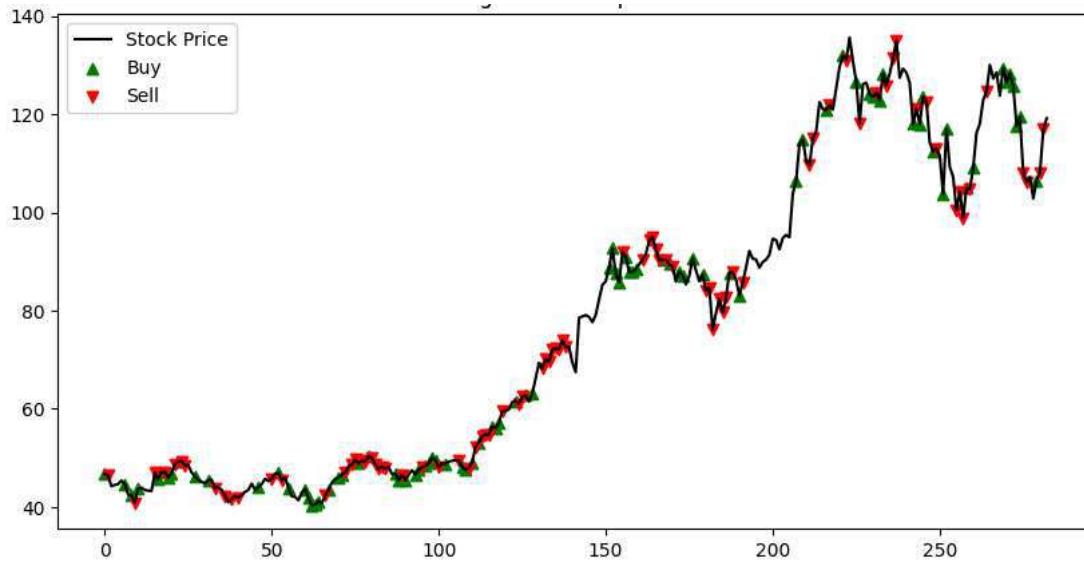
Trading Actions - Episode 226



Running Episode 227/500

Episode 227 Metrics: {'Total Profit': '\$122.61', 'Win Rate': '65.43%', 'Profit Factor': '1.63', 'Sharpe Ratio': '0.18', 'Max Drawdown': ''}

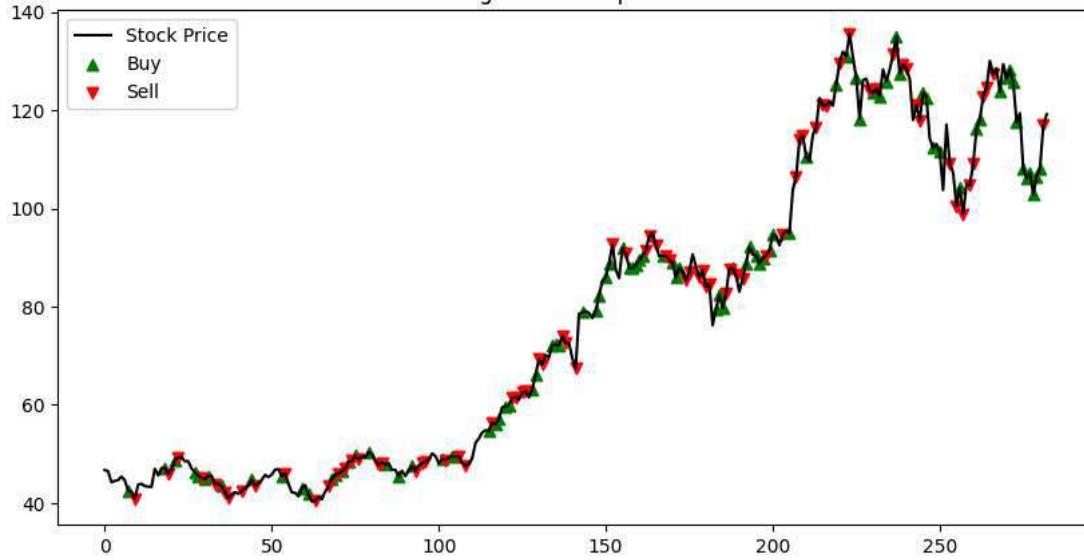
Trading Actions - Episode 227



Running Episode 228/500

Episode 228 Metrics: {'Total Profit': '\$241.94', 'Win Rate': '58.44%', 'Profit Factor': '2.38', 'Sharpe Ratio': '0.26', 'Max Drawdown': 0}

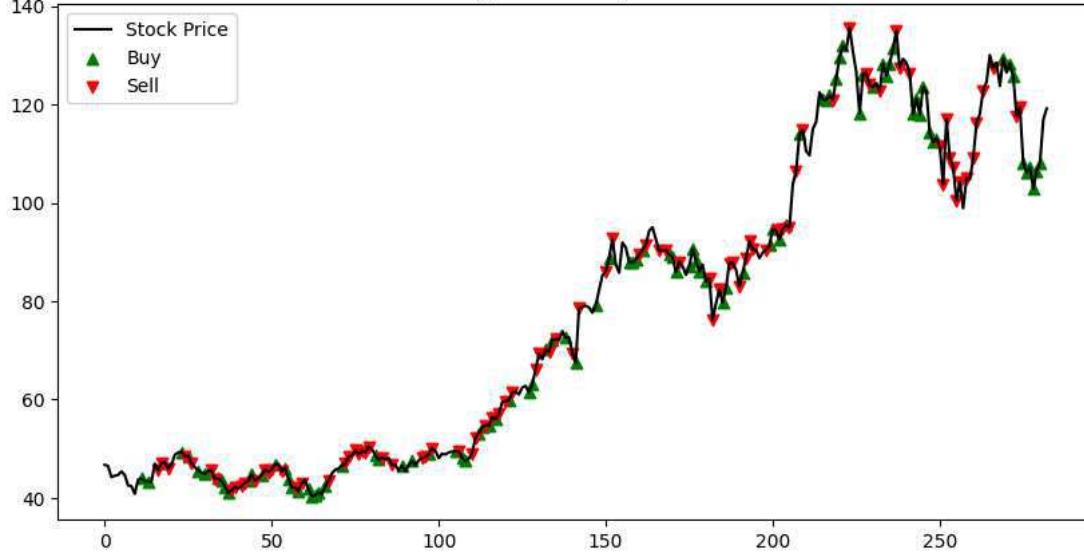
Trading Actions - Episode 228



Running Episode 229/500

Episode 229 Metrics: {'Total Profit': '\$0.94', 'Win Rate': '58.43%', 'Profit Factor': '1.00', 'Sharpe Ratio': '0.00', 'Max Drawdown': 0}

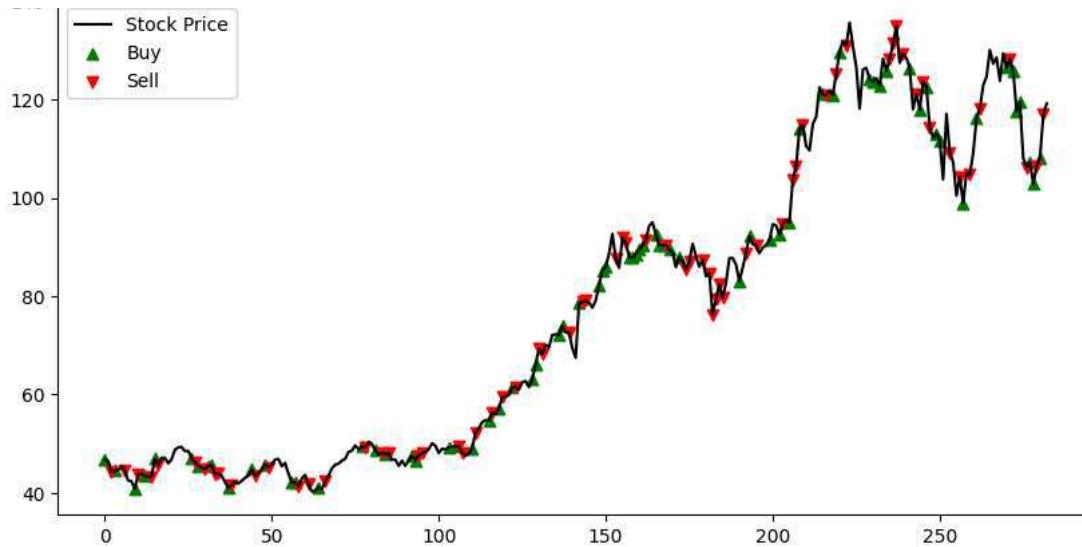
Trading Actions - Episode 229



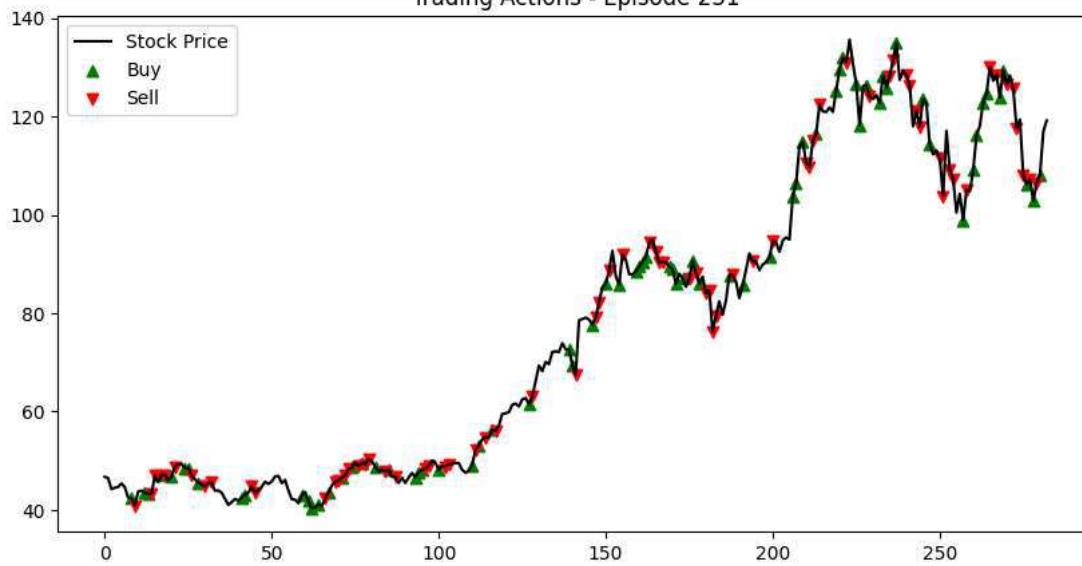
Running Episode 230/500

Episode 230 Metrics: {'Total Profit': '\$3.42', 'Win Rate': '54.41%', 'Profit Factor': '1.03', 'Sharpe Ratio': '0.01', 'Max Drawdown': 0}

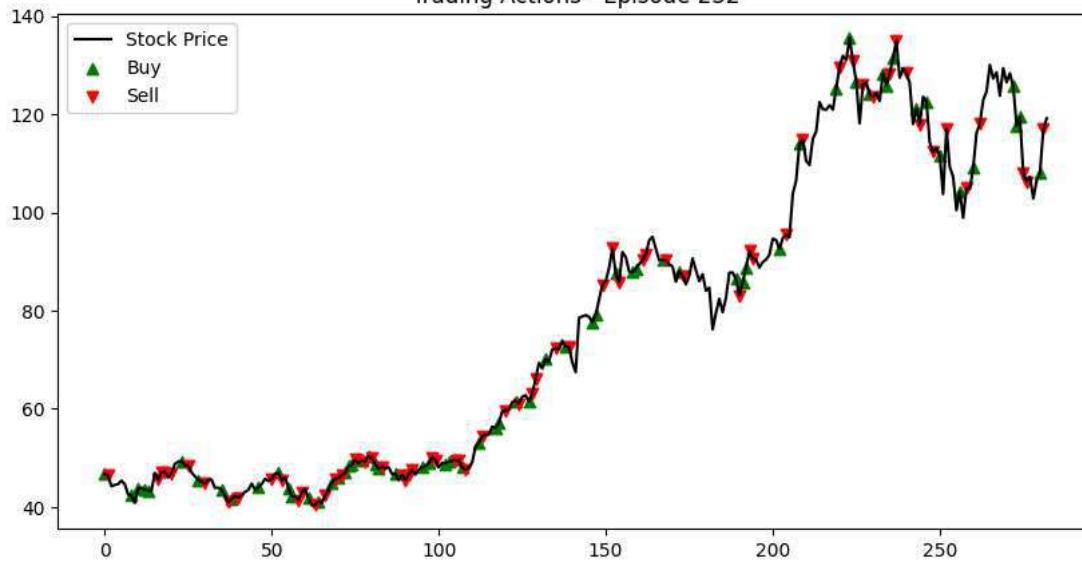
Trading Actions - Episode 230



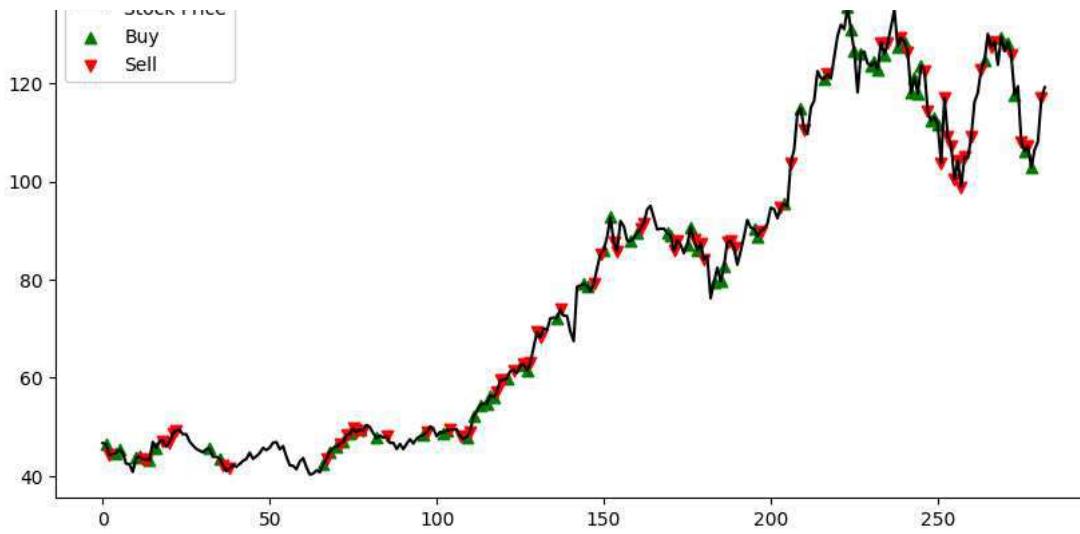
Trading Actions - Episode 231



Trading Actions - Episode 232



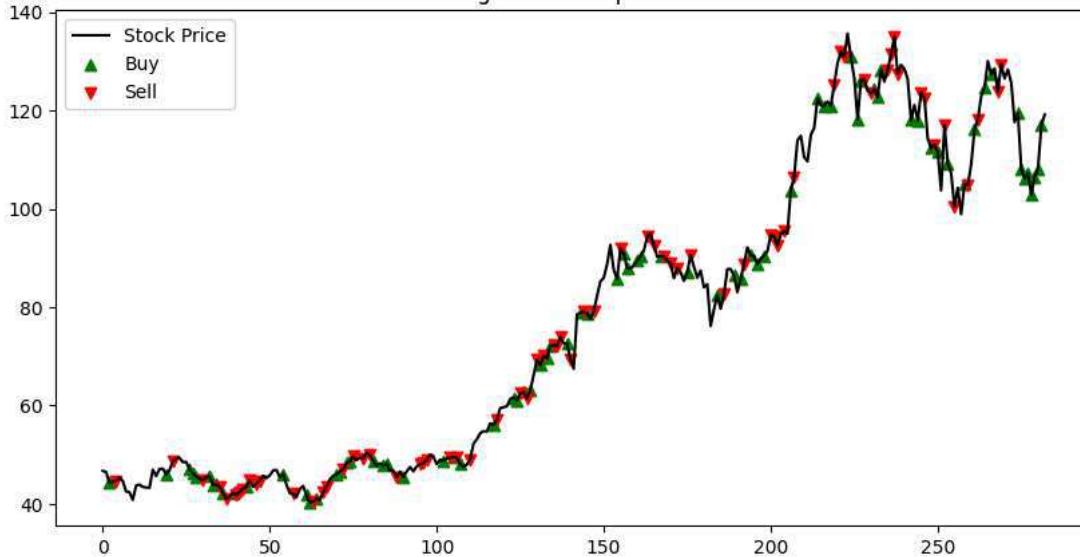
Trading Actions - Episode 233



Running Episode 234/500

Episode 234 Metrics: {'Total Profit': '\$120.35', 'Win Rate': '73.91%', 'Profit Factor': '3.62', 'Sharpe Ratio': '0.47', 'Max Drawdown':

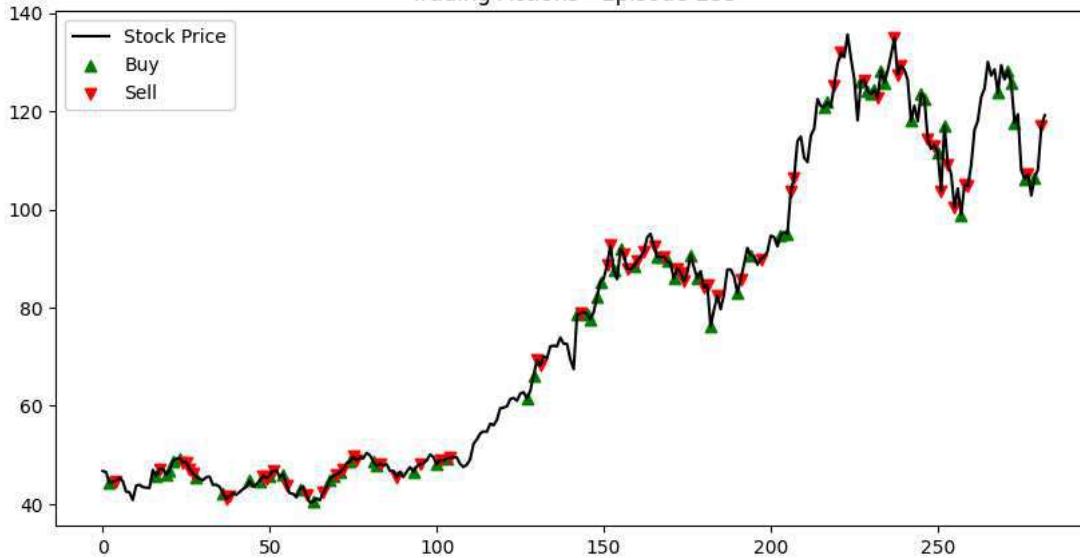
Trading Actions - Episode 234



Running Episode 235/500

Episode 235 Metrics: {'Total Profit': '\$3.99', 'Win Rate': '60.00%', 'Profit Factor': '1.03', 'Sharpe Ratio': '0.01', 'Max Drawdown':

Trading Actions - Episode 235

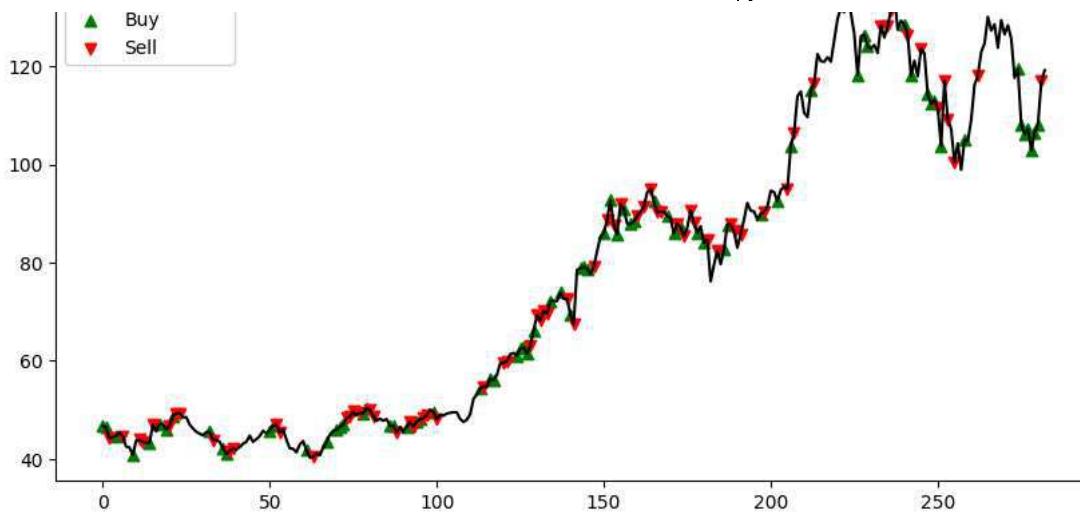


Running Episode 236/500

Episode 236 Metrics: {'Total Profit': '\$127.12', 'Win Rate': '65.22%', 'Profit Factor': '3.40', 'Sharpe Ratio': '0.44', 'Max Drawdown':

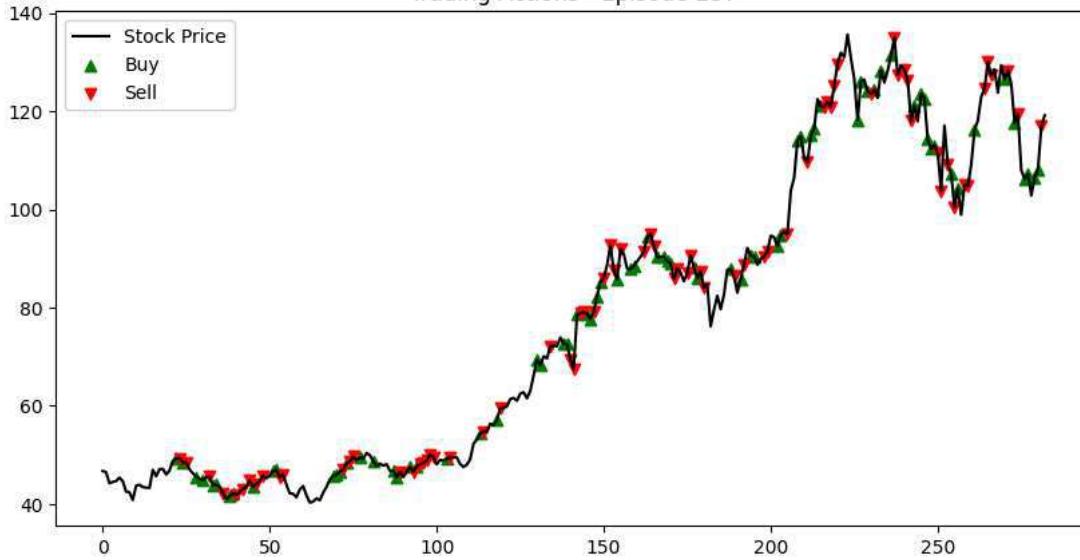
Trading Actions - Episode 236





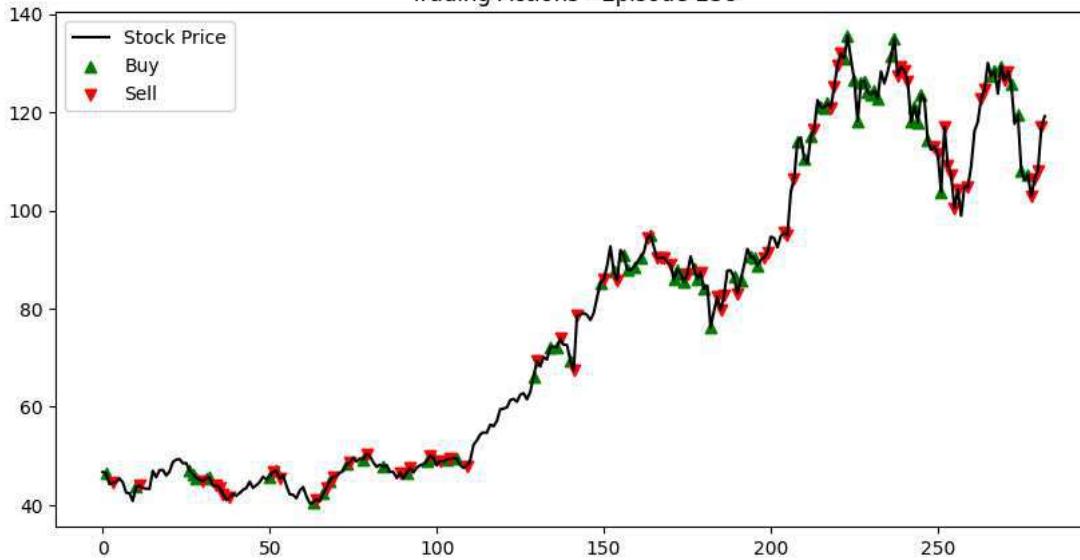
Running Episode 237/500

Episode 237 Metrics: {'Total Profit': '\$105.05', 'Win Rate': '65.28%', 'Profit Factor': '1.87', 'Sharpe Ratio': '0.21', 'Max Drawdown':

Trading Actions - Episode 237

Running Episode 238/500

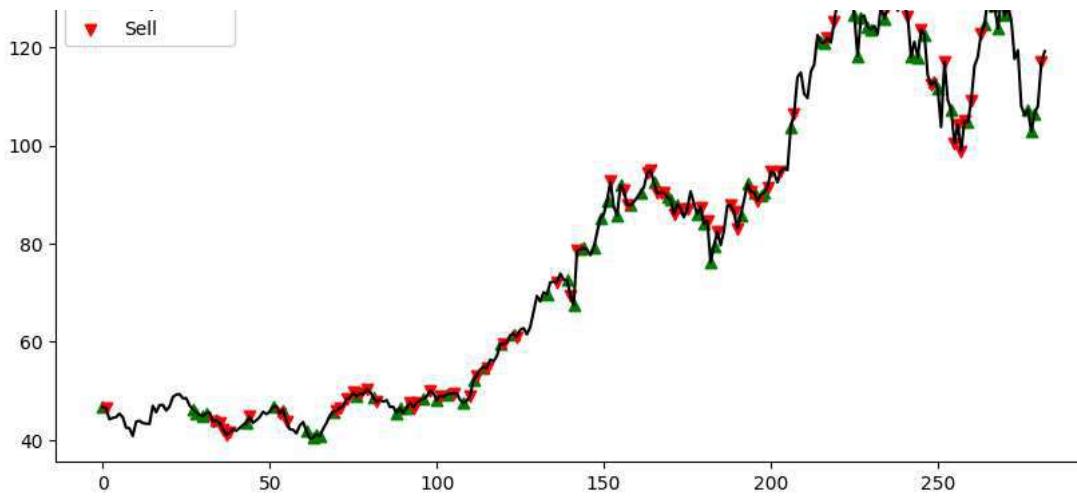
Episode 238 Metrics: {'Total Profit': '-\$28.06', 'Win Rate': '50.75%', 'Profit Factor': '0.89', 'Sharpe Ratio': '-0.04', 'Max Drawdown':

Trading Actions - Episode 238

Running Episode 239/500

Episode 239 Metrics: {'Total Profit': '\$62.19', 'Win Rate': '58.90%', 'Profit Factor': '1.36', 'Sharpe Ratio': '0.10', 'Max Drawdown':

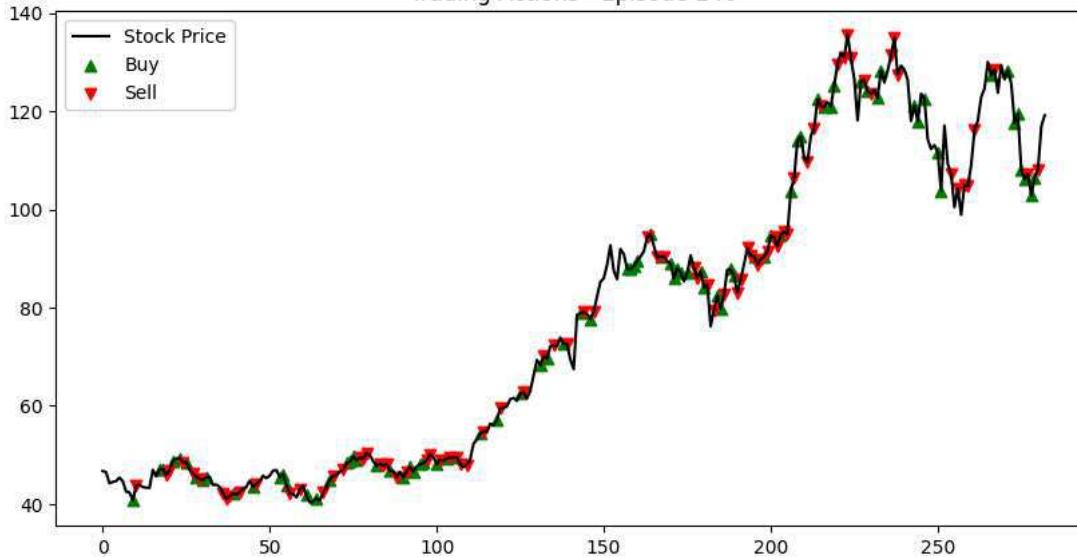
Trading Actions - Episode 239



Running Episode 240/500

Episode 240 Metrics: {'Total Profit': '\$78.92', 'Win Rate': '59.49%', 'Profit Factor': '1.51', 'Sharpe Ratio': '0.15', 'Max Drawdown':

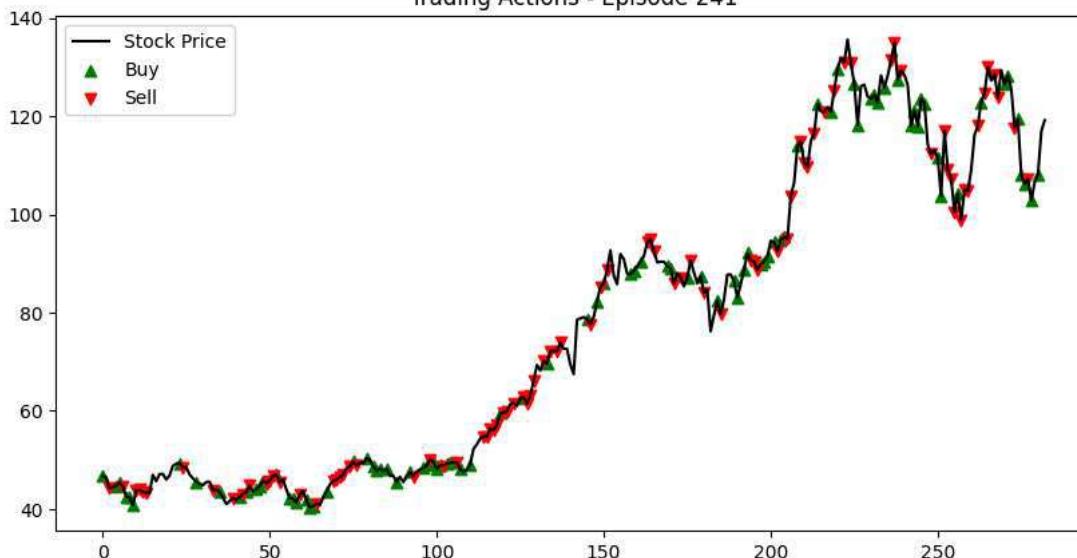
Trading Actions - Episode 240



Running Episode 241/500

Episode 241 Metrics: {'Total Profit': '\$275.99', 'Win Rate': '68.60%', 'Profit Factor': '2.47', 'Sharpe Ratio': '0.33', 'Max Drawdown':

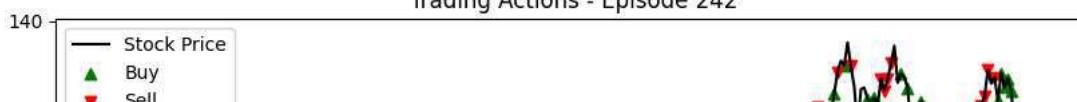
Trading Actions - Episode 241

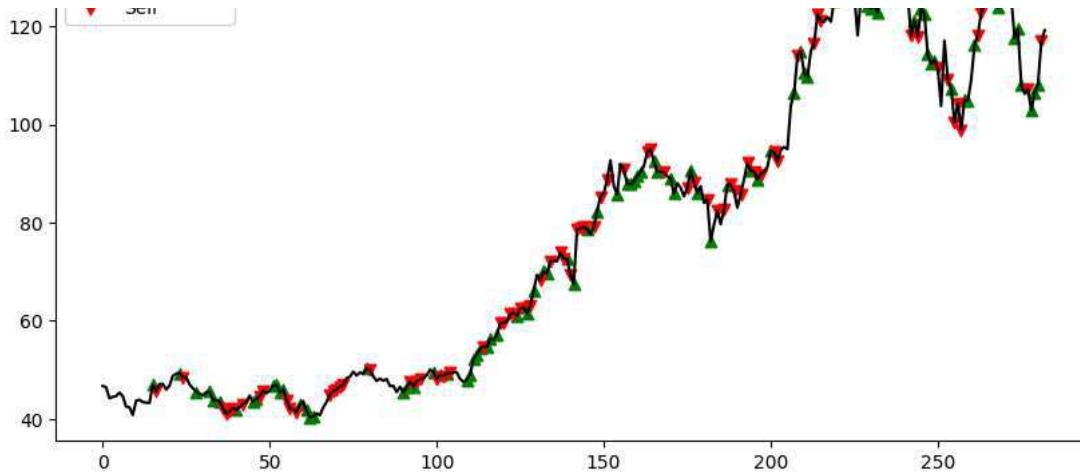


Running Episode 242/500

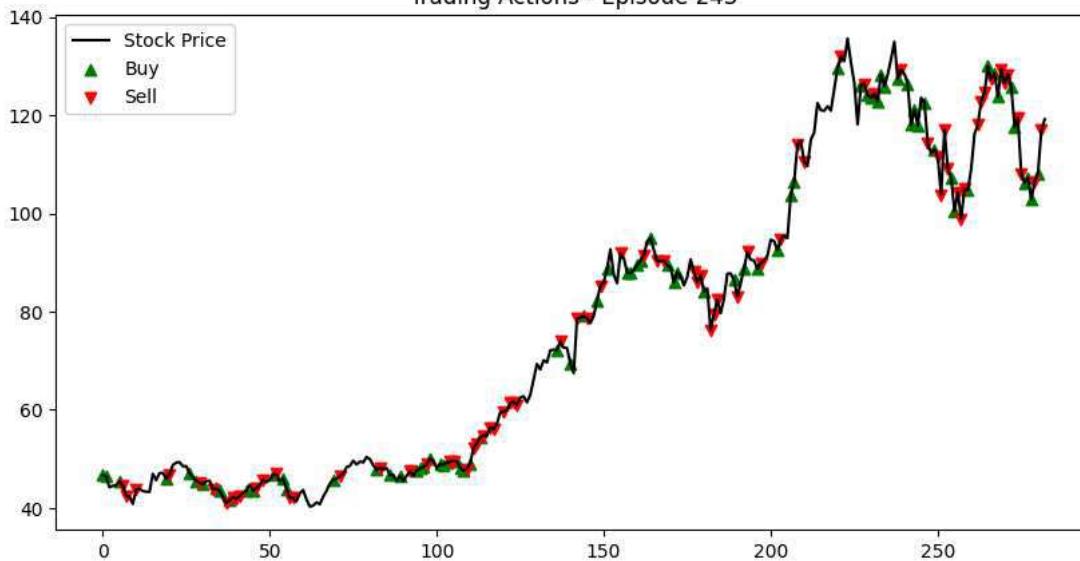
Episode 242 Metrics: {'Total Profit': '\$179.18', 'Win Rate': '61.45%', 'Profit Factor': '1.99', 'Sharpe Ratio': '0.27', 'Max Drawdown':

Trading Actions - Episode 242

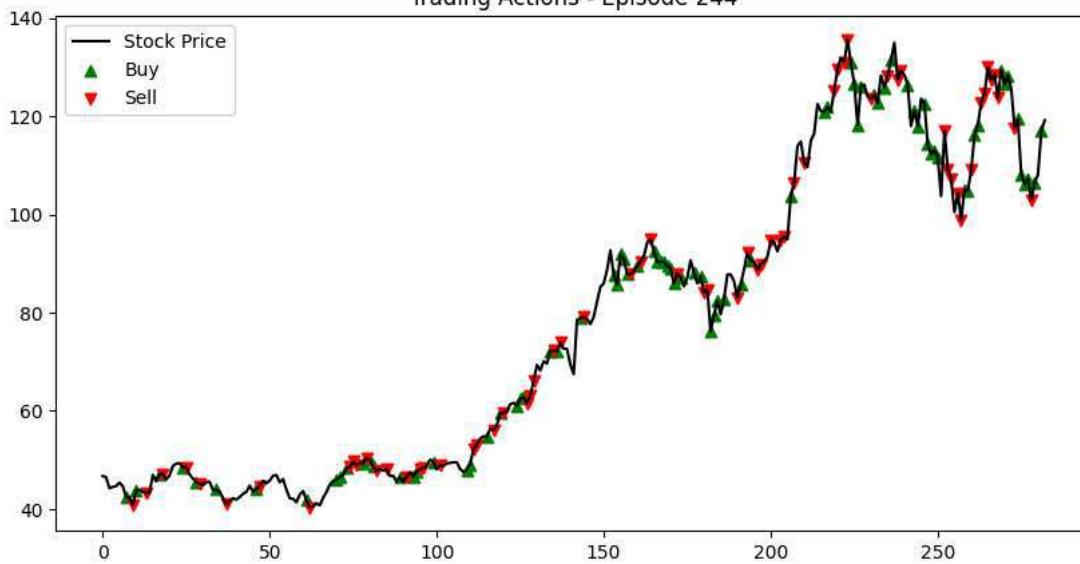




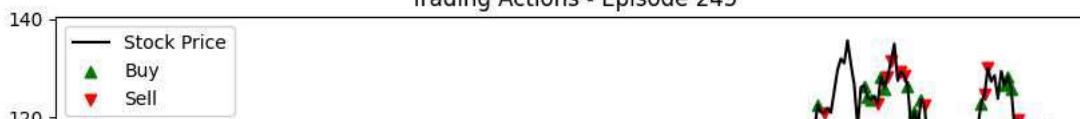
Trading Actions - Episode 243

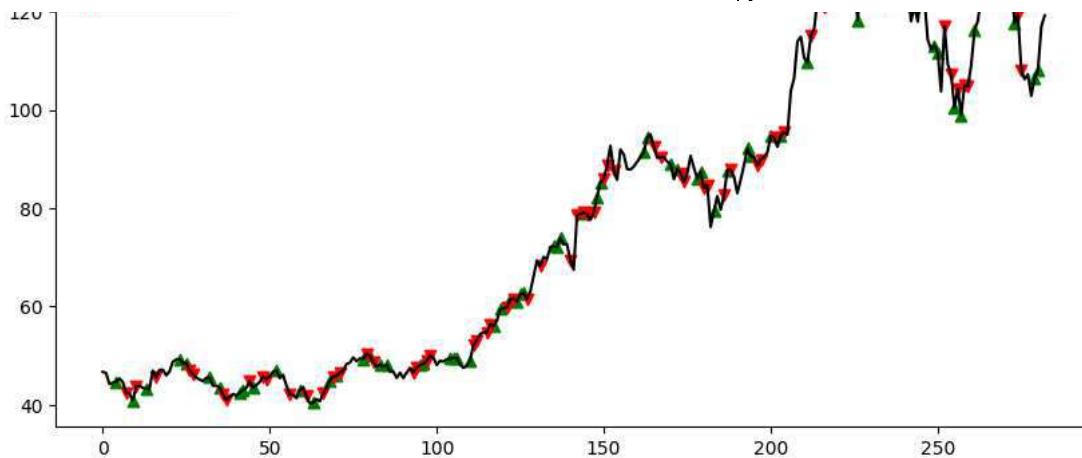


Trading Actions - Episode 244



Trading Actions - Episode 245

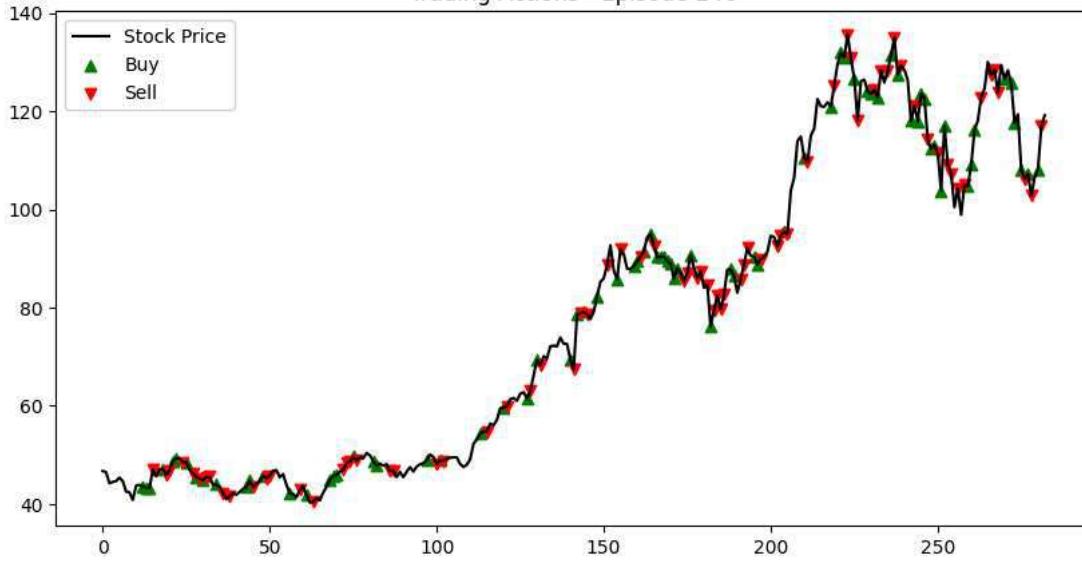




Running Episode 246/500

Episode 246 Metrics: {'Total Profit': '-\$28.60', 'Win Rate': '51.35%', 'Profit Factor': '0.84', 'Sharpe Ratio': '-0.06', 'Max Drawdown':

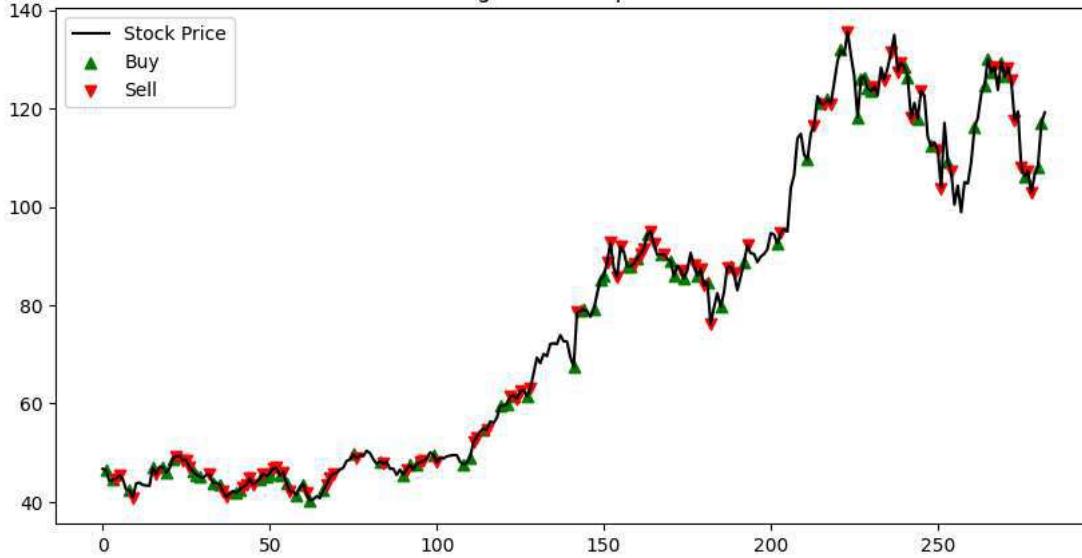
Trading Actions - Episode 246



Running Episode 247/500

Episode 247 Metrics: {'Total Profit': '\$40.06', 'Win Rate': '56.41%', 'Profit Factor': '1.32', 'Sharpe Ratio': '0.09', 'Max Drawdown':

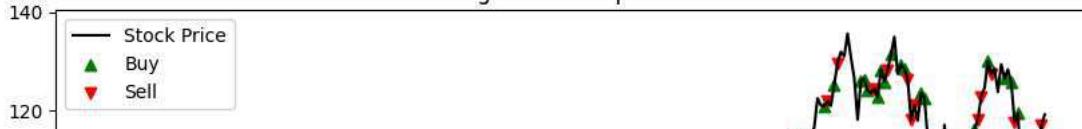
Trading Actions - Episode 247

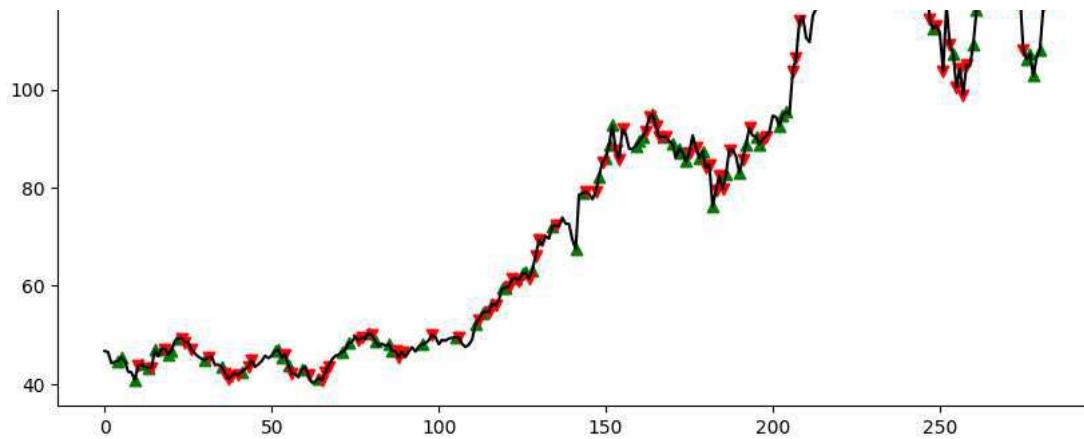


Running Episode 248/500

Episode 248 Metrics: {'Total Profit': '-\$98.14', 'Win Rate': '46.43%', 'Profit Factor': '0.60', 'Sharpe Ratio': '-0.16', 'Max Drawdown':

Trading Actions - Episode 248

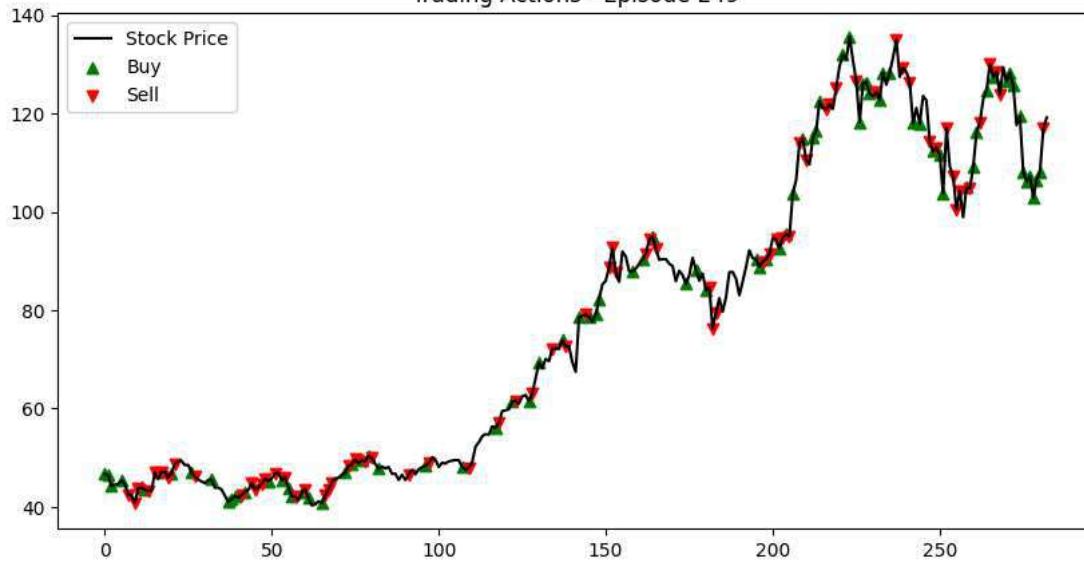




Running Episode 249/500

Episode 249 Metrics: {'Total Profit': '\$44.09', 'Win Rate': '55.71%', 'Profit Factor': '1.28', 'Sharpe Ratio': '0.08', 'Max Drawdown':

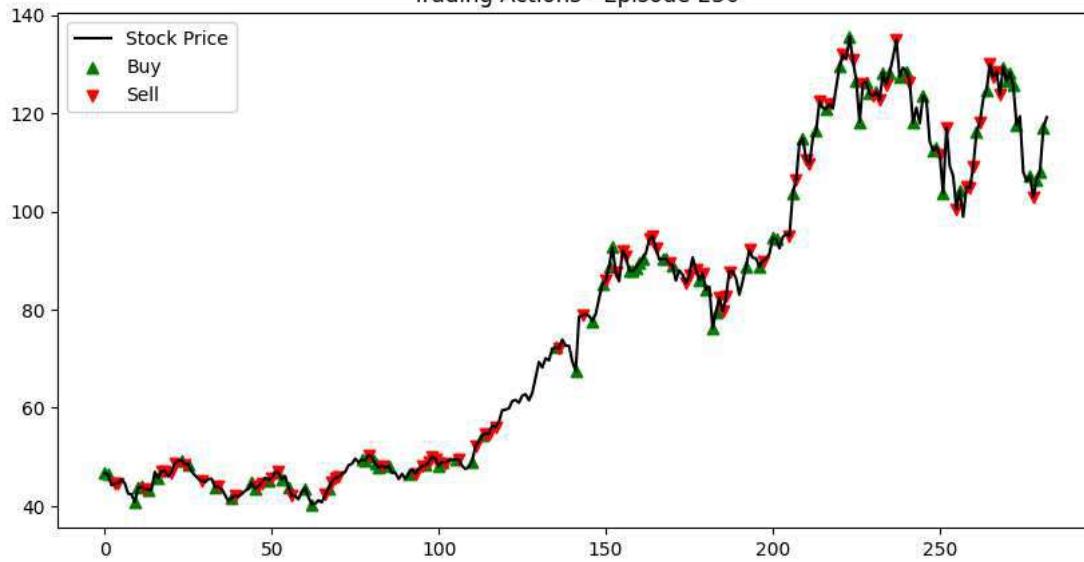
Trading Actions - Episode 249



Running Episode 250/500

Episode 250 Metrics: {'Total Profit': '\$52.77', 'Win Rate': '60.76%', 'Profit Factor': '1.30', 'Sharpe Ratio': '0.08', 'Max Drawdown':

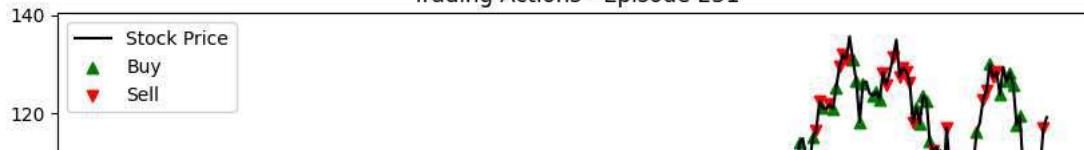
Trading Actions - Episode 250

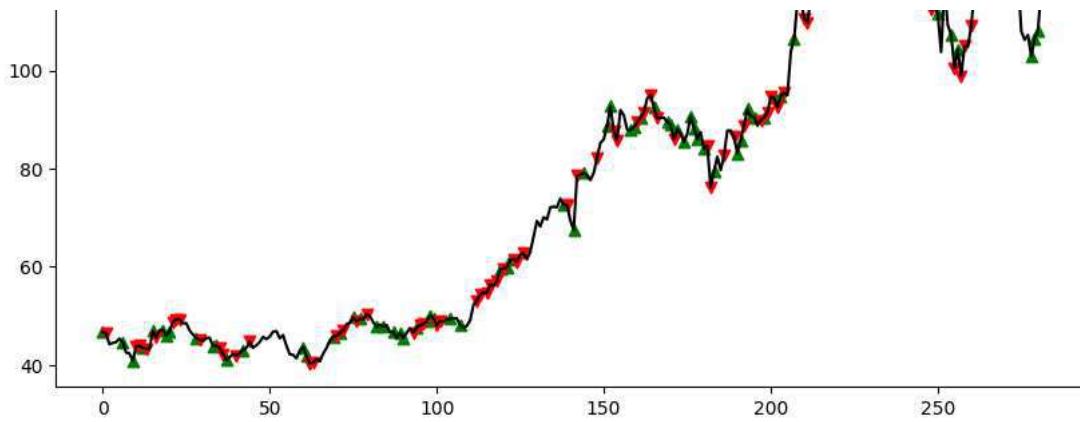


Running Episode 251/500

Episode 251 Metrics: {'Total Profit': '\$289.65', 'Win Rate': '65.00%', 'Profit Factor': '2.95', 'Sharpe Ratio': '0.35', 'Max Drawdown':

Trading Actions - Episode 251

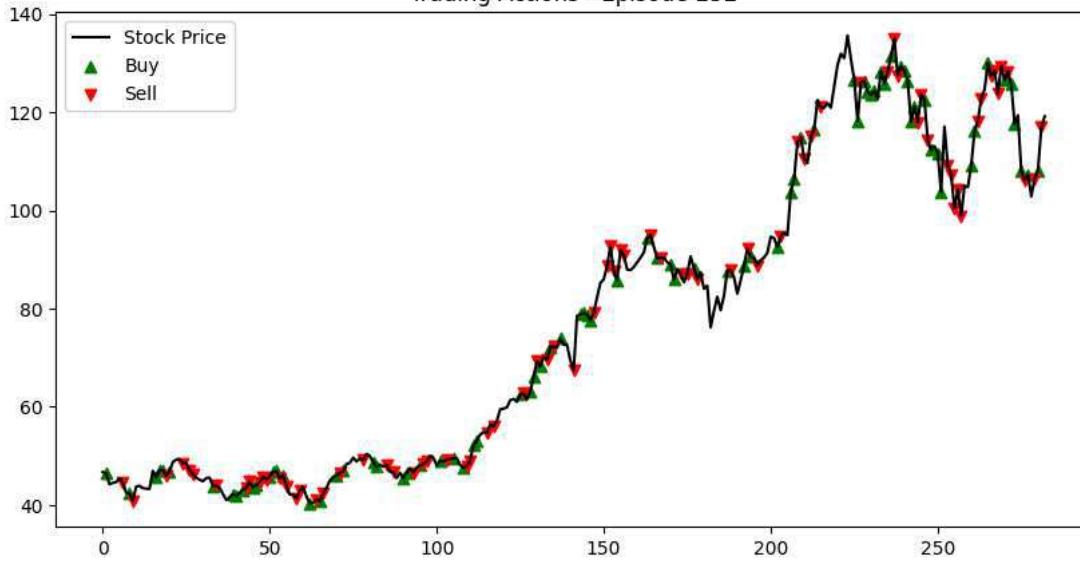




Running Episode 252/500

Episode 252 Metrics: {'Total Profit': '\$11.95', 'Win Rate': '64.47%', 'Profit Factor': '1.06', 'Sharpe Ratio': '0.02', 'Max Drawdown':

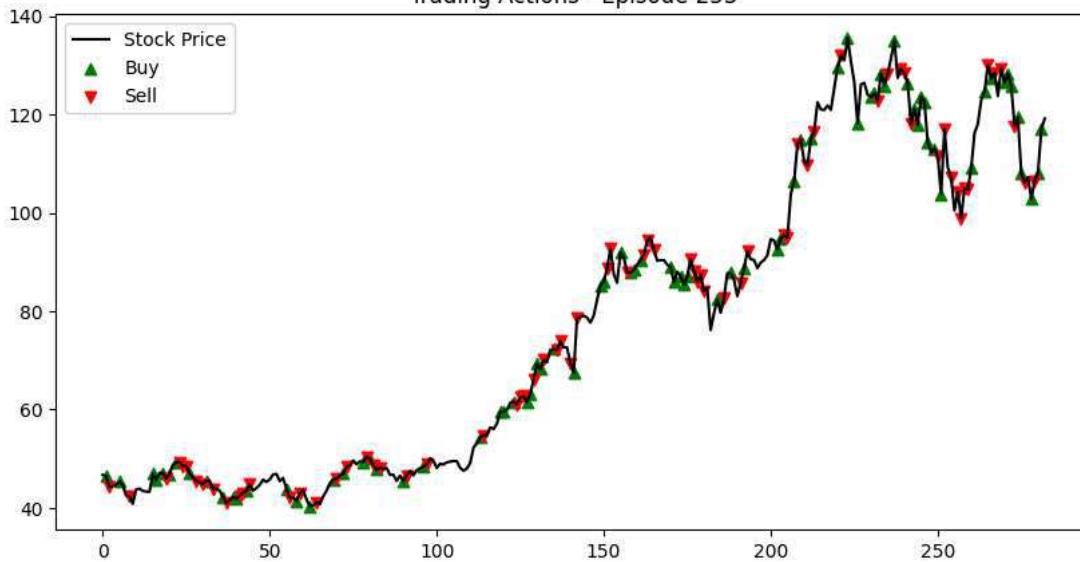
Trading Actions - Episode 252



Running Episode 253/500

Episode 253 Metrics: {'Total Profit': '-\$36.96', 'Win Rate': '63.38%', 'Profit Factor': '0.83', 'Sharpe Ratio': '-0.06', 'Max Drawdown':

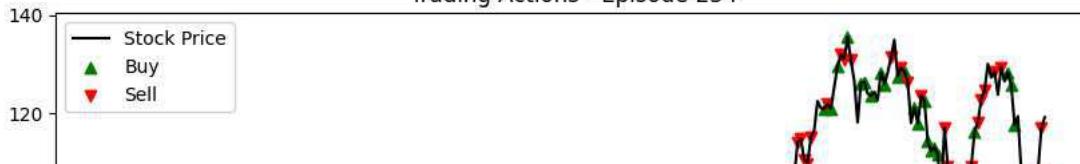
Trading Actions - Episode 253

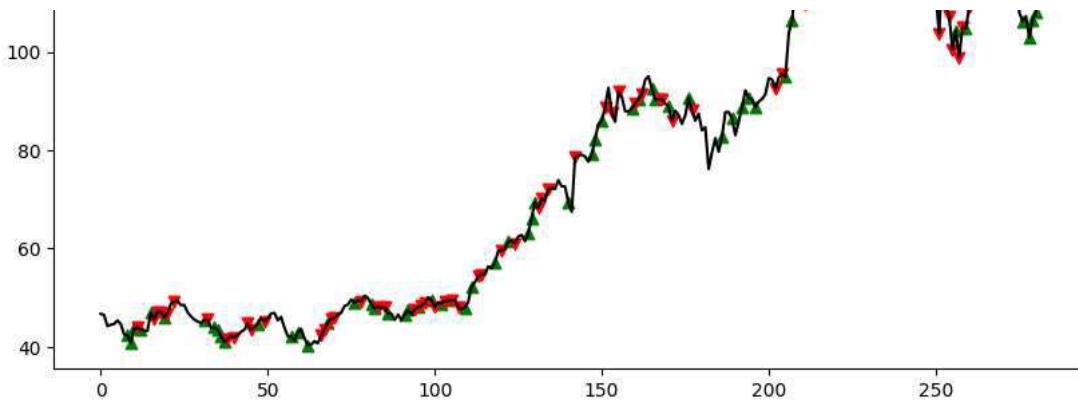


Running Episode 254/500

Episode 254 Metrics: {'Total Profit': '\$147.06', 'Win Rate': '70.83%', 'Profit Factor': '1.95', 'Sharpe Ratio': '0.22', 'Max Drawdown':

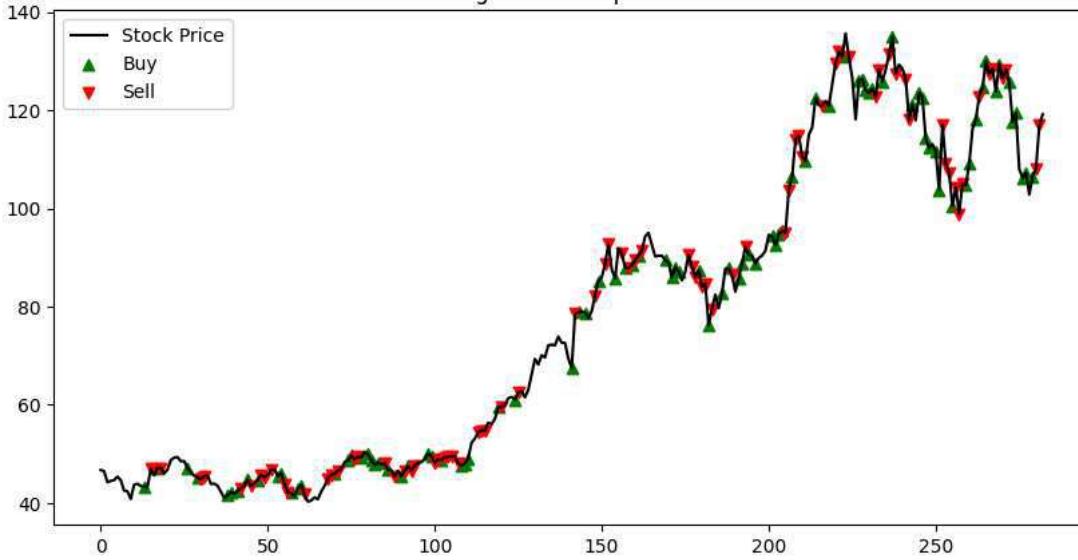
Trading Actions - Episode 254





Running Episode 255/500

Episode 255 Metrics: {'Total Profit': '\$261.45', 'Win Rate': '66.23%', 'Profit Factor': '2.72', 'Sharpe Ratio': '0.31', 'Max Drawdown': ''}



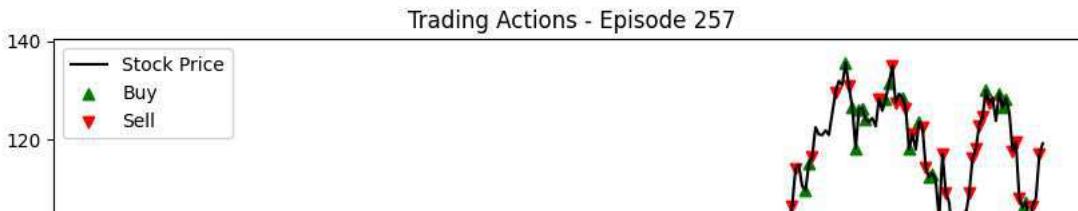
Running Episode 256/500

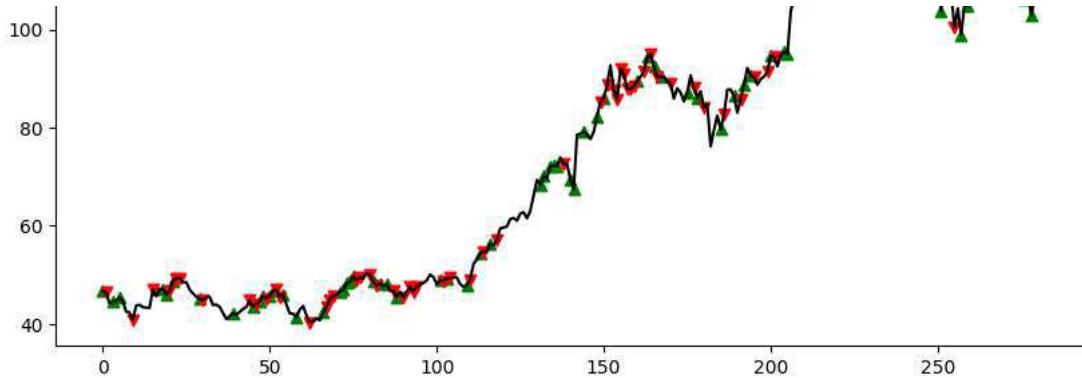
Episode 256 Metrics: {'Total Profit': '\$22.04', 'Win Rate': '53.52%', 'Profit Factor': '1.10', 'Sharpe Ratio': '0.03', 'Max Drawdown': ''}



Running Episode 257/500

Episode 257 Metrics: {'Total Profit': '\$159.10', 'Win Rate': '59.74%', 'Profit Factor': '2.07', 'Sharpe Ratio': '0.23', 'Max Drawdown': ''}

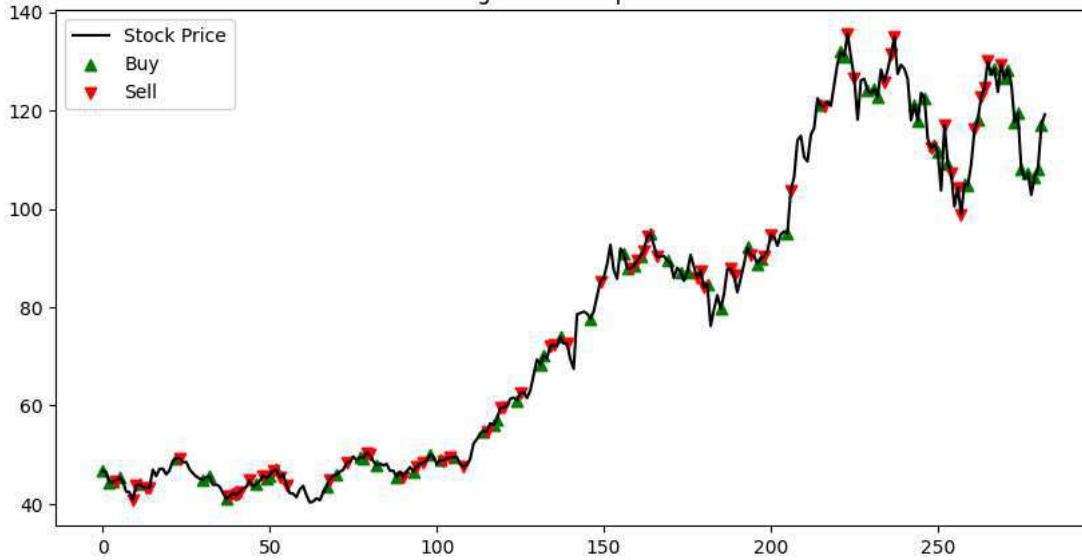




Running Episode 258/500

Episode 258 Metrics: {'Total Profit': '\$61.18', 'Win Rate': '58.06%', 'Profit Factor': '1.66', 'Sharpe Ratio': '0.17', 'Max Drawdown':

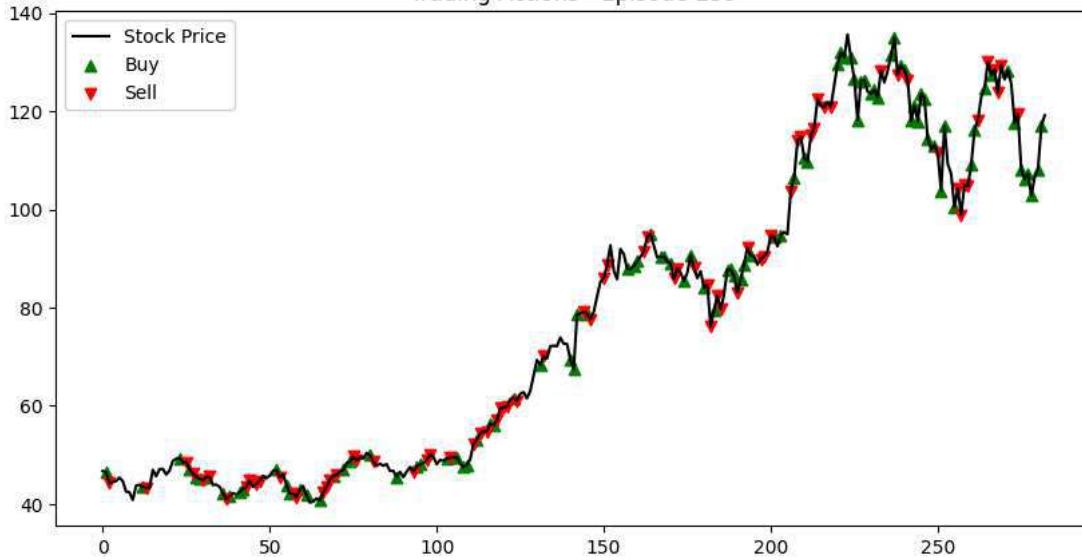
Trading Actions - Episode 258



Running Episode 259/500

Episode 259 Metrics: {'Total Profit': '\$87.62', 'Win Rate': '56.76%', 'Profit Factor': '1.43', 'Sharpe Ratio': '0.12', 'Max Drawdown':

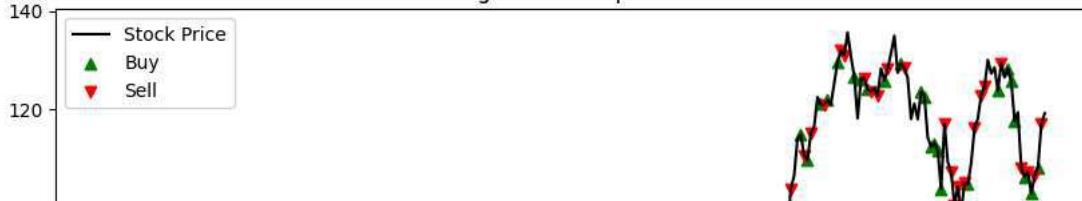
Trading Actions - Episode 259

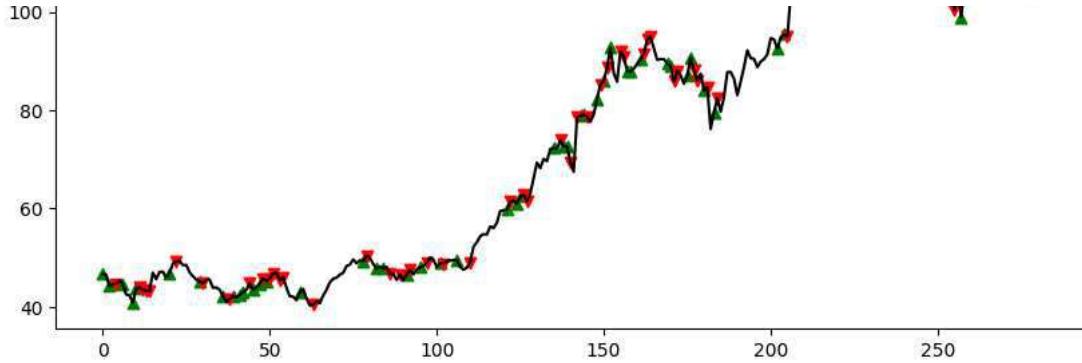


Running Episode 260/500

Episode 260 Metrics: {'Total Profit': '\$38.75', 'Win Rate': '52.24%', 'Profit Factor': '1.29', 'Sharpe Ratio': '0.08', 'Max Drawdown':

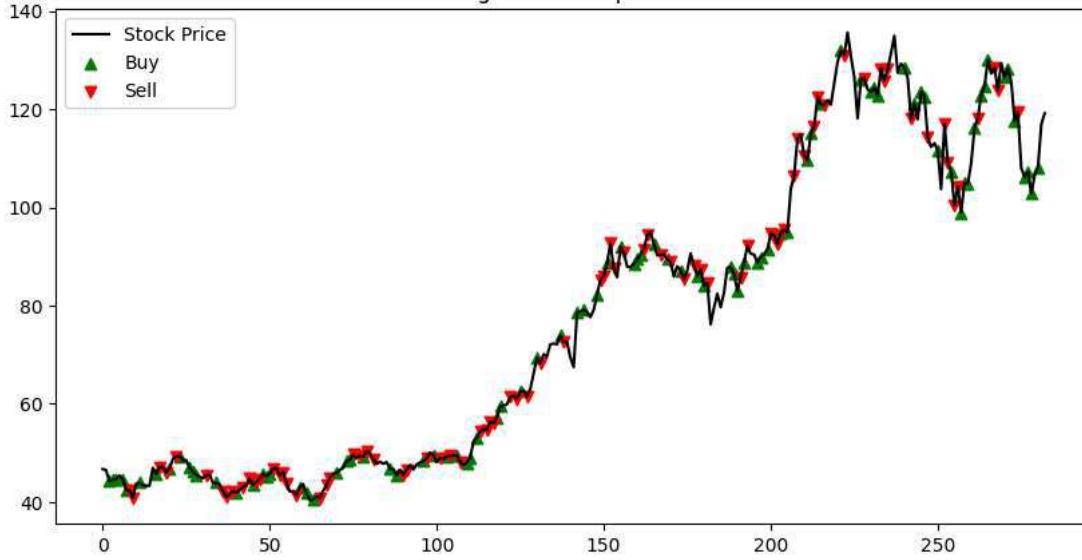
Trading Actions - Episode 260





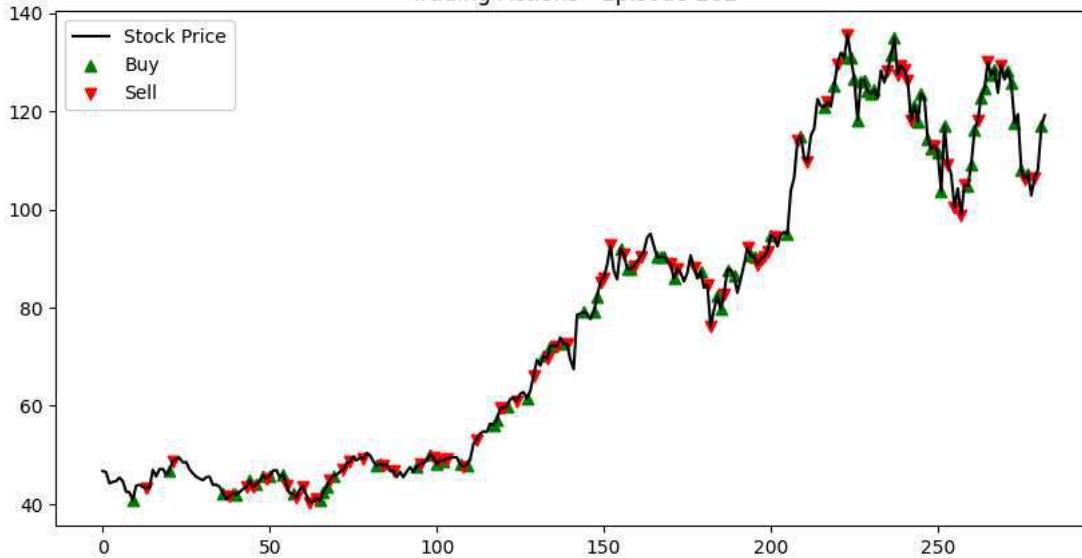
Running Episode 261/500

Episode 261 Metrics: {'Total Profit': '\$162.09', 'Win Rate': '60.00%', 'Profit Factor': '2.50', 'Sharpe Ratio': '0.31', 'Max Drawdown':

Trading Actions - Episode 261

Running Episode 262/500

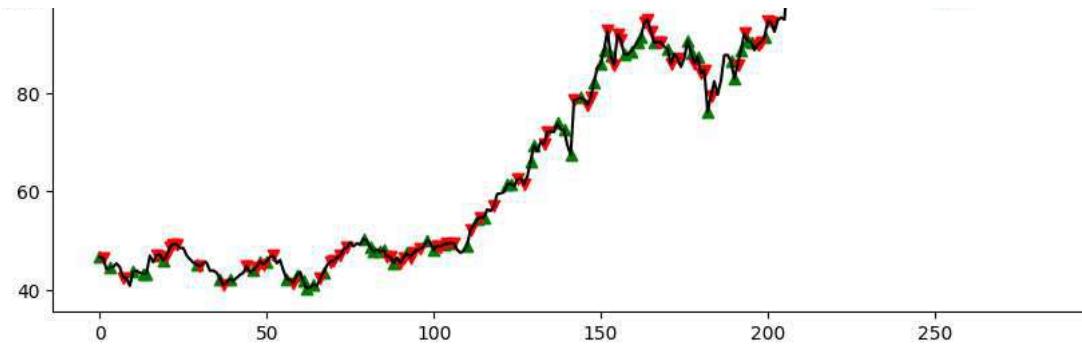
Episode 262 Metrics: {'Total Profit': '-\$16.86', 'Win Rate': '55.07%', 'Profit Factor': '0.90', 'Sharpe Ratio': '-0.03', 'Max Drawdown':

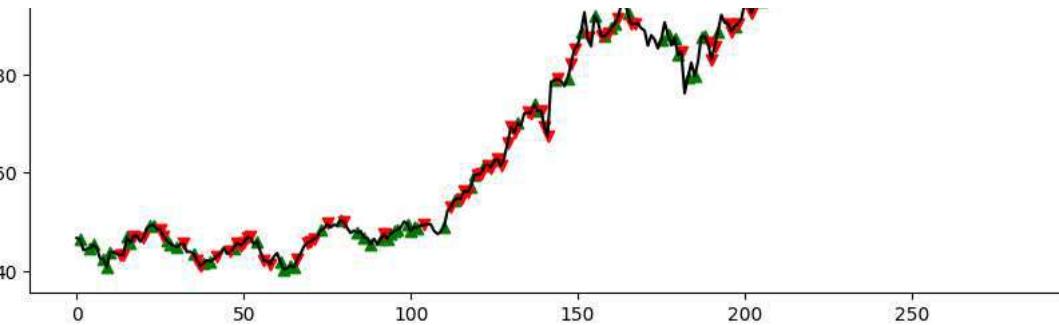
Trading Actions - Episode 262

Running Episode 263/500

Episode 263 Metrics: {'Total Profit': '\$46.32', 'Win Rate': '56.79%', 'Profit Factor': '1.28', 'Sharpe Ratio': '0.08', 'Max Drawdown':

Trading Actions - Episode 263

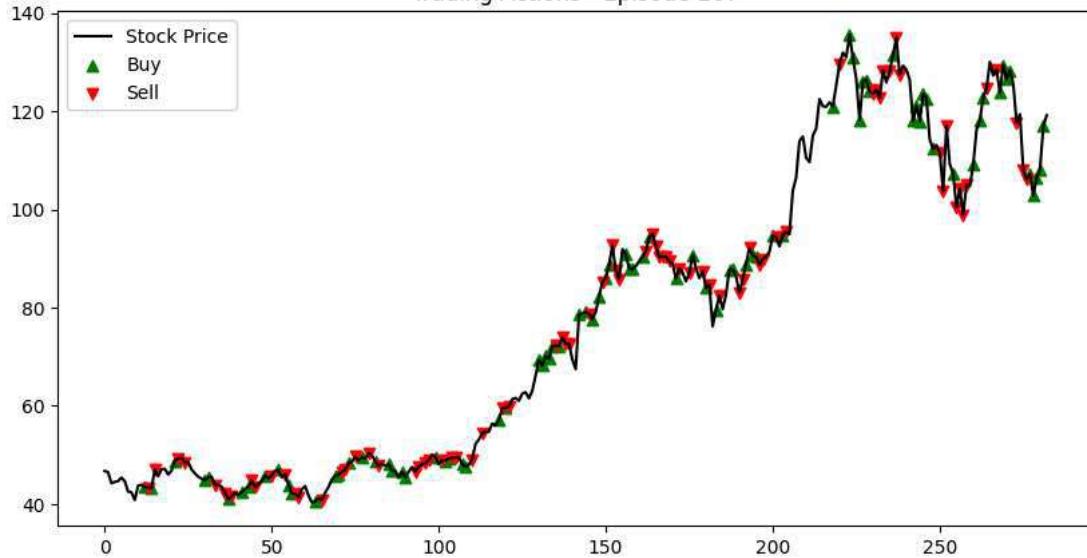




Running Episode 267/500

Episode 267 Metrics: {'Total Profit': '\$2.42', 'Win Rate': '58.97%', 'Profit Factor': '1.01', 'Sharpe Ratio': '0.00', 'Max Drawdown':

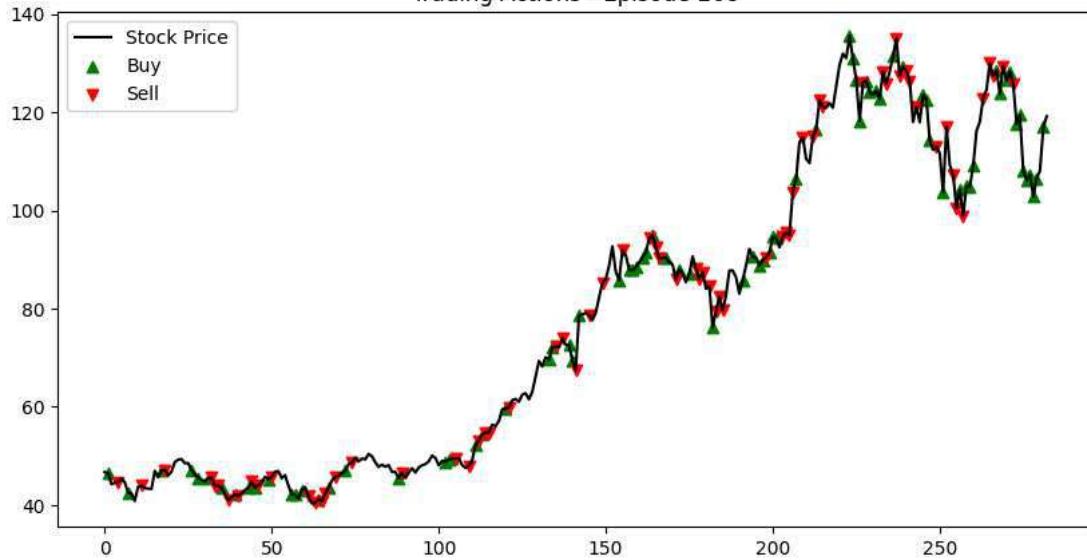
Trading Actions - Episode 267



Running Episode 268/500

Episode 268 Metrics: {'Total Profit': '\$130.27', 'Win Rate': '60.29%', 'Profit Factor': '1.83', 'Sharpe Ratio': '0.20', 'Max Drawdown':

Trading Actions - Episode 268

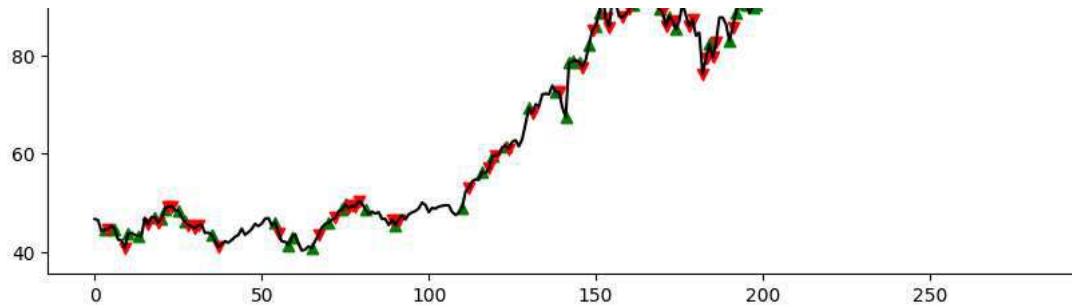


Running Episode 269/500

Episode 269 Metrics: {'Total Profit': '\$24.42', 'Win Rate': '58.82%', 'Profit Factor': '1.12', 'Sharpe Ratio': '0.04', 'Max Drawdown':

Trading Actions - Episode 269

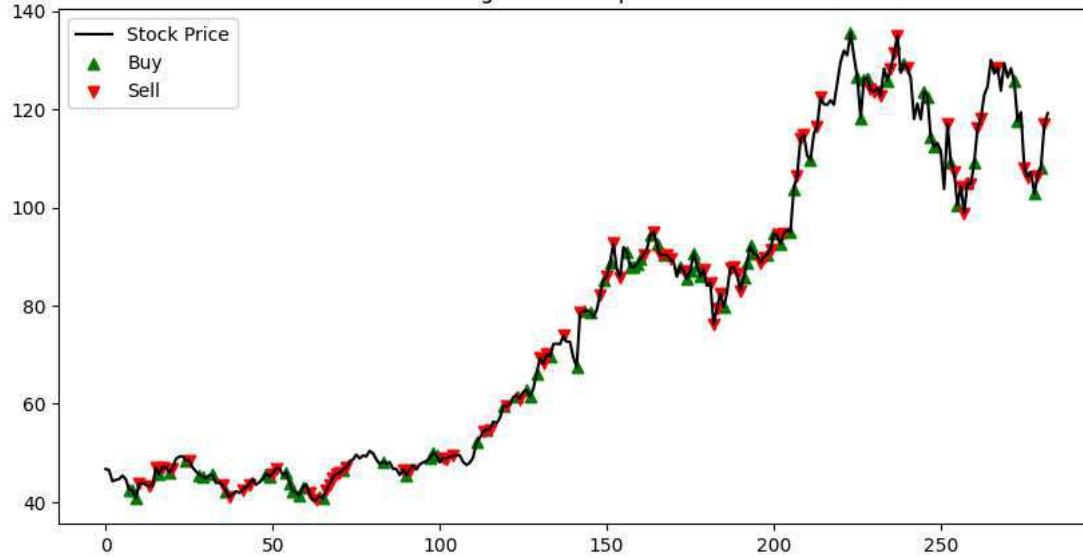




Running Episode 270/500

Episode 270 Metrics: {'Total Profit': '\$106.64', 'Win Rate': '62.20%', 'Profit Factor': '1.66', 'Sharpe Ratio': '0.18', 'Max Drawdown':

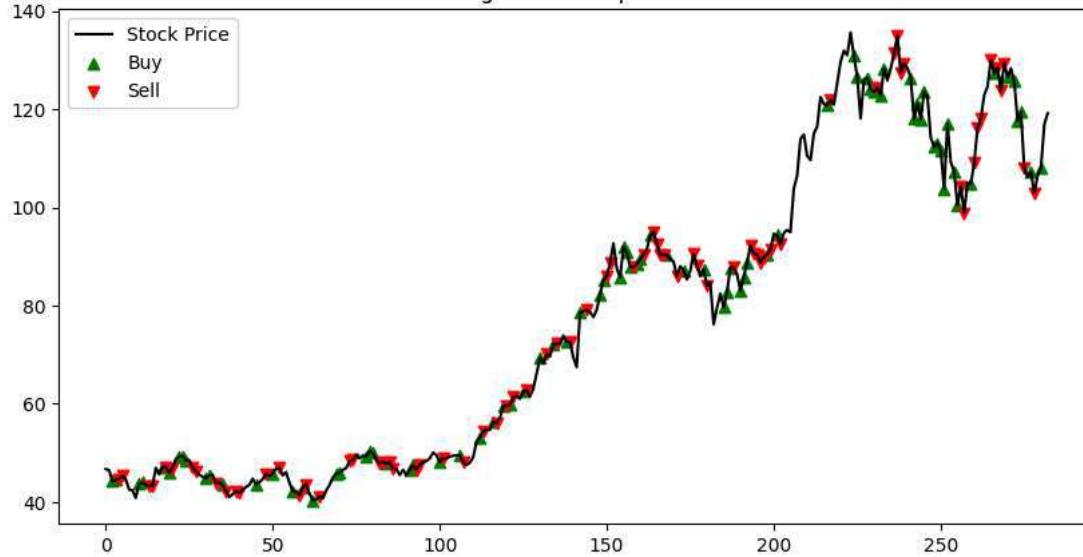
Trading Actions - Episode 270



Running Episode 271/500

Episode 271 Metrics: {'Total Profit': '\$17.19', 'Win Rate': '61.64%', 'Profit Factor': '1.14', 'Sharpe Ratio': '0.04', 'Max Drawdown':

Trading Actions - Episode 271

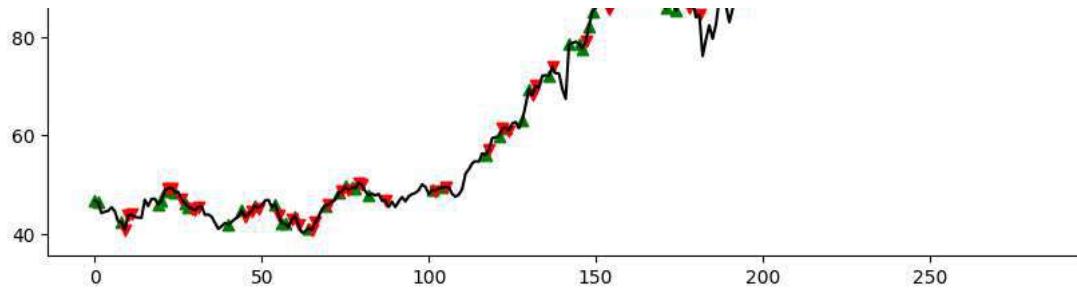


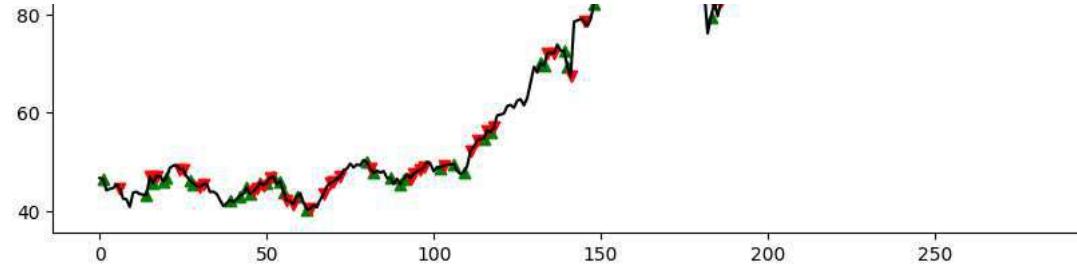
Running Episode 272/500

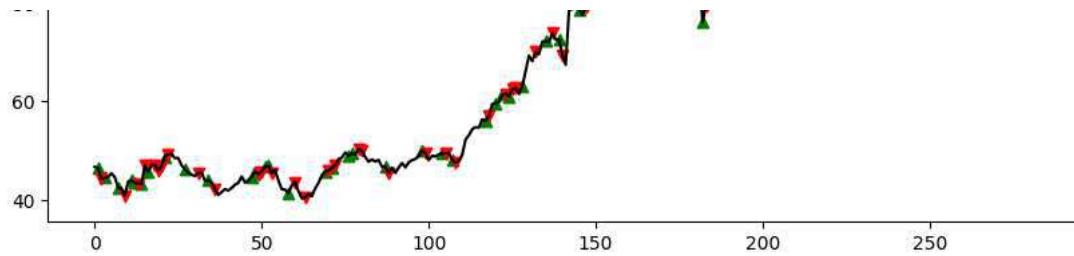
Episode 272 Metrics: {'Total Profit': '\$136.40', 'Win Rate': '61.43%', 'Profit Factor': '2.69', 'Sharpe Ratio': '0.28', 'Max Drawdown':

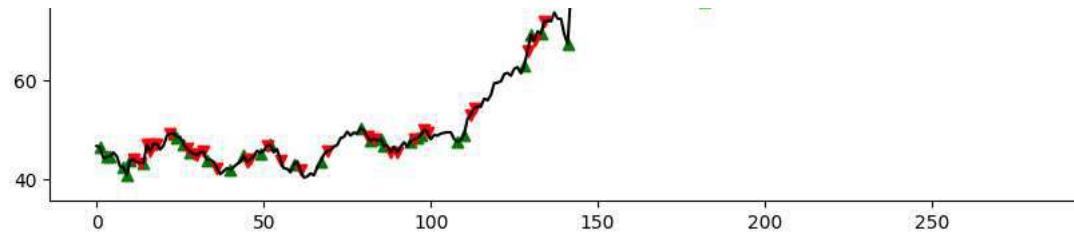
Trading Actions - Episode 272







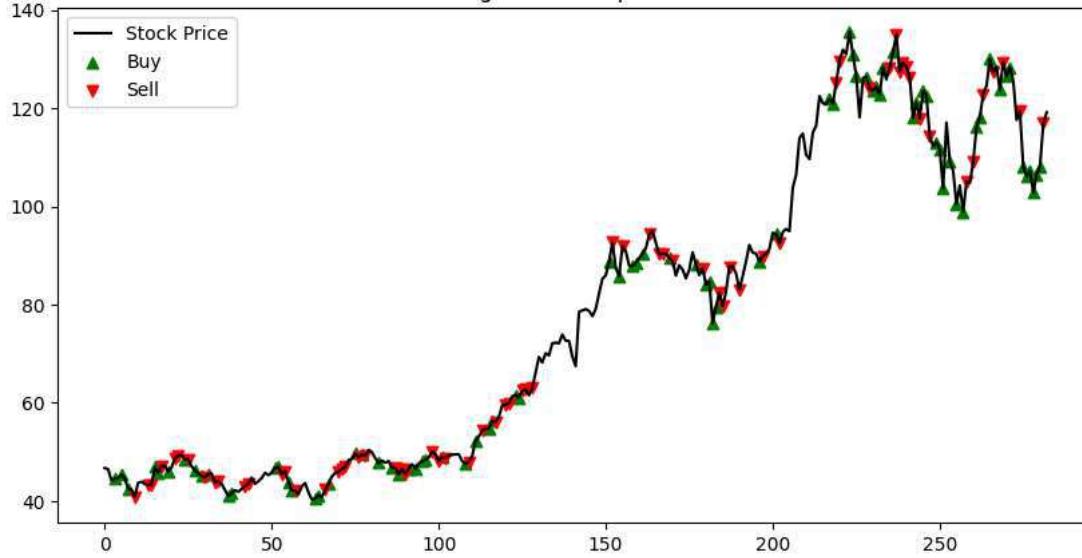




Running Episode 282/500

Episode 282 Metrics: {'Total Profit': '\$84.86', 'Win Rate': '59.09%', 'Profit Factor': '1.91', 'Sharpe Ratio': '0.23', 'Max Drawdown':

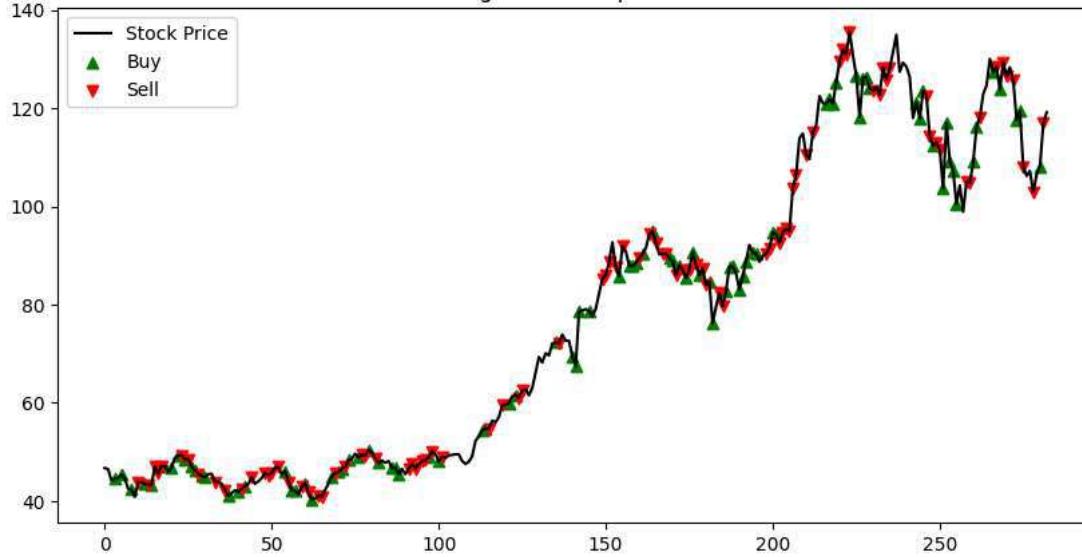
Trading Actions - Episode 282



Running Episode 283/500

Episode 283 Metrics: {'Total Profit': '\$253.89', 'Win Rate': '64.04%', 'Profit Factor': '3.12', 'Sharpe Ratio': '0.37', 'Max Drawdown':

Trading Actions - Episode 283

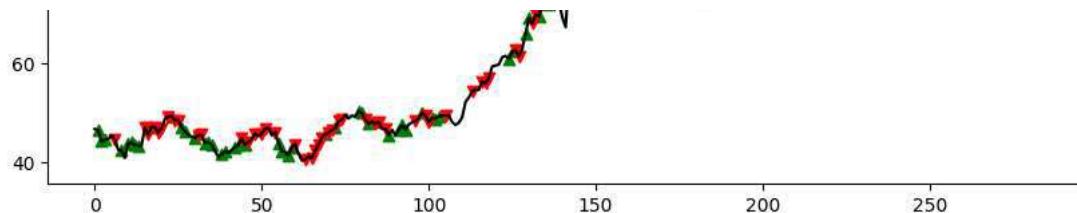


Running Episode 284/500

Episode 284 Metrics: {'Total Profit': '\$491.01', 'Win Rate': '74.47%', 'Profit Factor': '6.64', 'Sharpe Ratio': '0.55', 'Max Drawdown':

Trading Actions - Episode 284





Running Episode 285/500

Episode 285 Metrics: {'Total Profit': '\$173.24', 'Win Rate': '70.13%', 'Profit Factor': '2.82', 'Sharpe Ratio': '0.38', 'Max Drawdown': ''}



Running Episode 286/500

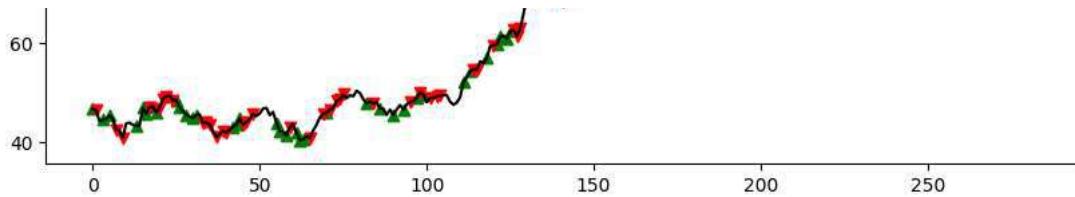
Episode 286 Metrics: {'Total Profit': '\$142.29', 'Win Rate': '64.00%', 'Profit Factor': '2.09', 'Sharpe Ratio': '0.25', 'Max Drawdown': ''}



Running Episode 287/500

Episode 287 Metrics: {'Total Profit': '\$119.07', 'Win Rate': '63.01%', 'Profit Factor': '1.94', 'Sharpe Ratio': '0.24', 'Max Drawdown': ''}

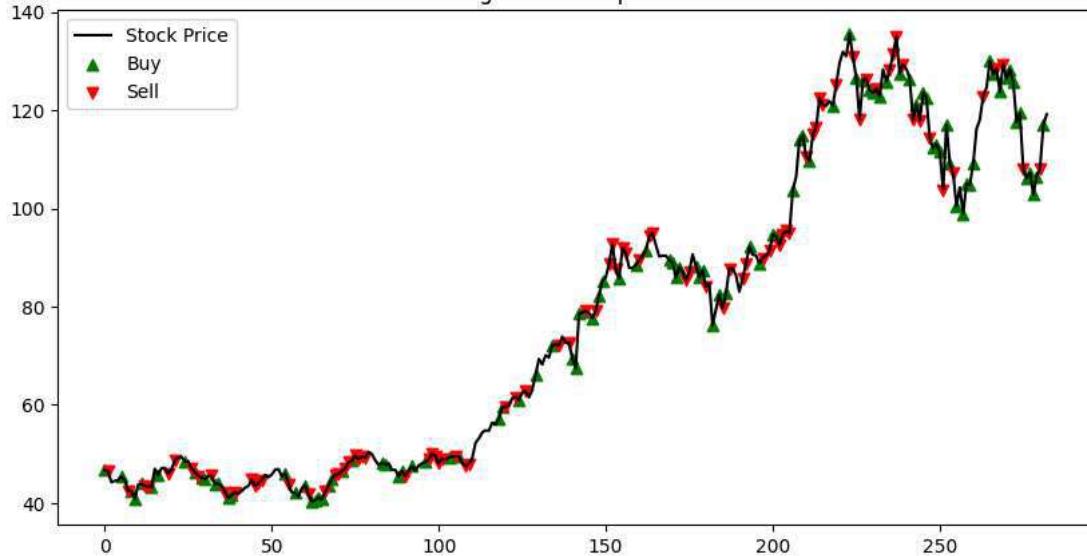




Running Episode 288/500

Episode 288 Metrics: {'Total Profit': '\$233.40', 'Win Rate': '68.97%', 'Profit Factor': '3.37', 'Sharpe Ratio': '0.45', 'Max Drawdown': ''}

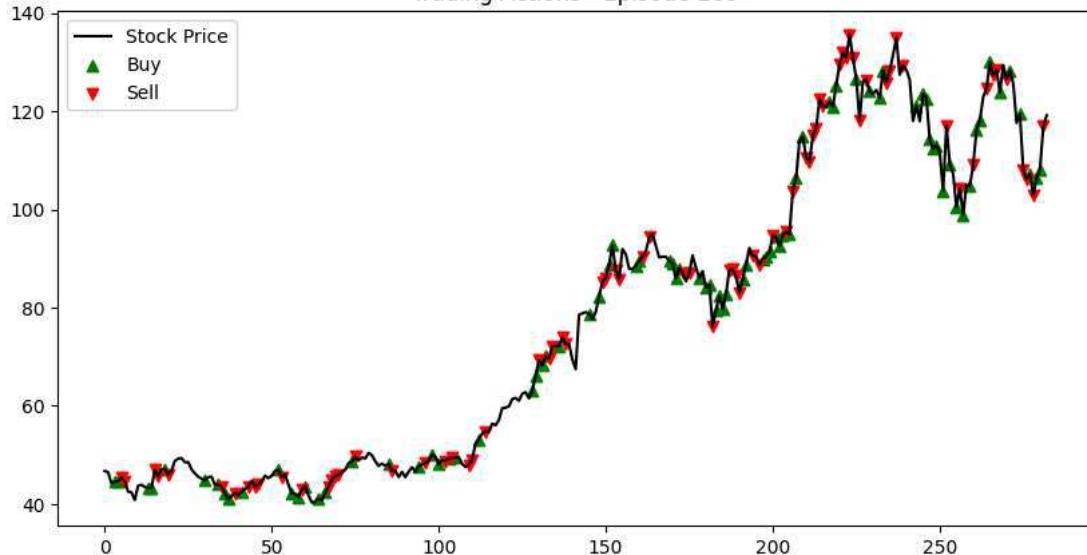
Trading Actions - Episode 288



Running Episode 289/500

Episode 289 Metrics: {'Total Profit': '\$433.65', 'Win Rate': '70.67%', 'Profit Factor': '6.73', 'Sharpe Ratio': '0.55', 'Max Drawdown': ''}

Trading Actions - Episode 289

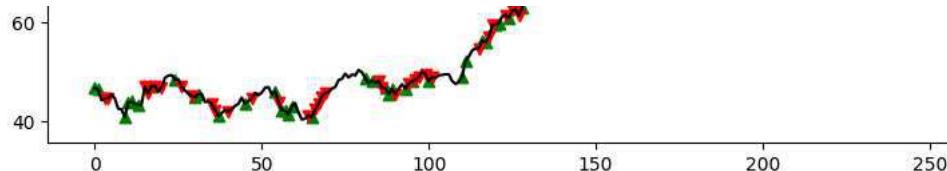


Running Episode 290/500

Episode 290 Metrics: {'Total Profit': '\$562.04', 'Win Rate': '70.27%', 'Profit Factor': '9.37', 'Sharpe Ratio': '0.54', 'Max Drawdown': ''}

Trading Actions - Episode 290

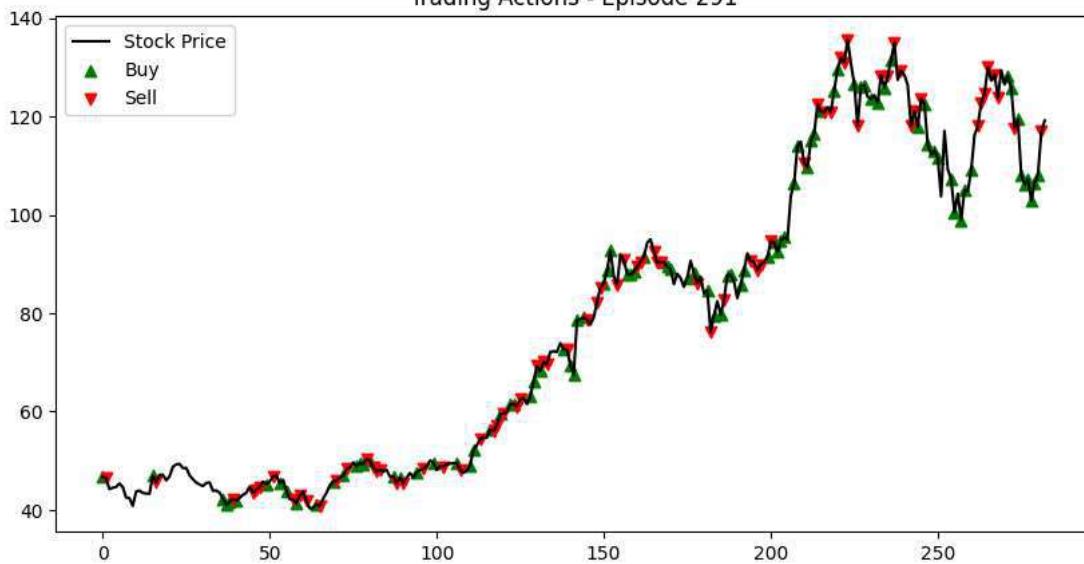




Running Episode 291/500

Episode 291 Metrics: {'Total Profit': '\$498.36', 'Win Rate': '68.06%', 'Profit Factor': '9.02', 'Sharpe Ratio': '0.50', 'Max Drawdown': ''}

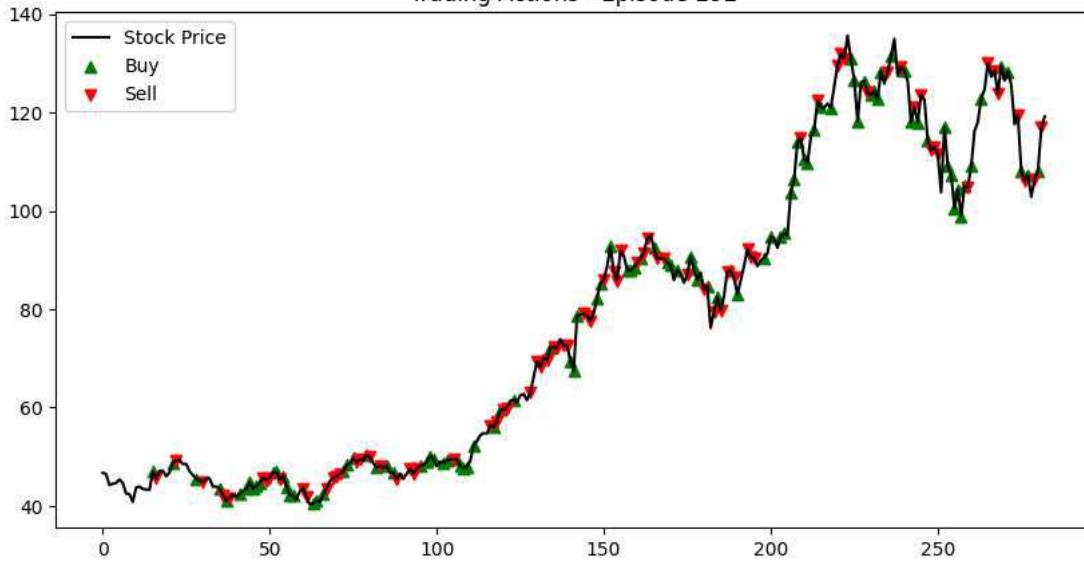
Trading Actions - Episode 291



Running Episode 292/500

Episode 292 Metrics: {'Total Profit': '\$862.92', 'Win Rate': '71.79%', 'Profit Factor': '8.80', 'Sharpe Ratio': '0.72', 'Max Drawdown': ''}

Trading Actions - Episode 292

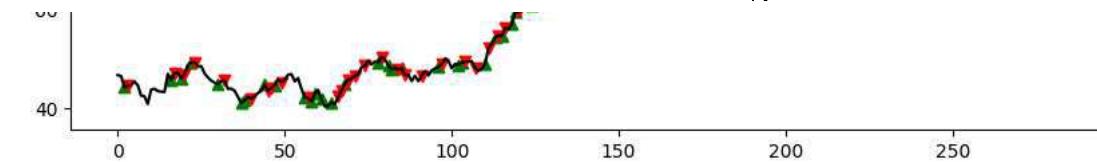


Running Episode 293/500

Episode 293 Metrics: {'Total Profit': '\$404.28', 'Win Rate': '74.32%', 'Profit Factor': '4.89', 'Sharpe Ratio': '0.45', 'Max Drawdown': ''}

Trading Actions - Episode 293

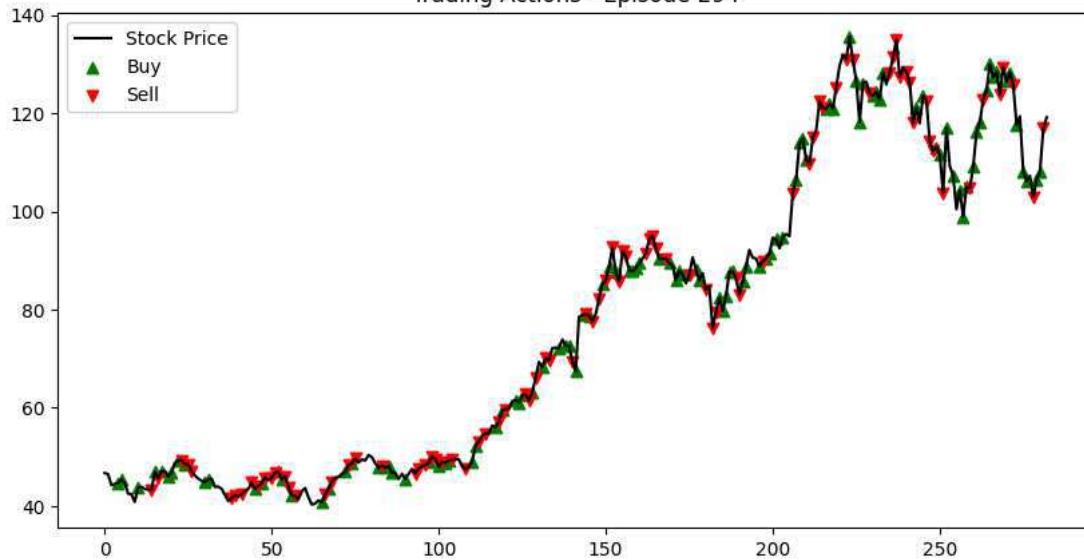




Running Episode 294/500

Episode 294 Metrics: {'Total Profit': '\$419.85', 'Win Rate': '67.44%', 'Profit Factor': '3.61', 'Sharpe Ratio': '0.36', 'Max Drawdown': ''}

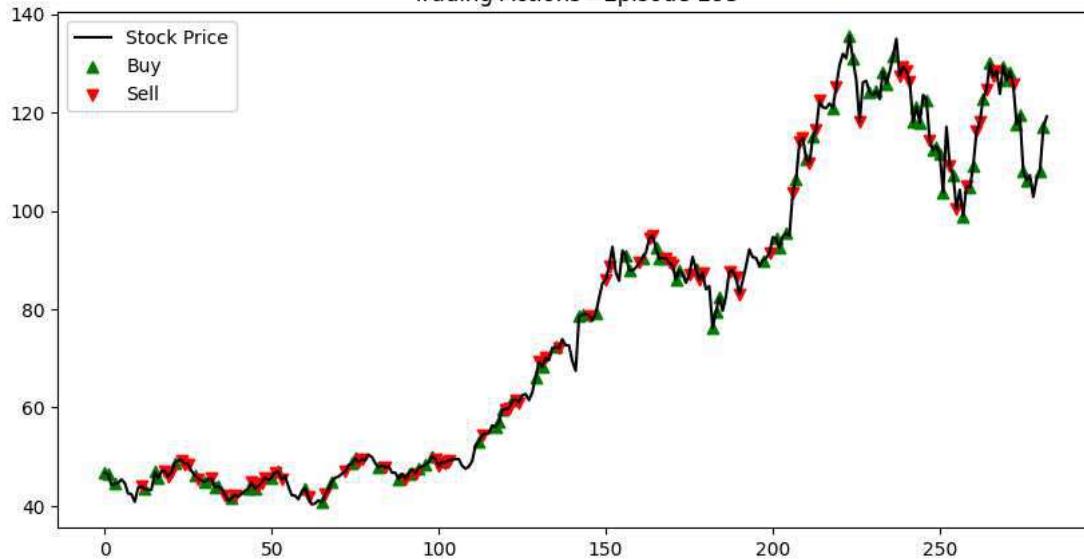
Trading Actions - Episode 294



Running Episode 295/500

Episode 295 Metrics: {'Total Profit': '\$116.04', 'Win Rate': '62.67%', 'Profit Factor': '1.97', 'Sharpe Ratio': '0.21', 'Max Drawdown': ''}

Trading Actions - Episode 295



Running Episode 296/500

Episode 296 Metrics: {'Total Profit': '\$626.54', 'Win Rate': '65.33%', 'Profit Factor': '6.02', 'Sharpe Ratio': '0.51', 'Max Drawdown': ''}

Trading Actions - Episode 296

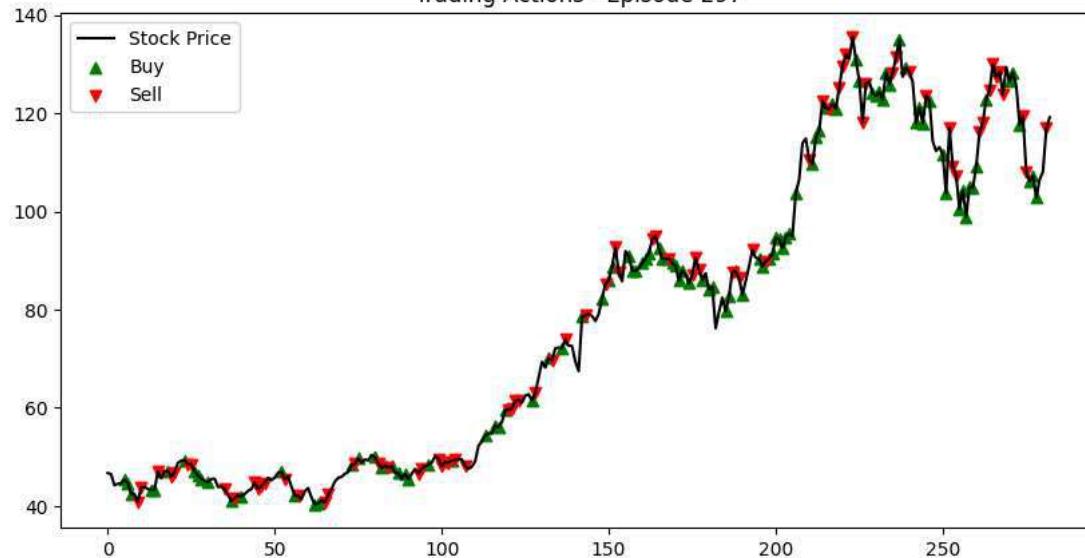




Running Episode 297/500

Episode 297 Metrics: {'Total Profit': '\$756.53', 'Win Rate': '70.67%', 'Profit Factor': '14.07', 'Sharpe Ratio': '0.62', 'Max Drawdown': ''}

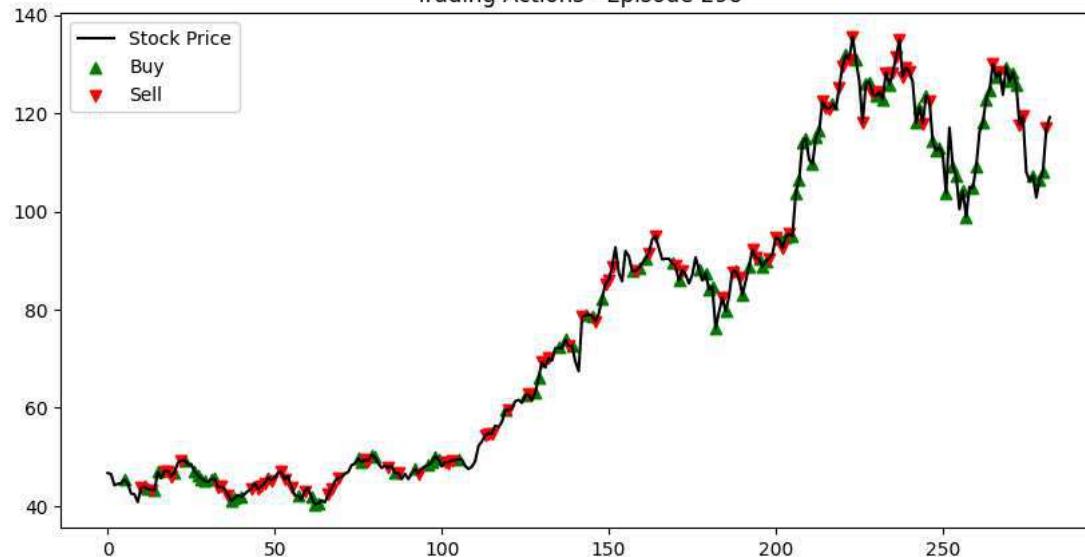
Trading Actions - Episode 297



Running Episode 298/500

Episode 298 Metrics: {'Total Profit': '\$431.07', 'Win Rate': '68.75%', 'Profit Factor': '8.15', 'Sharpe Ratio': '0.55', 'Max Drawdown': ''}

Trading Actions - Episode 298



Running Episode 299/500

Episode 299 Metrics: {'Total Profit': '\$473.49', 'Win Rate': '69.05%', 'Profit Factor': '6.84', 'Sharpe Ratio': '0.56', 'Max Drawdown': ''}

Trading Actions - Episode 299

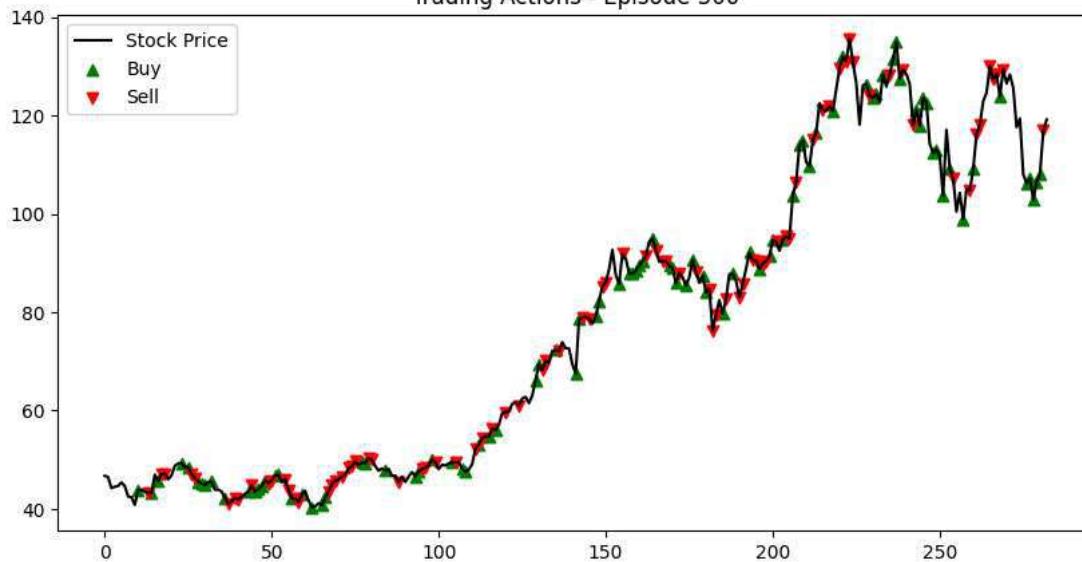




Running Episode 300/500

Episode 300 Metrics: {'Total Profit': '\$119.92', 'Win Rate': '62.20%', 'Profit Factor': '1.75', 'Sharpe Ratio': '0.20', 'Max Drawdown': ''}

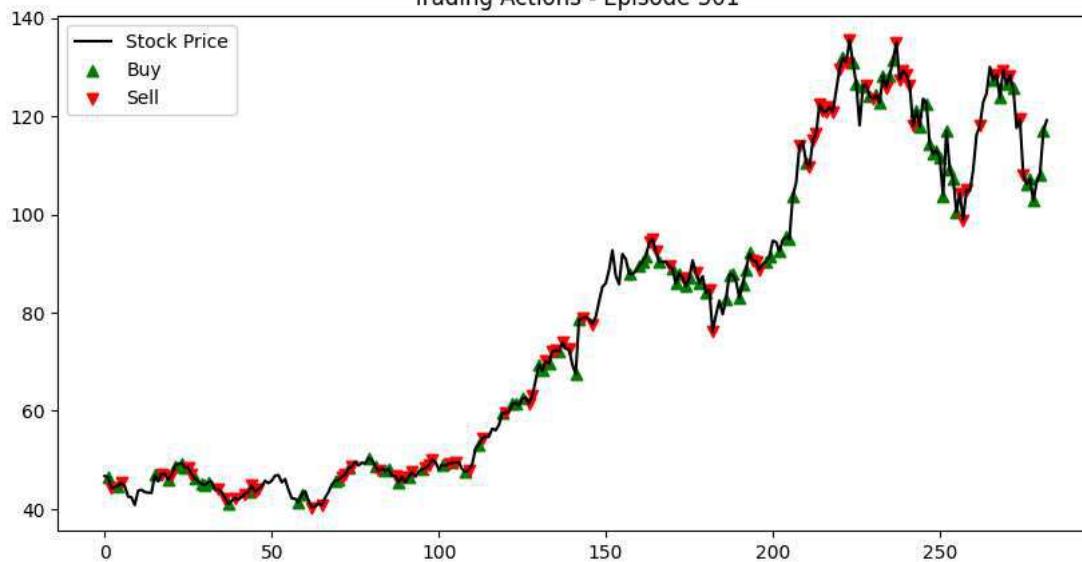
Trading Actions - Episode 300



Running Episode 301/500

Episode 301 Metrics: {'Total Profit': '\$430.40', 'Win Rate': '66.25%', 'Profit Factor': '3.94', 'Sharpe Ratio': '0.39', 'Max Drawdown': ''}

Trading Actions - Episode 301



Running Episode 302/500

Episode 302 Metrics: {'Total Profit': '\$615.34', 'Win Rate': '62.86%', 'Profit Factor': '9.24', 'Sharpe Ratio': '0.58', 'Max Drawdown': ''}

Trading Actions - Episode 302

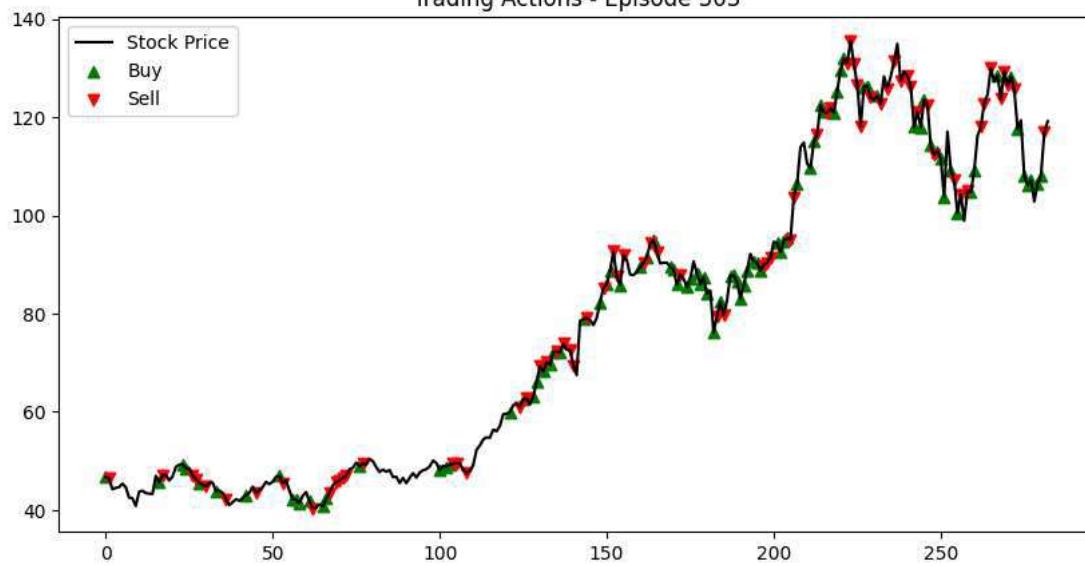




Running Episode 303/500

Episode 303 Metrics: {'Total Profit': '\$632.83', 'Win Rate': '70.42%', 'Profit Factor': '7.88', 'Sharpe Ratio': '0.54', 'Max Drawdown': ''}

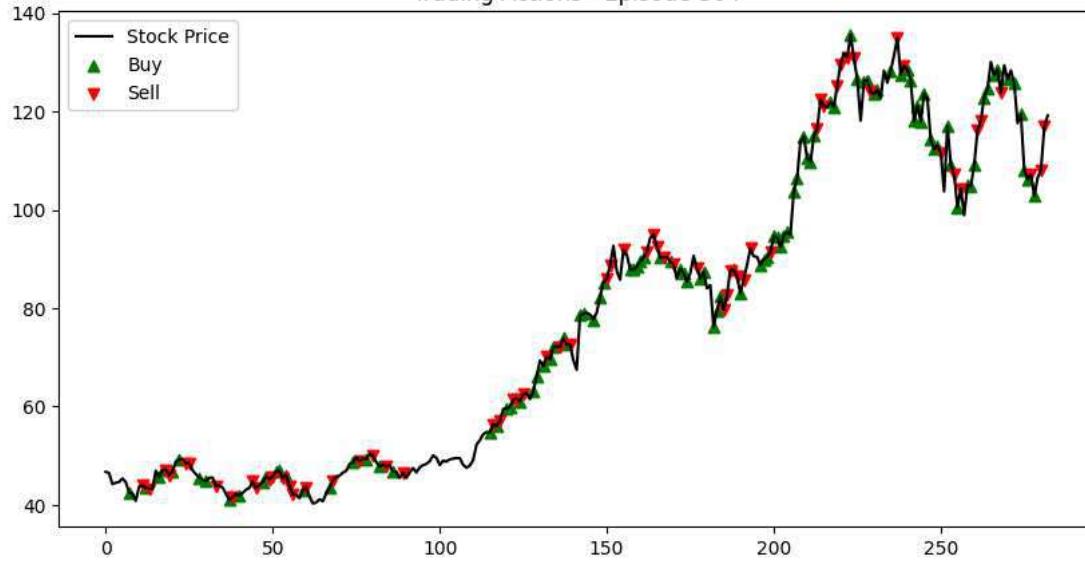
Trading Actions - Episode 303



Running Episode 304/500

Episode 304 Metrics: {'Total Profit': '\$718.23', 'Win Rate': '78.12%', 'Profit Factor': '20.37', 'Sharpe Ratio': '0.71', 'Max Drawdown': ''}

Trading Actions - Episode 304



Running Episode 305/500

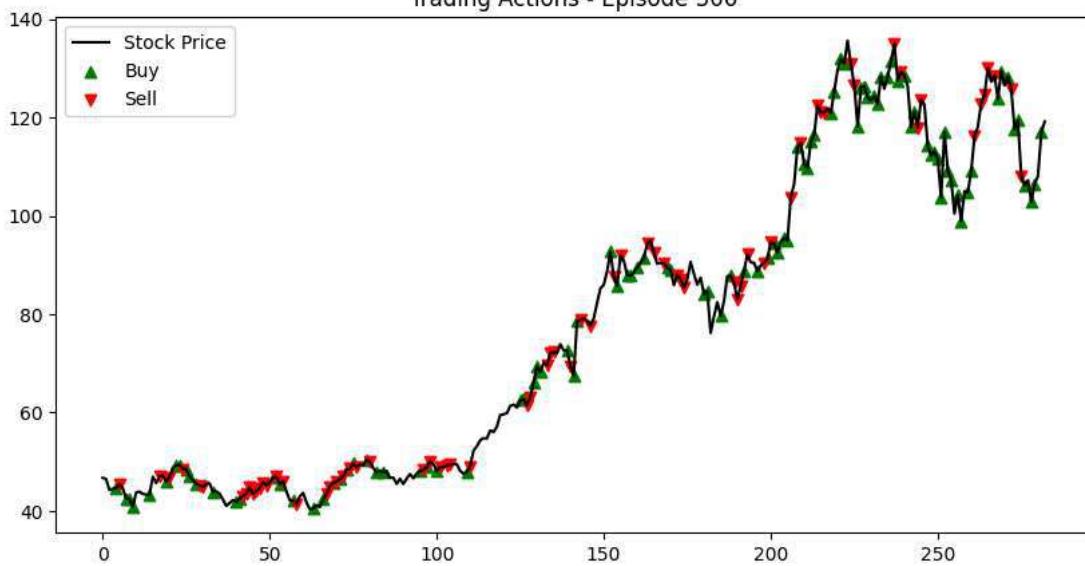
Episode 305 Metrics: {'Total Profit': '\$277.66', 'Win Rate': '67.61%', 'Profit Factor': '3.75', 'Sharpe Ratio': '0.40', 'Max Drawdown': ''}

Trading Actions - Episode 305





Running Episode 306/500
Episode 306 Metrics: {'Total Profit': '\$220.02', 'Win Rate': '68.57%', 'Profit Factor': '3.55', 'Sharpe Ratio': '0.38', 'Max Drawdown': '10.00'}



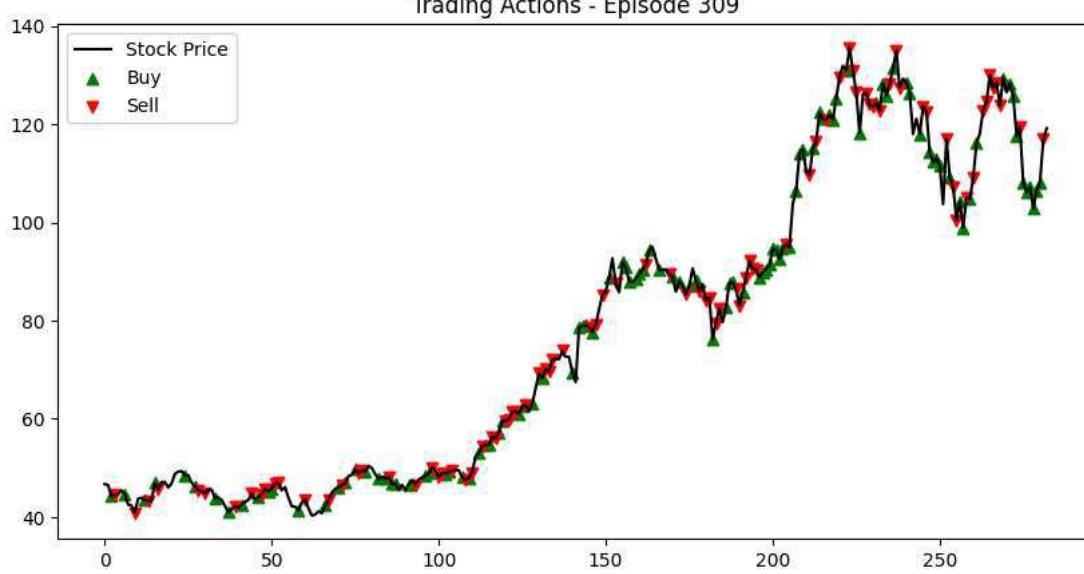
Running Episode 307/500
Episode 307 Metrics: {'Total Profit': '\$311.17', 'Win Rate': '73.17%', 'Profit Factor': '2.83', 'Sharpe Ratio': '0.34', 'Max Drawdown': '10.00'}



Running Episode 308/500
Episode 308 Metrics: {'Total Profit': '\$492.11', 'Win Rate': '75.32%', 'Profit Factor': '10.23', 'Sharpe Ratio': '0.64', 'Max Drawdown': '10.00'}



Running Episode 309/500
Episode 309 Metrics: {'Total Profit': '\$536.20', 'Win Rate': '67.44%', 'Profit Factor': '4.24', 'Sharpe Ratio': '0.44', 'Max Drawdown': '40'}



Running Episode 310/500
Episode 310 Metrics: {'Total Profit': '\$412.22', 'Win Rate': '65.79%', 'Profit Factor': '4.84', 'Sharpe Ratio': '0.42', 'Max Drawdown': '40'}

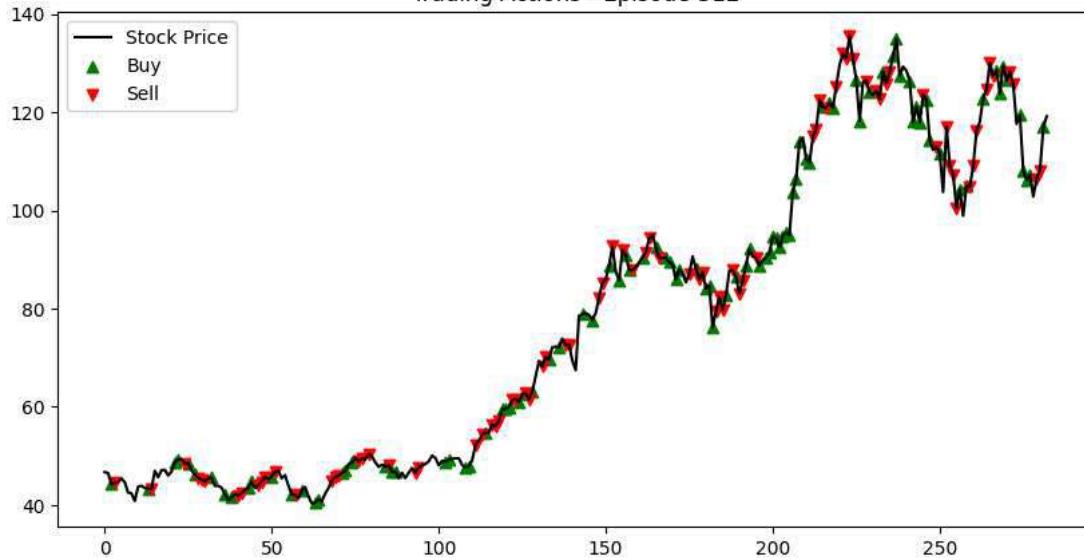


Running Episode 311/500
Episode 311 Metrics: {'Total Profit': '\$456.83', 'Win Rate': '62.16%', 'Profit Factor': '3.78', 'Sharpe Ratio': '0.41', 'Max Drawdown': '40'}



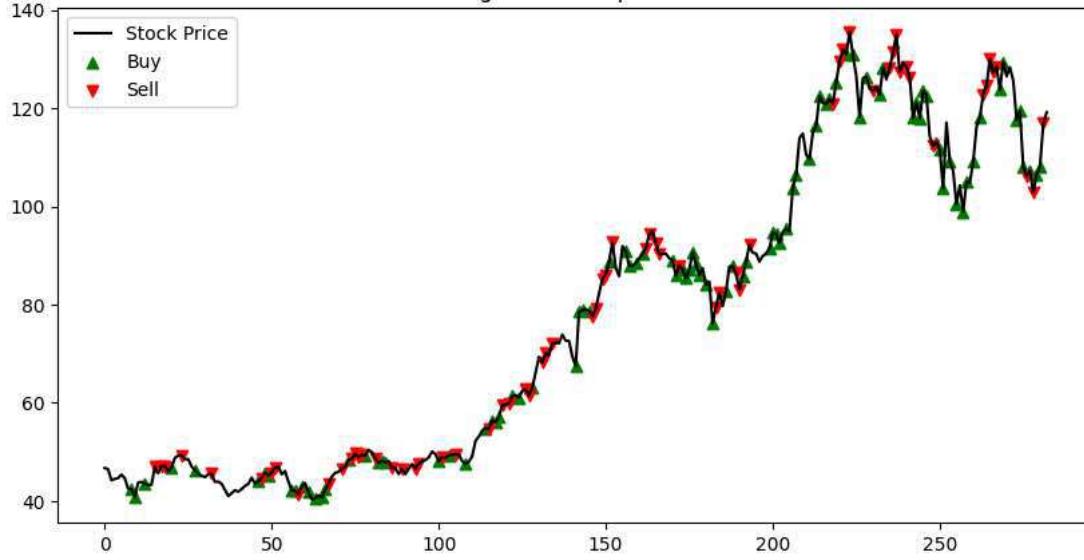
Running Episode 312/500
Episode 312 Metrics: {'Total Profit': '\$388.32', 'Win Rate': '67.47%', 'Profit Factor': '3.20', 'Sharpe Ratio': '0.36', 'Max Drawdown':

Trading Actions - Episode 312



Running Episode 313/500
Episode 313 Metrics: {'Total Profit': '\$667.87', 'Win Rate': '78.46%', 'Profit Factor': '11.72', 'Sharpe Ratio': '0.63', 'Max Drawdown':

Trading Actions - Episode 313



Running Episode 314/500
Episode 314 Metrics: {'Total Profit': '\$791.55', 'Win Rate': '76.12%', 'Profit Factor': '28.20', 'Sharpe Ratio': '0.69', 'Max Drawdown':

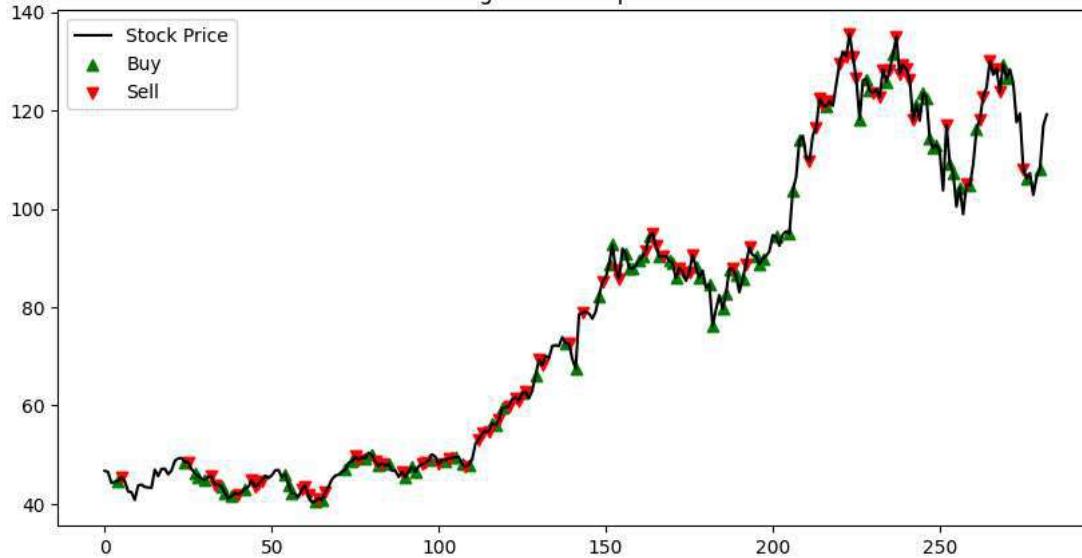
Trading Actions - Episode 314



0 50 100 150 200 250

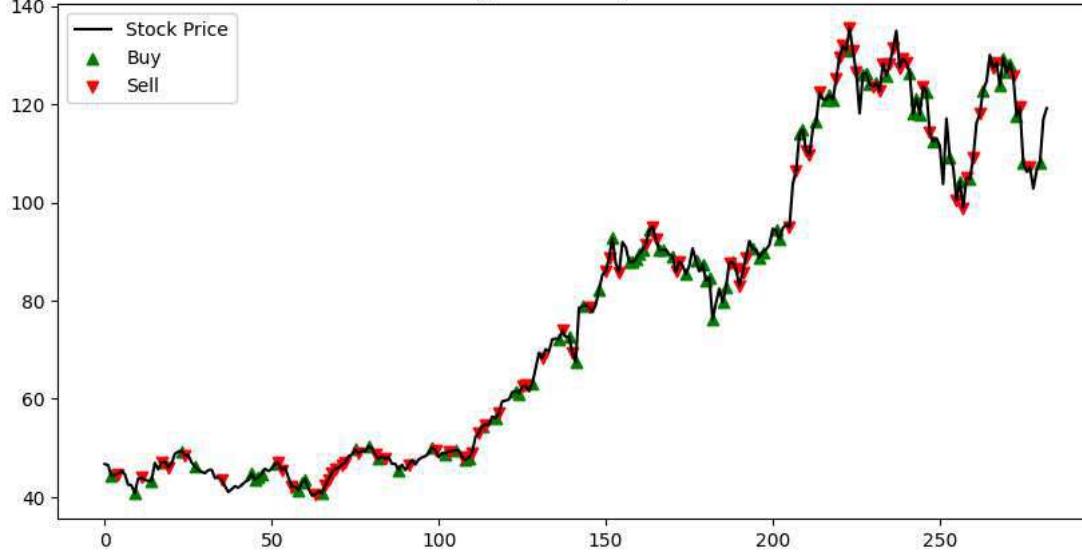
Running Episode 315/500
 Episode 315 Metrics: {'Total Profit': '\$633.09', 'Win Rate': '70.51%', 'Profit Factor': '8.81', 'Sharpe Ratio': '0.54', 'Max Drawdown'

Trading Actions - Episode 315



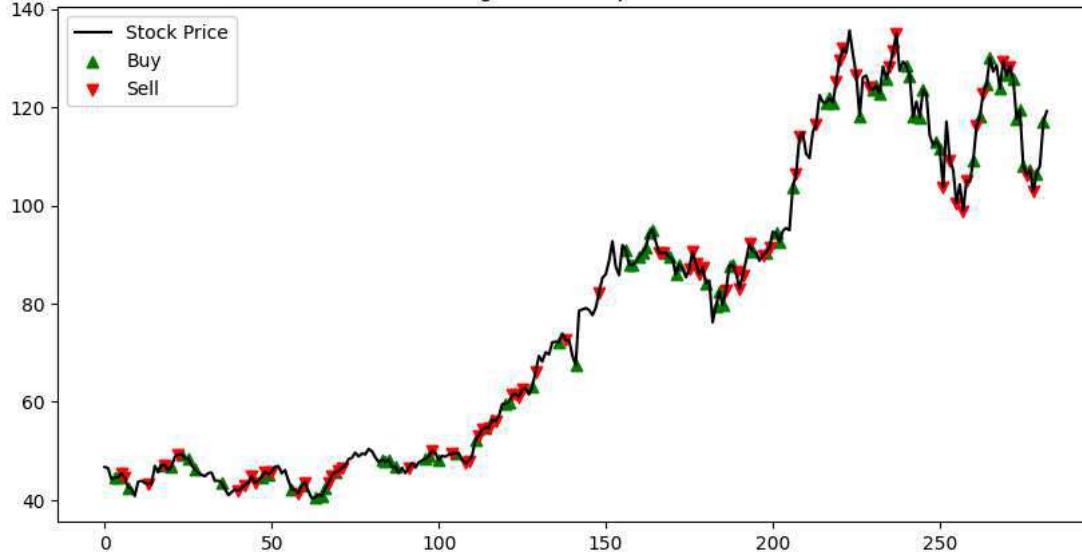
Running Episode 316/500
 Episode 316 Metrics: {'Total Profit': '\$443.09', 'Win Rate': '64.94%', 'Profit Factor': '3.47', 'Sharpe Ratio': '0.37', 'Max Drawdown'

Trading Actions - Episode 316



Running Episode 317/500
 Episode 317 Metrics: {'Total Profit': '\$235.71', 'Win Rate': '62.32%', 'Profit Factor': '2.20', 'Sharpe Ratio': '0.25', 'Max Drawdown'

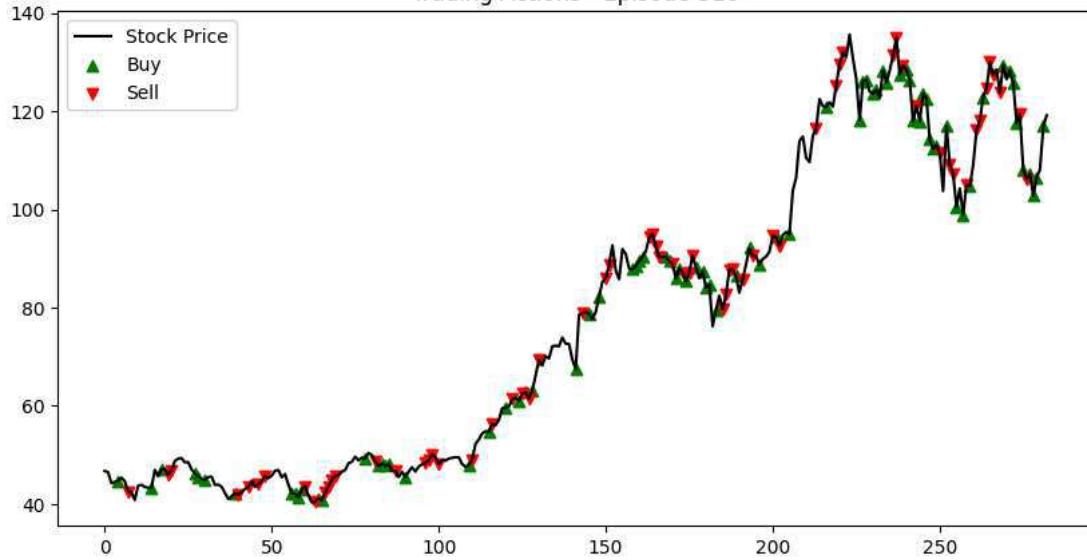
Trading Actions - Episode 317



Running Episode 318/500

Episode 318 Metrics: {'Total Profit': '\$132.41', 'Win Rate': '65.62%', 'Profit Factor': '2.01', 'Sharpe Ratio': '0.22', 'Max Drawdown': ''}

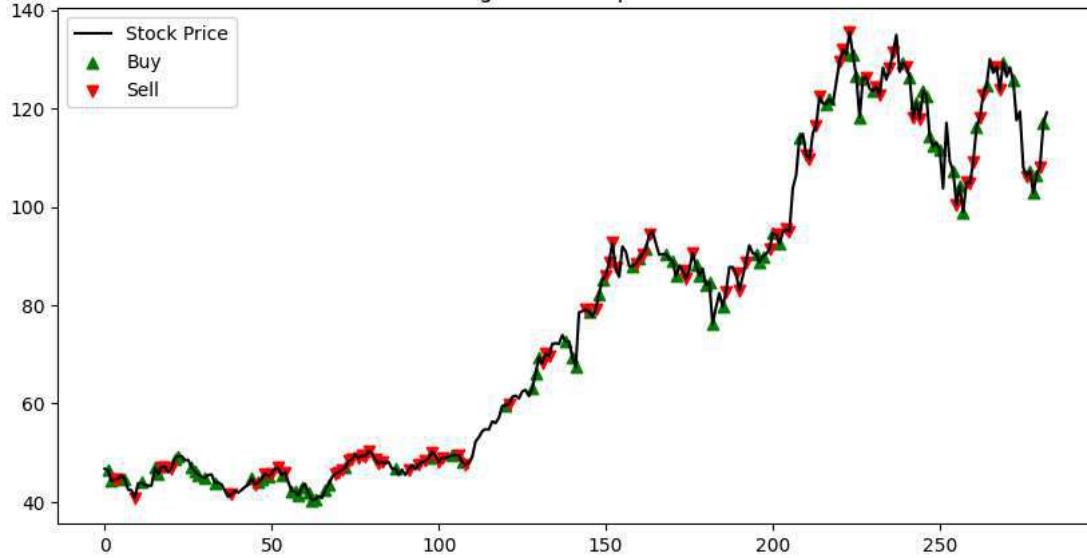
Trading Actions - Episode 318



Running Episode 319/500

Episode 319 Metrics: {'Total Profit': '\$253.15', 'Win Rate': '72.84%', 'Profit Factor': '2.90', 'Sharpe Ratio': '0.37', 'Max Drawdown': ''}

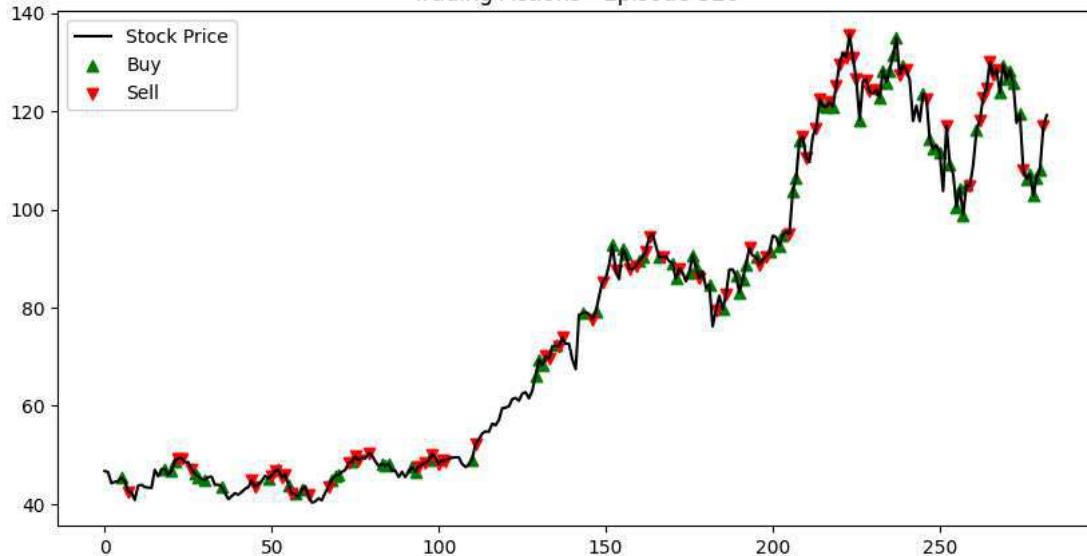
Trading Actions - Episode 319



Running Episode 320/500

Episode 320 Metrics: {'Total Profit': '\$350.87', 'Win Rate': '69.01%', 'Profit Factor': '4.30', 'Sharpe Ratio': '0.42', 'Max Drawdown': ''}

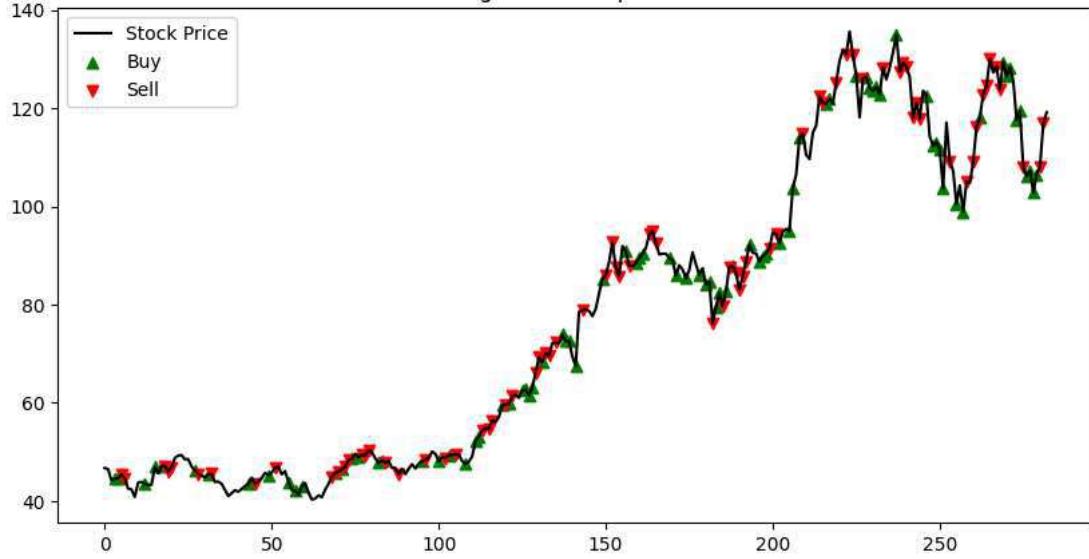
Trading Actions - Episode 320



Running Episode 321/500

Episode 321 Metrics: {'Total Profit': '\$429.88', 'Win Rate': '77.33%', 'Profit Factor': '4.73', 'Sharpe Ratio': '0.48', 'Max Drawdown': ''}

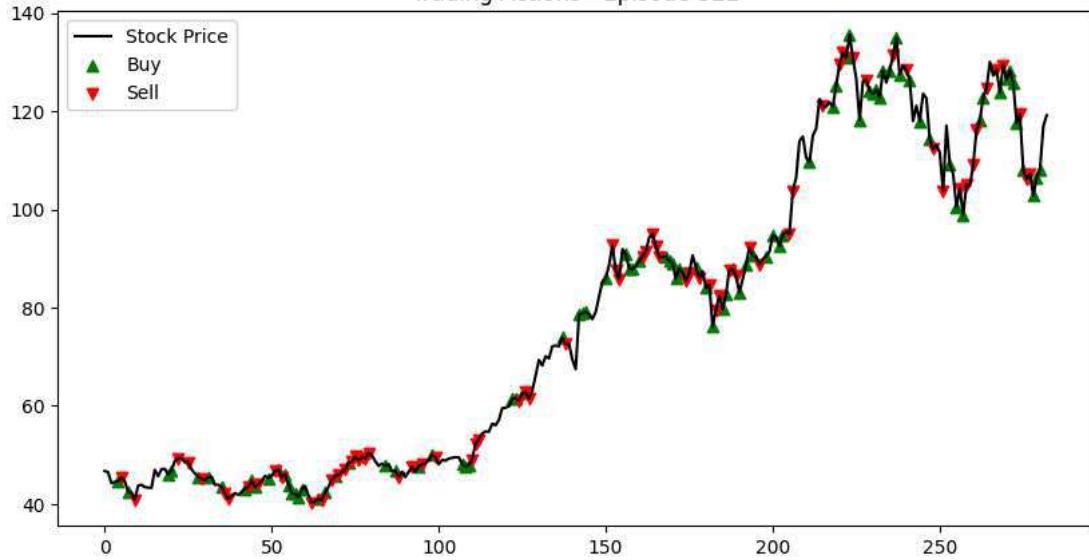
Trading Actions - Episode 321



Running Episode 322/500

Episode 322 Metrics: {'Total Profit': '\$257.58', 'Win Rate': '62.50%', 'Profit Factor': '2.35', 'Sharpe Ratio': '0.26', 'Max Drawdown': ''}

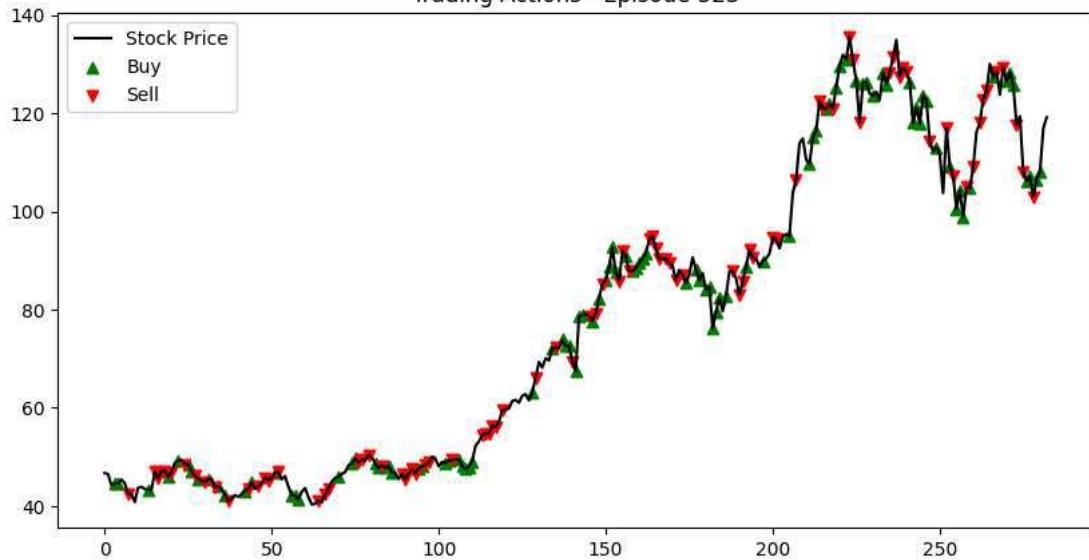
Trading Actions - Episode 322



Running Episode 323/500

Episode 323 Metrics: {'Total Profit': '\$371.50', 'Win Rate': '63.10%', 'Profit Factor': '3.11', 'Sharpe Ratio': '0.33', 'Max Drawdown': ''}

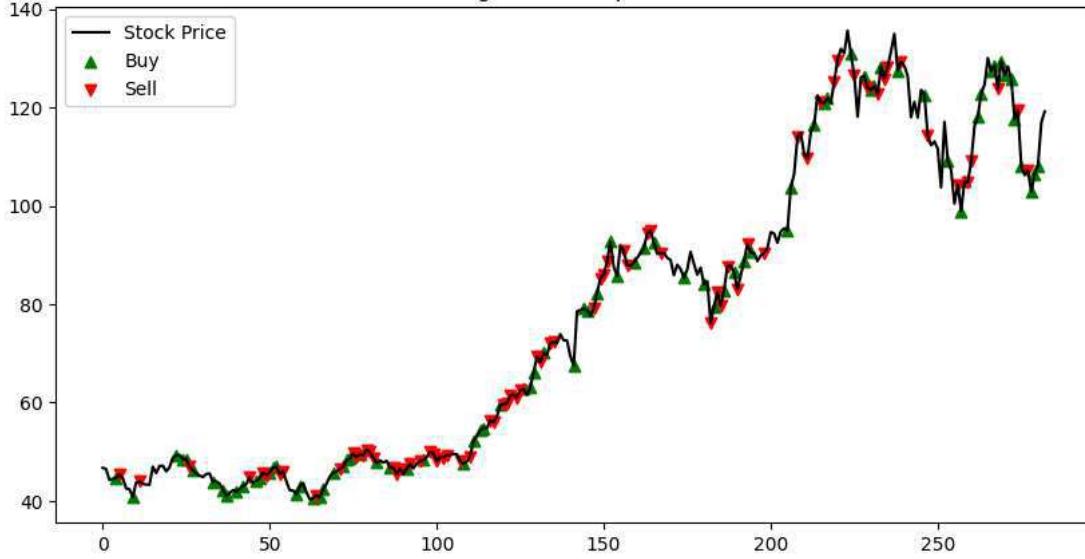
Trading Actions - Episode 323



Running Episode 324/500

Episode 324 Metrics: {'Total Profit': '\$188.51', 'Win Rate': '72.60%', 'Profit Factor': '3.59', 'Sharpe Ratio': '0.49', 'Max Drawdown':

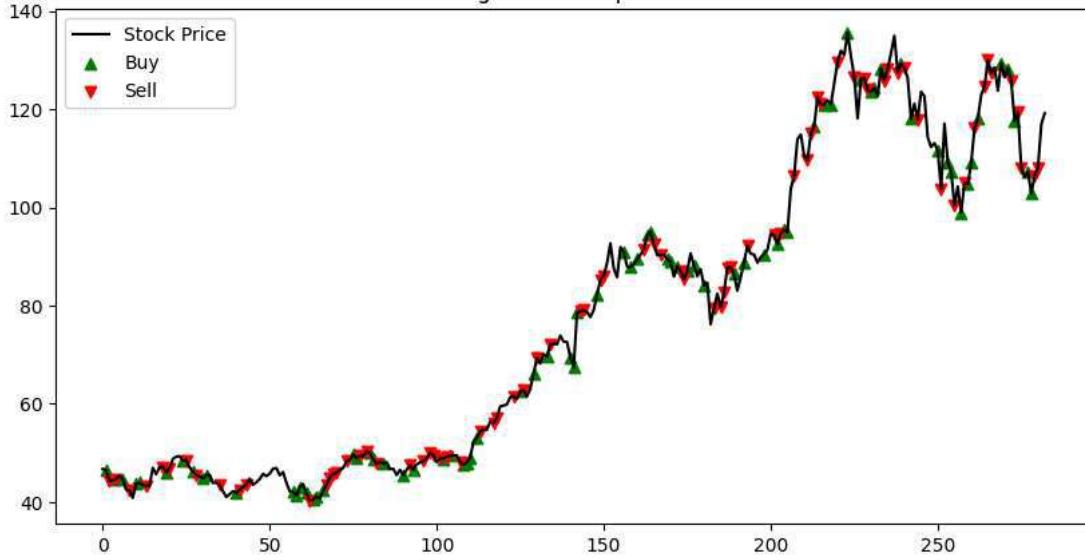
Trading Actions - Episode 324



Running Episode 325/500

Episode 325 Metrics: {'Total Profit': '\$205.55', 'Win Rate': '62.34%', 'Profit Factor': '2.81', 'Sharpe Ratio': '0.36', 'Max Drawdown':

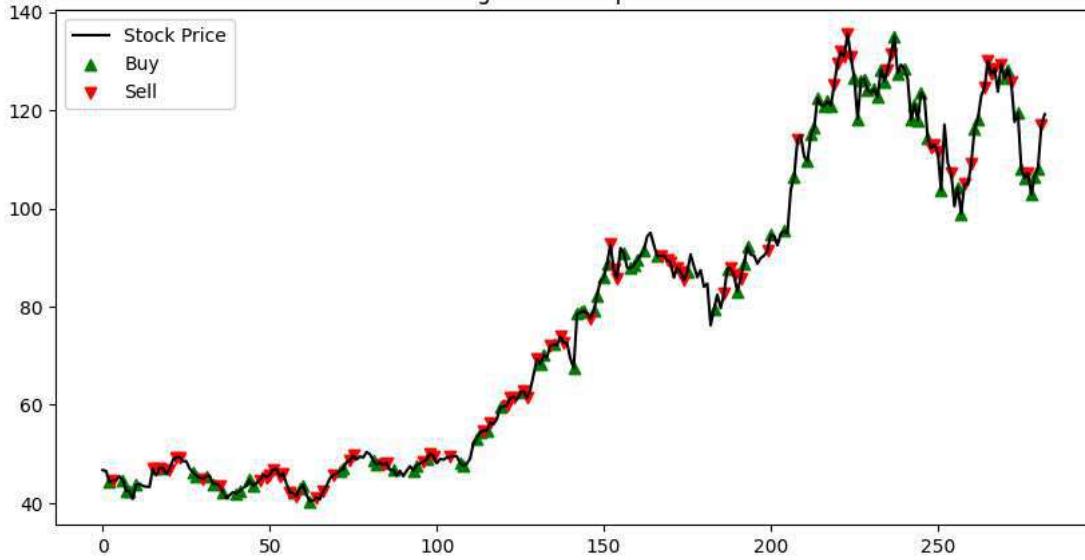
Trading Actions - Episode 325



Running Episode 326/500

Episode 326 Metrics: {'Total Profit': '\$404.32', 'Win Rate': '68.42%', 'Profit Factor': '4.31', 'Sharpe Ratio': '0.41', 'Max Drawdown':

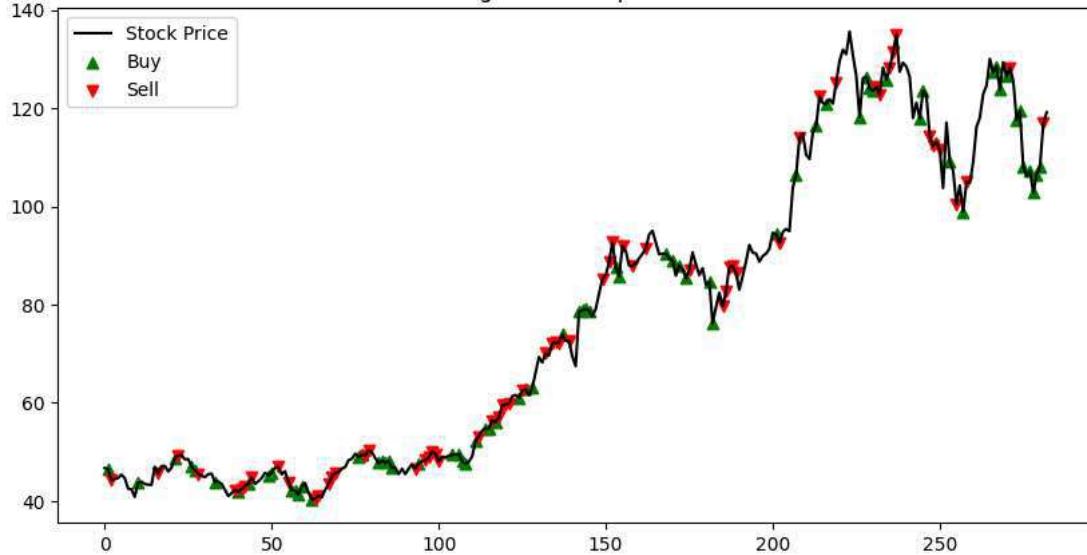
Trading Actions - Episode 326



Running Episode 327/500

Episode 327 Metrics: {'Total Profit': '\$159.94', 'Win Rate': '69.84%', 'Profit Factor': '3.09', 'Sharpe Ratio': '0.44', 'Max Drawdown':

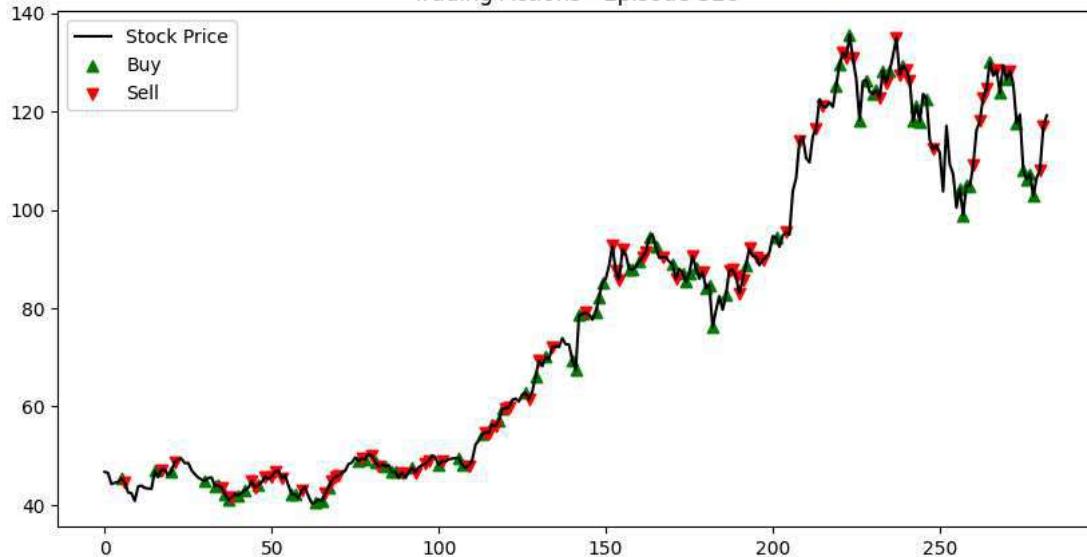
Trading Actions - Episode 327



Running Episode 328/500

Episode 328 Metrics: {'Total Profit': '\$290.91', 'Win Rate': '70.27%', 'Profit Factor': '5.47', 'Sharpe Ratio': '0.46', 'Max Drawdown': ''}

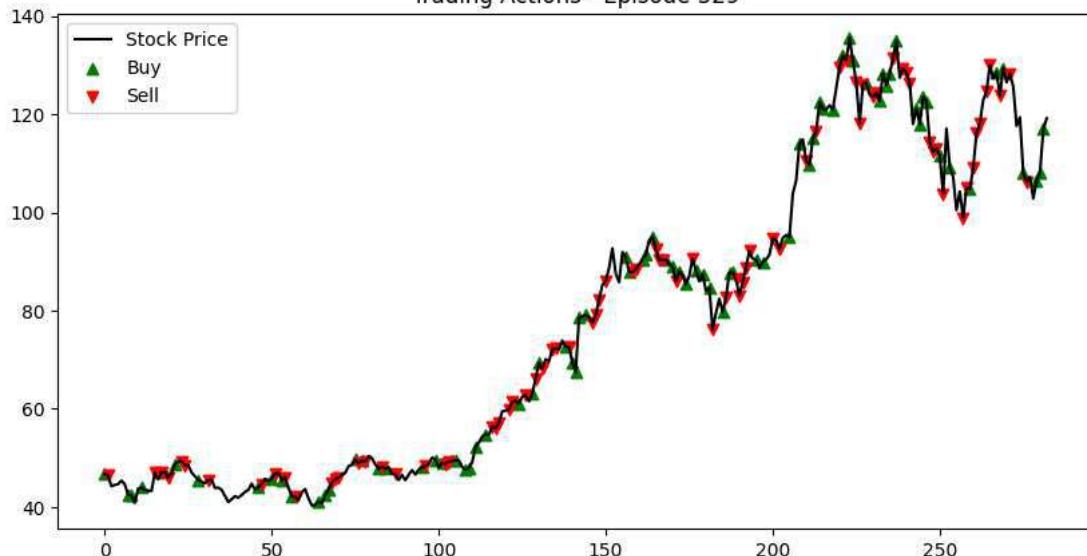
Trading Actions - Episode 328



Running Episode 329/500

Episode 329 Metrics: {'Total Profit': '\$119.07', 'Win Rate': '59.49%', 'Profit Factor': '1.62', 'Sharpe Ratio': '0.17', 'Max Drawdown': ''}

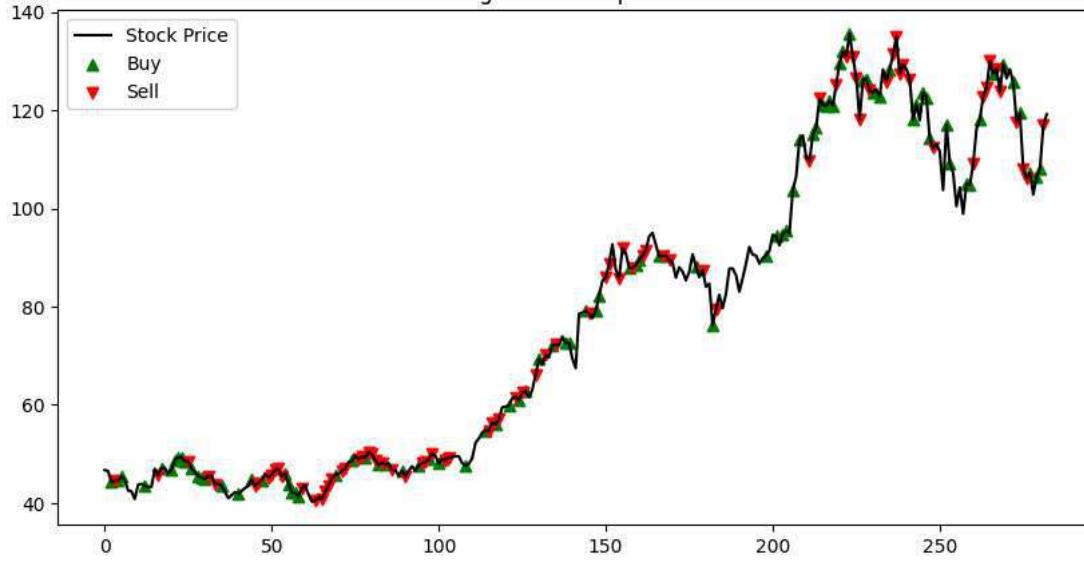
Trading Actions - Episode 329



Running Episode 330/500

Episode 330 Metrics: {'Total Profit': '\$205.18', 'Win Rate': '66.67%', 'Profit Factor': '2.67', 'Sharpe Ratio': '0.29', 'Max Drawdown': ''}

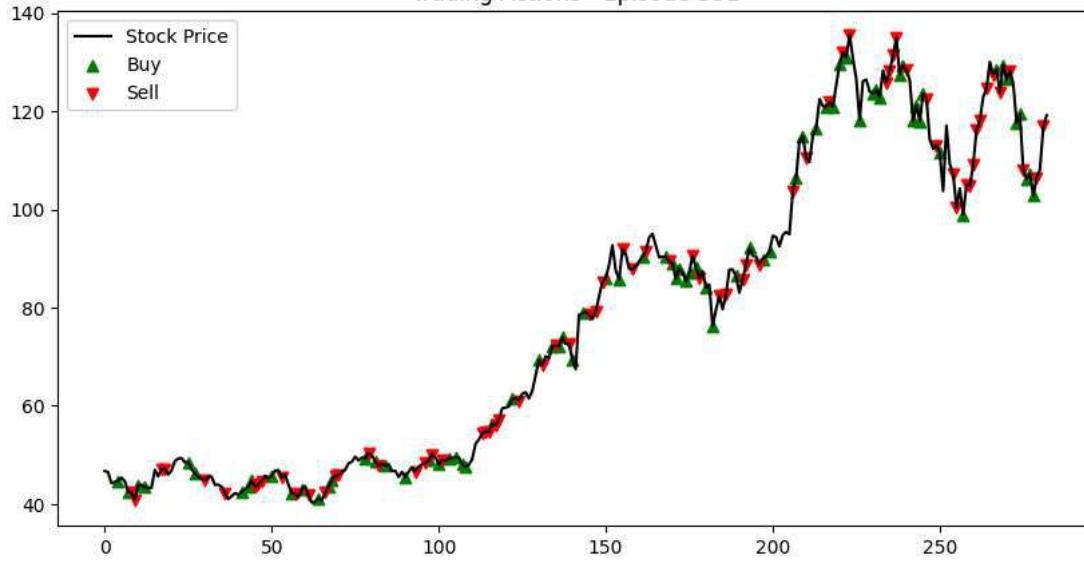
Trading Actions - Episode 330



Running Episode 331/500

Episode 331 Metrics: {'Total Profit': '\$168.96', 'Win Rate': '62.86%', 'Profit Factor': '1.89', 'Sharpe Ratio': '0.20', 'Max Drawdown':

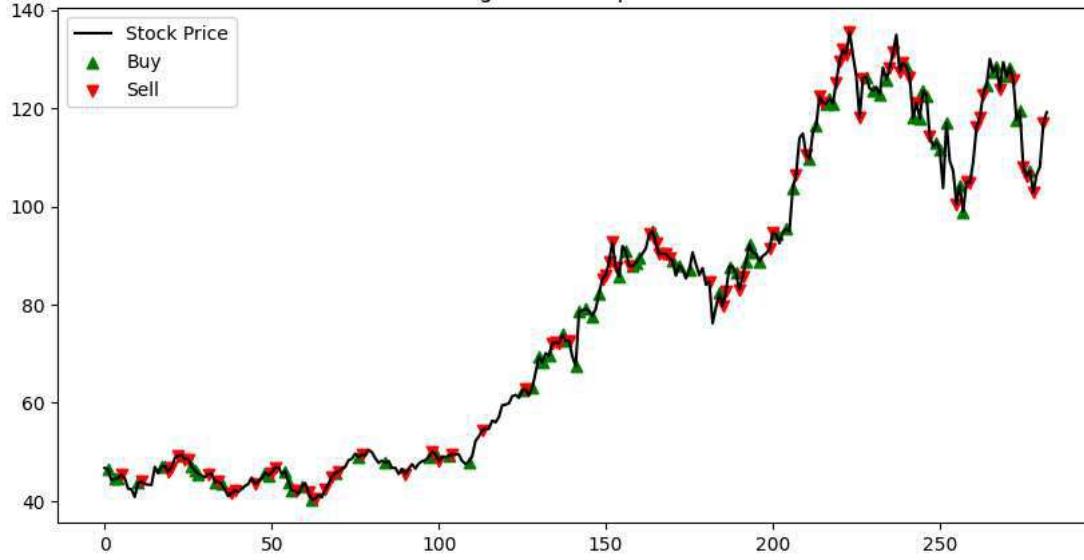
Trading Actions - Episode 331



Running Episode 332/500

Episode 332 Metrics: {'Total Profit': '\$287.52', 'Win Rate': '63.75%', 'Profit Factor': '2.48', 'Sharpe Ratio': '0.30', 'Max Drawdown':

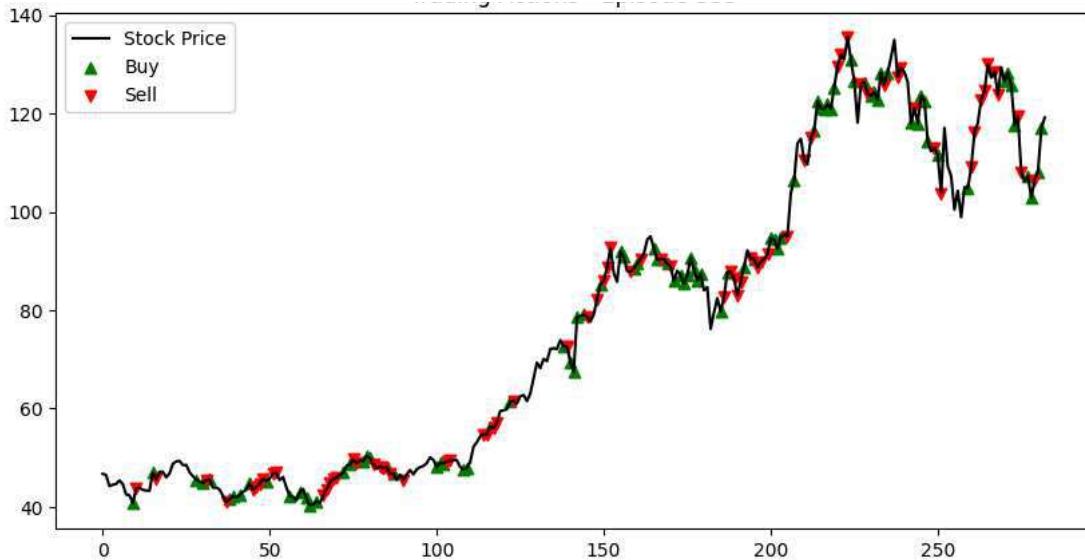
Trading Actions - Episode 332

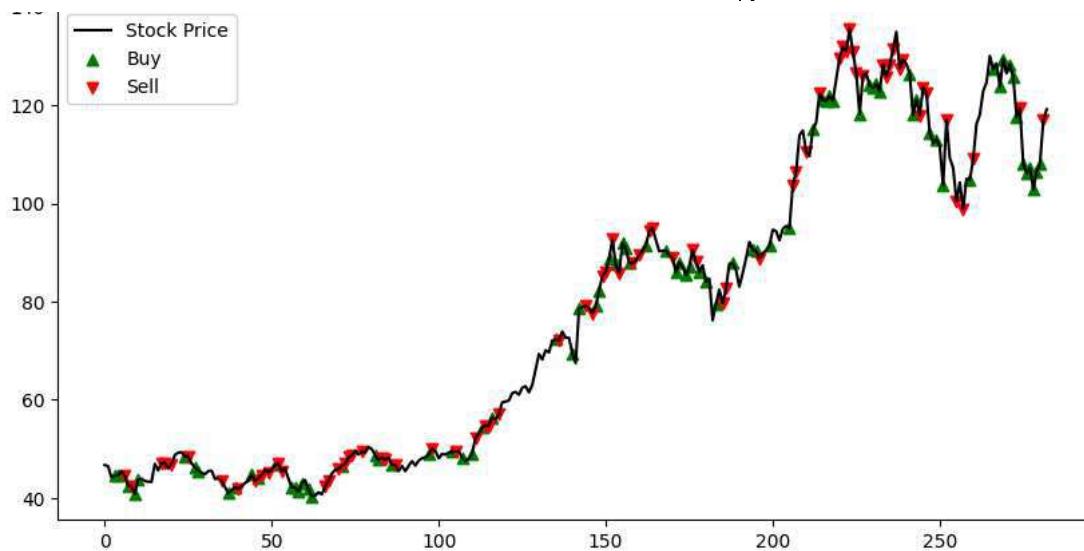


Running Episode 333/500

Episode 333 Metrics: {'Total Profit': '\$379.13', 'Win Rate': '62.50%', 'Profit Factor': '3.98', 'Sharpe Ratio': '0.38', 'Max Drawdown':

Trading Actions - Episode 333

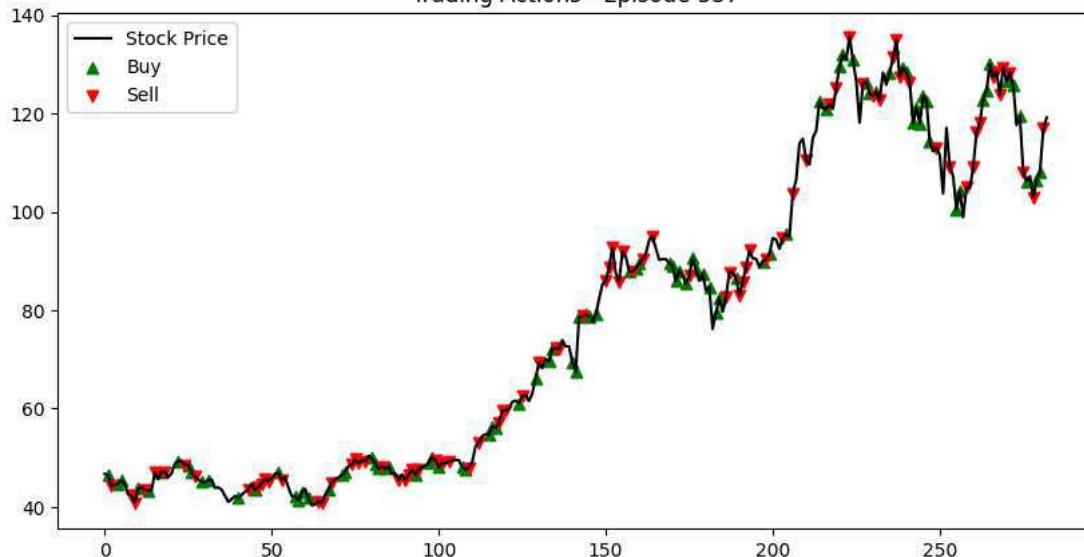




Running Episode 337/500

Episode 337 Metrics: {'Total Profit': '\$263.72', 'Win Rate': '59.04%', 'Profit Factor': '2.89', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

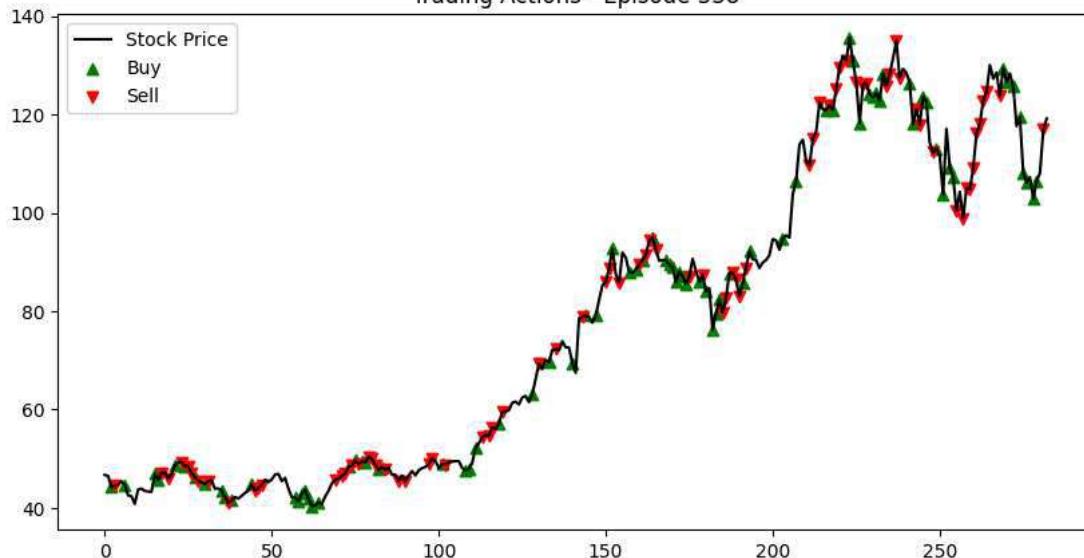
Trading Actions - Episode 337



Running Episode 338/500

Episode 338 Metrics: {'Total Profit': '\$327.93', 'Win Rate': '60.53%', 'Profit Factor': '2.69', 'Sharpe Ratio': '0.31', 'Max Drawdown': ''}

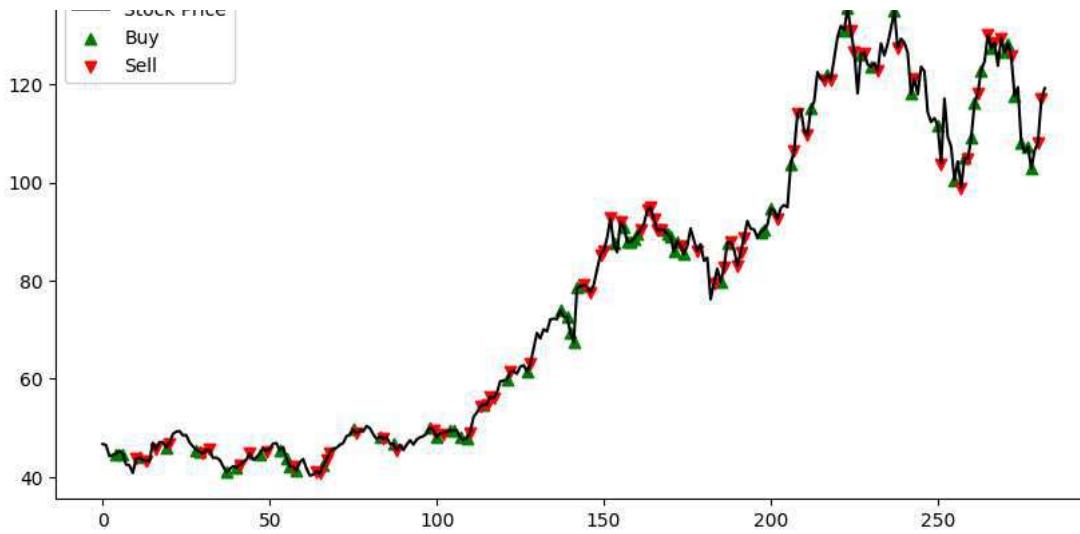
Trading Actions - Episode 338



Running Episode 339/500

Episode 339 Metrics: {'Total Profit': '\$135.30', 'Win Rate': '58.82%', 'Profit Factor': '2.58', 'Sharpe Ratio': '0.31', 'Max Drawdown': ''}

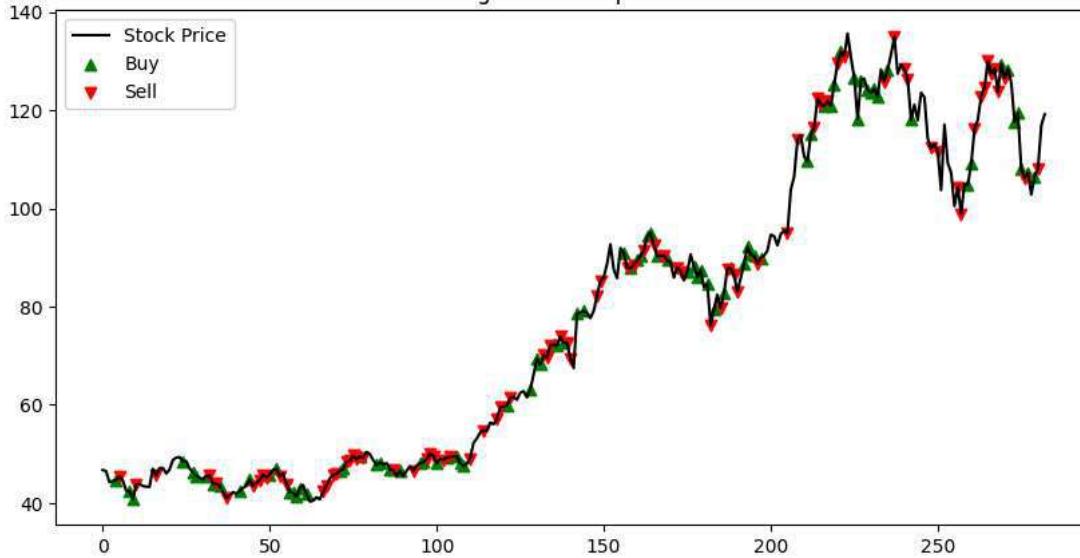
Trading Actions - Episode 339



Running Episode 340/500

Episode 340 Metrics: {'Total Profit': '\$232.35', 'Win Rate': '64.20%', 'Profit Factor': '2.22', 'Sharpe Ratio': '0.25', 'Max Drawdown'}

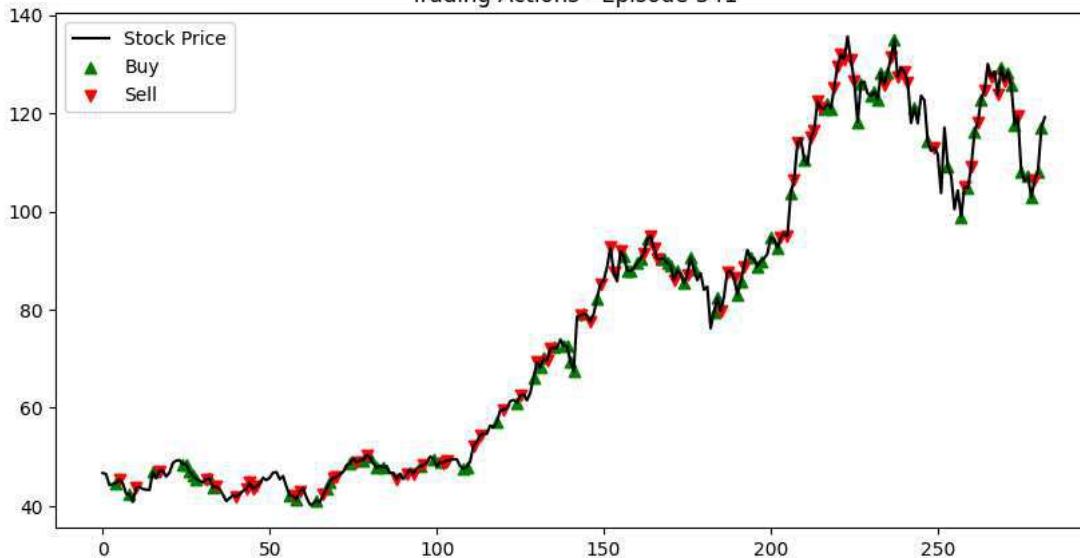
Trading Actions - Episode 340



Running Episode 341/500

Episode 341 Metrics: {'Total Profit': '\$502.65', 'Win Rate': '65.33%', 'Profit Factor': '5.02', 'Sharpe Ratio': '0.46', 'Max Drawdown'}

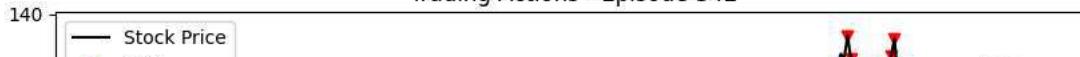
Trading Actions - Episode 341

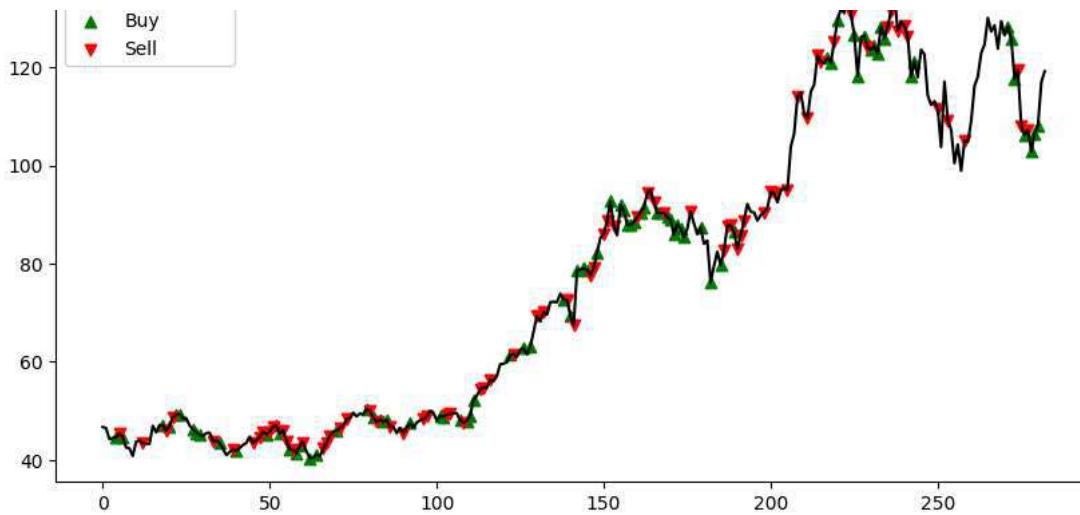


Running Episode 342/500

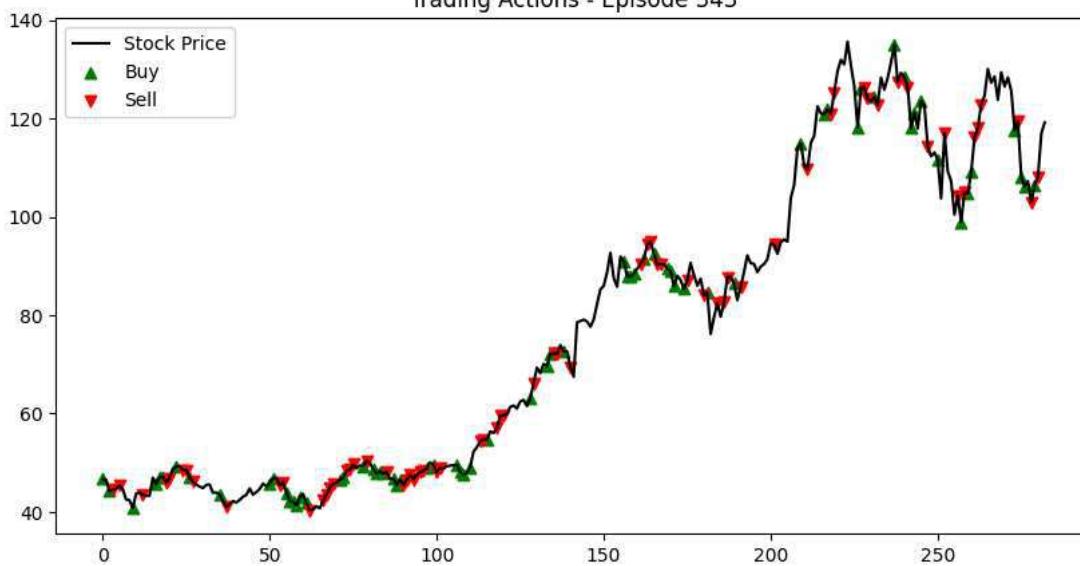
Episode 342 Metrics: {'Total Profit': '\$158.66', 'Win Rate': '58.44%', 'Profit Factor': '2.08', 'Sharpe Ratio': '0.22', 'Max Drawdown'}

Trading Actions - Episode 342

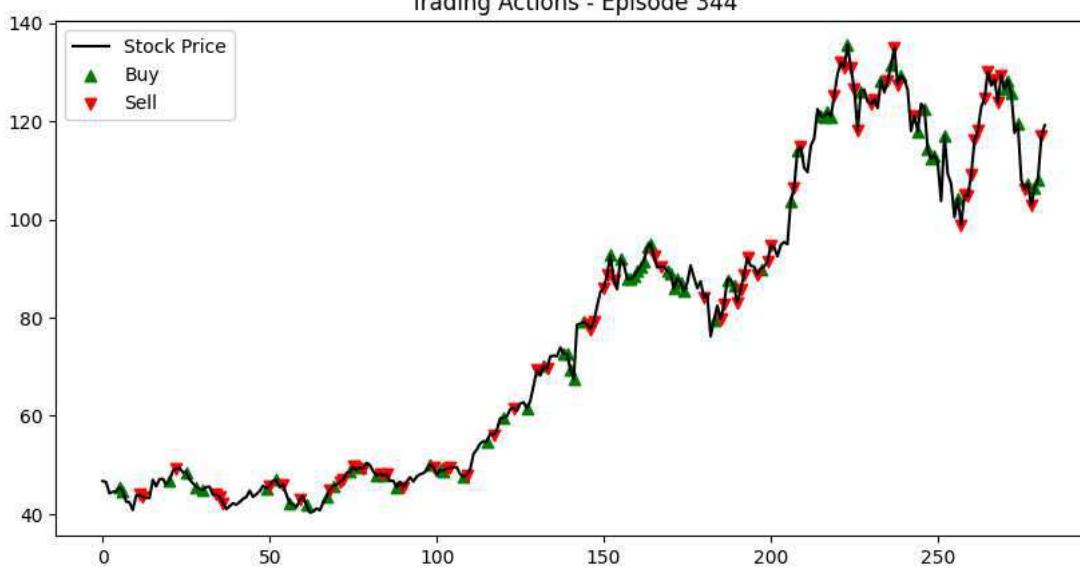




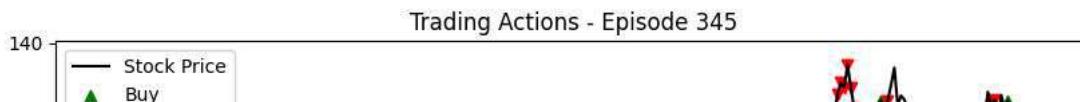
Running Episode 343/500
 Episode 343 Metrics: {'Total Profit': '\$58.37', 'Win Rate': '51.47%', 'Profit Factor': '1.58', 'Sharpe Ratio': '0.16', 'Max Drawdown': '10.0%'}

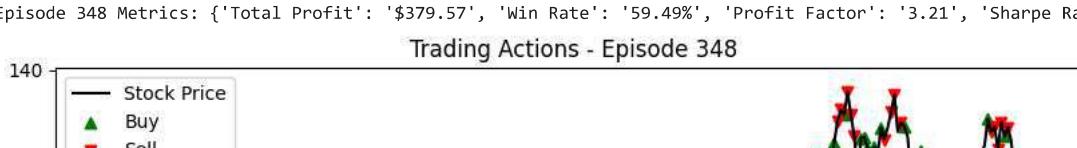
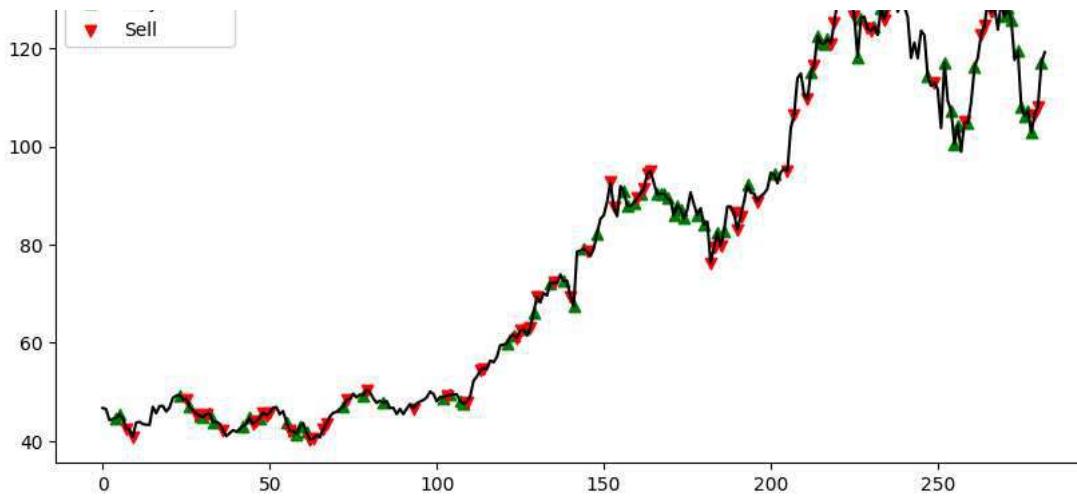


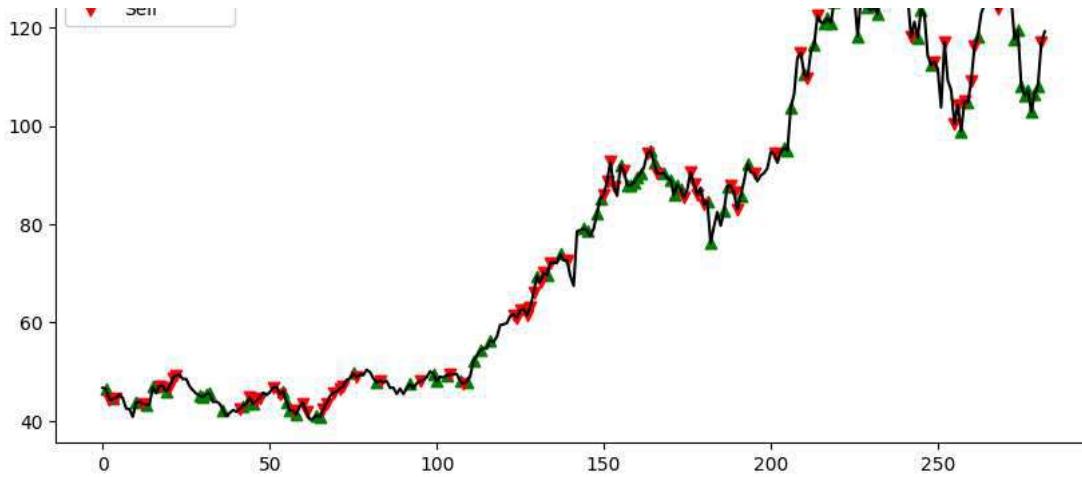
Running Episode 344/500
 Episode 344 Metrics: {'Total Profit': '\$247.73', 'Win Rate': '59.15%', 'Profit Factor': '2.06', 'Sharpe Ratio': '0.23', 'Max Drawdown': '10.0%'}



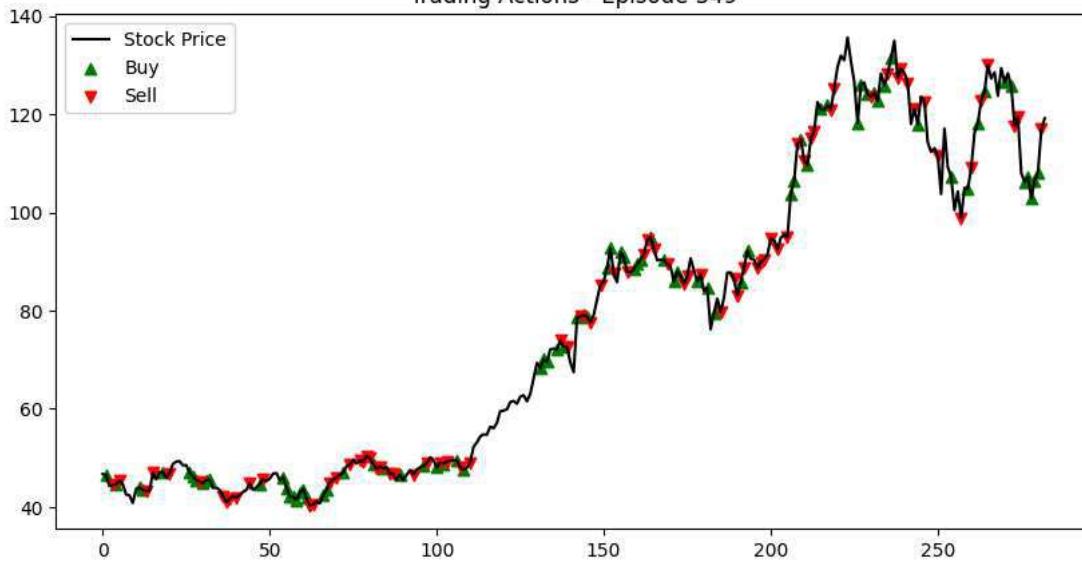
Running Episode 345/500
 Episode 345 Metrics: {'Total Profit': '\$305.20', 'Win Rate': '61.19%', 'Profit Factor': '3.69', 'Sharpe Ratio': '0.39', 'Max Drawdown': '10.0%'}



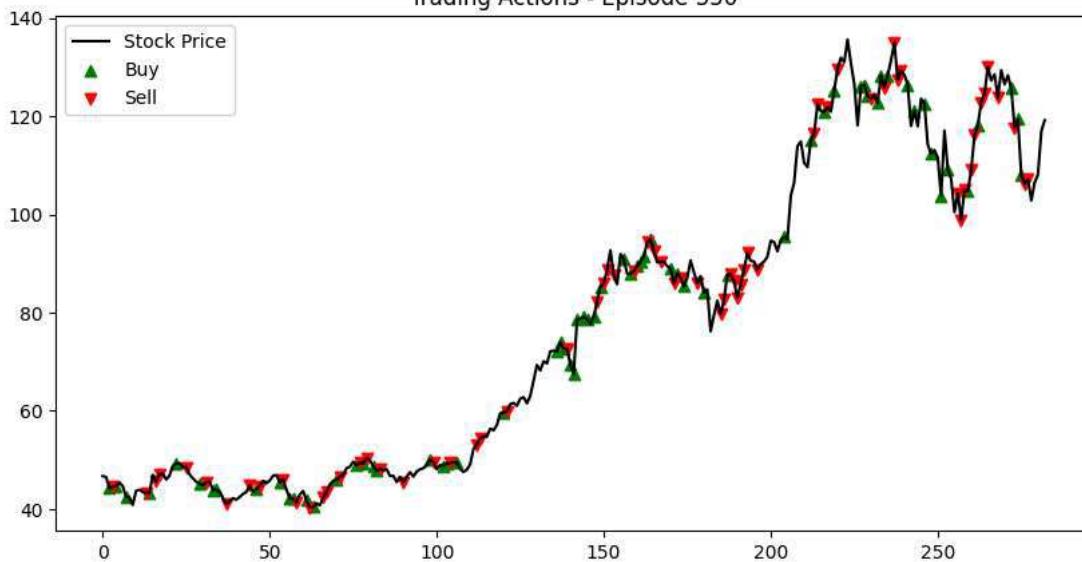




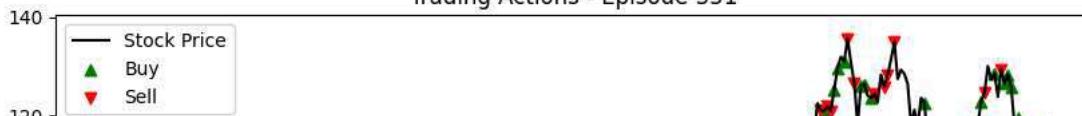
Trading Actions - Episode 349

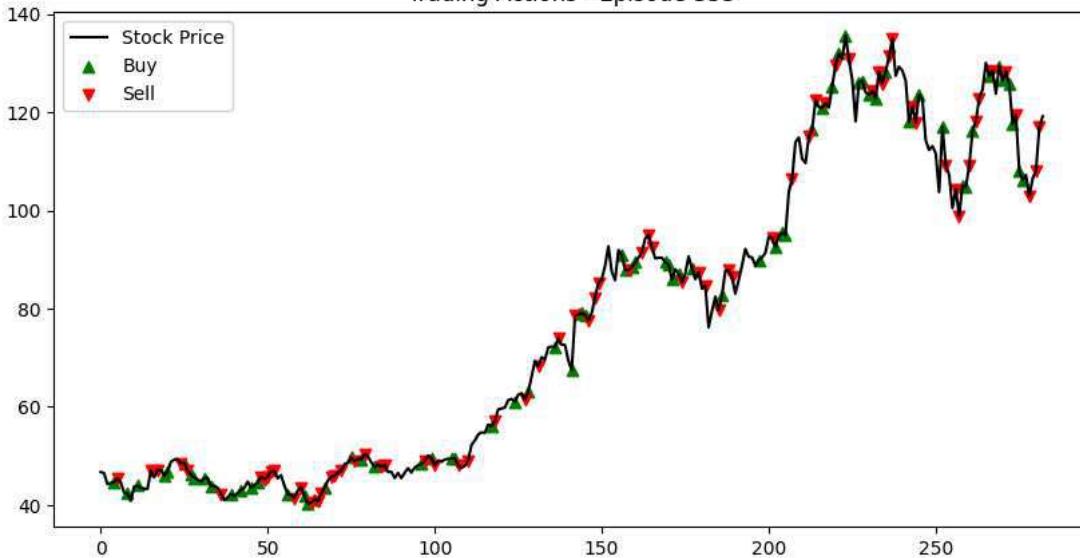
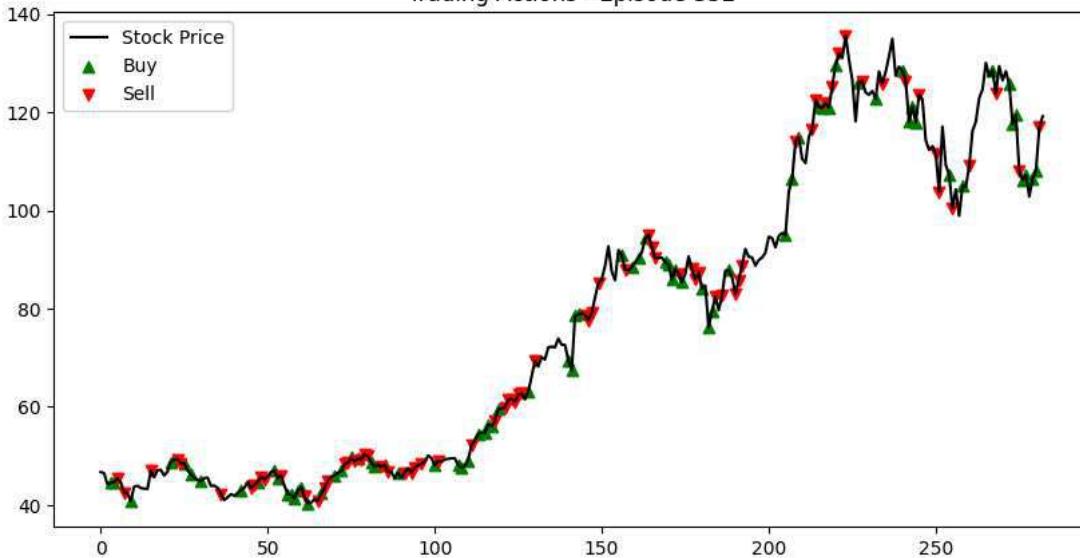
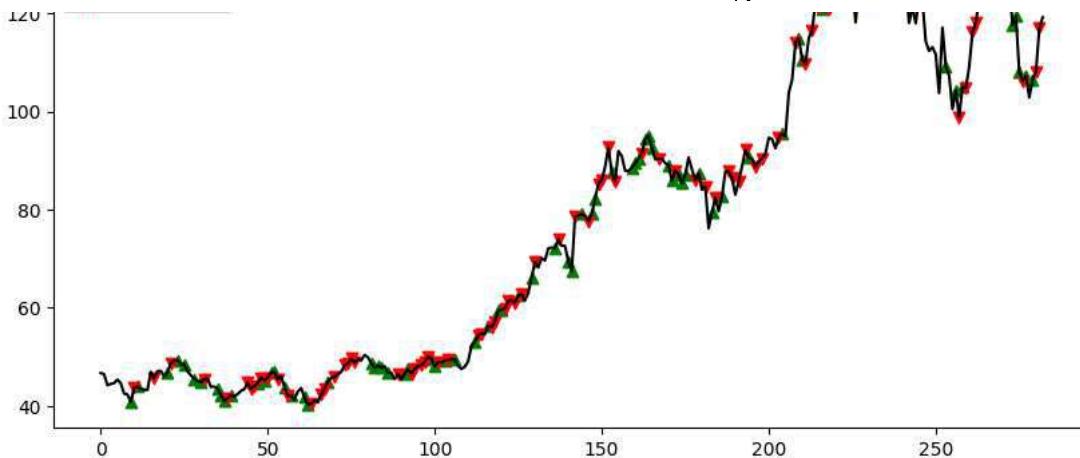


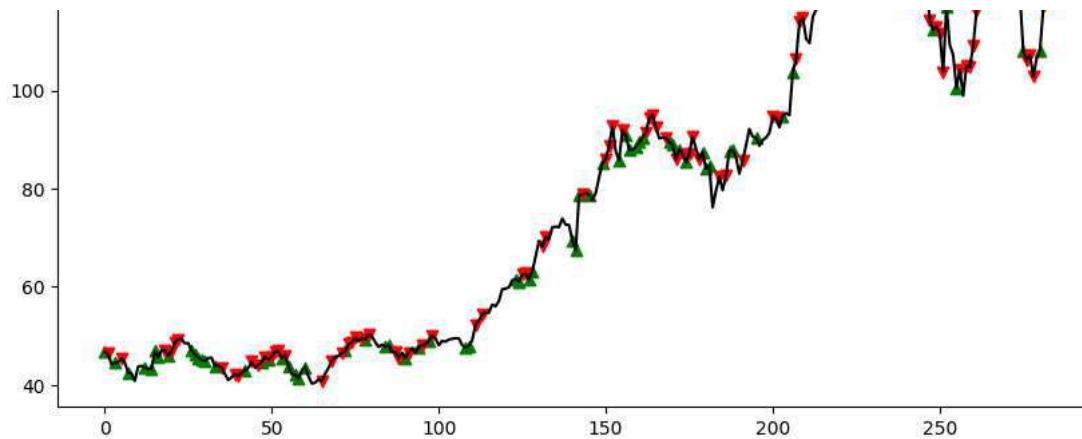
Trading Actions - Episode 350



Trading Actions - Episode 351



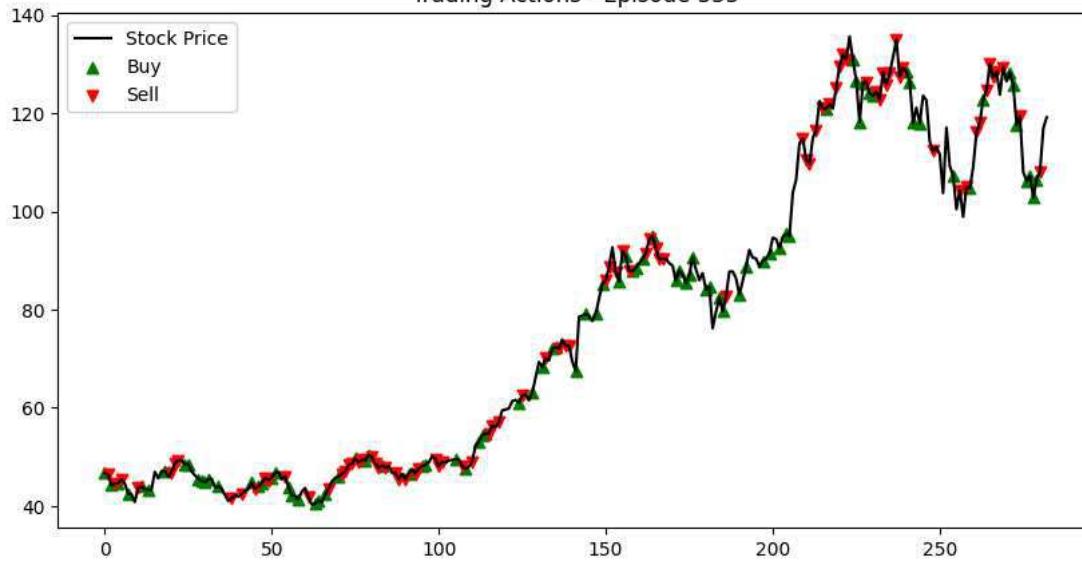




Running Episode 355/500

Episode 355 Metrics: {'Total Profit': '\$620.51', 'Win Rate': '75.29%', 'Profit Factor': '5.45', 'Sharpe Ratio': '0.49', 'Max Drawdown':

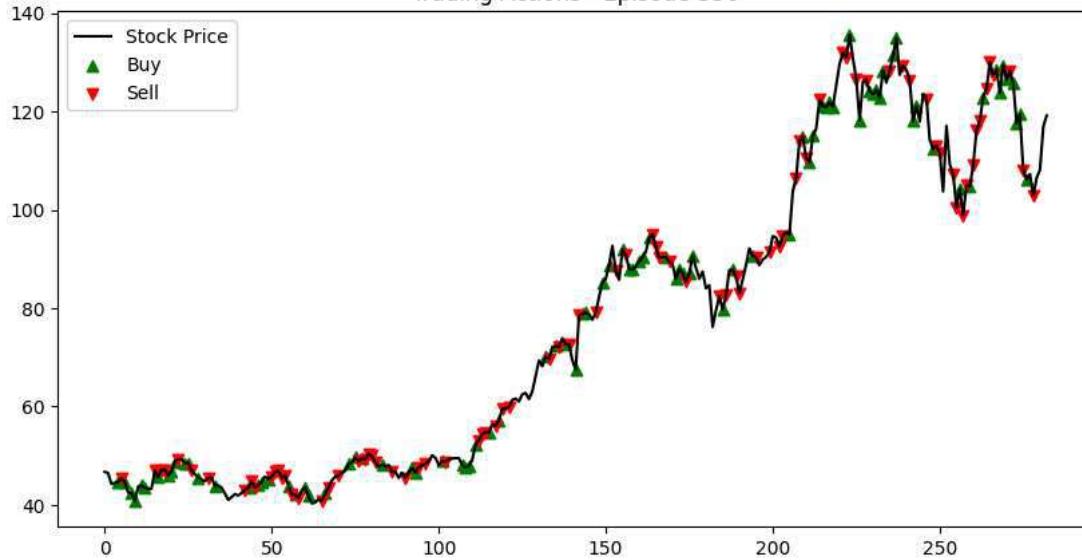
Trading Actions - Episode 355



Running Episode 356/500

Episode 356 Metrics: {'Total Profit': '\$121.06', 'Win Rate': '60.24%', 'Profit Factor': '1.46', 'Sharpe Ratio': '0.13', 'Max Drawdown':

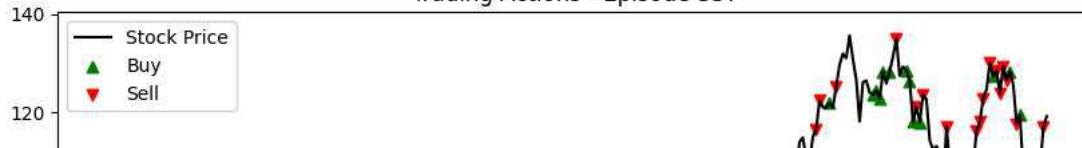
Trading Actions - Episode 356

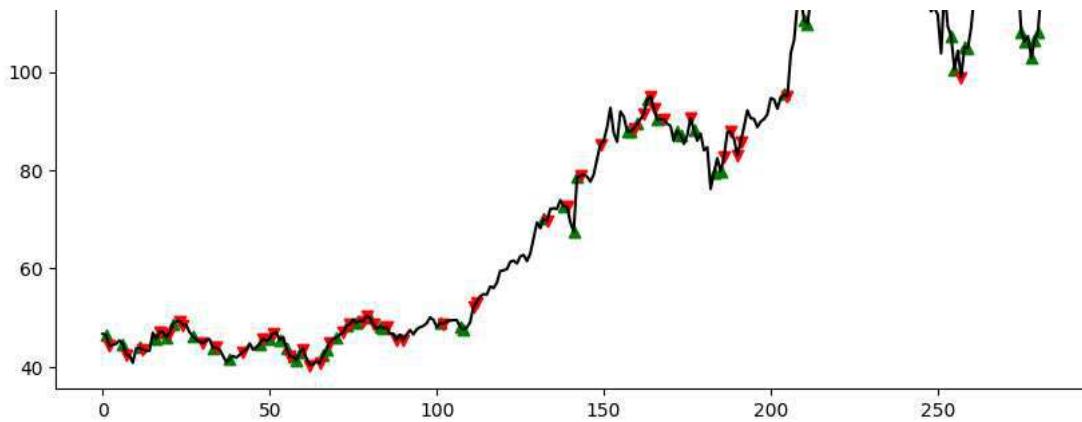


Running Episode 357/500

Episode 357 Metrics: {'Total Profit': '\$104.49', 'Win Rate': '54.10%', 'Profit Factor': '1.93', 'Sharpe Ratio': '0.20', 'Max Drawdown':

Trading Actions - Episode 357

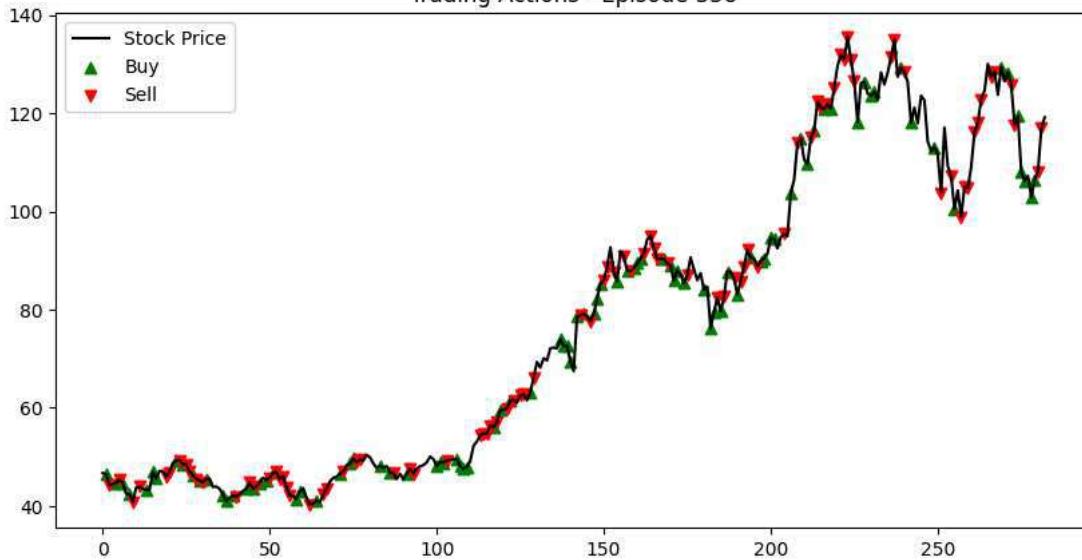




Running Episode 358/500

Episode 358 Metrics: {'Total Profit': '\$544.13', 'Win Rate': '67.42%', 'Profit Factor': '3.98', 'Sharpe Ratio': '0.43', 'Max Drawdown'}

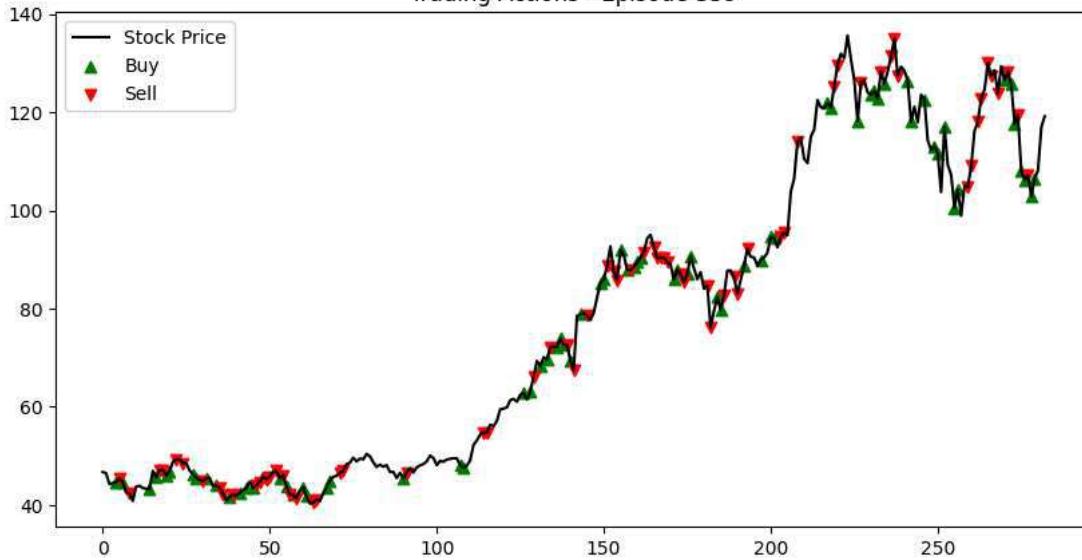
Trading Actions - Episode 358



Running Episode 359/500

Episode 359 Metrics: {'Total Profit': '\$197.13', 'Win Rate': '69.12%', 'Profit Factor': '2.84', 'Sharpe Ratio': '0.36', 'Max Drawdown'}

Trading Actions - Episode 359

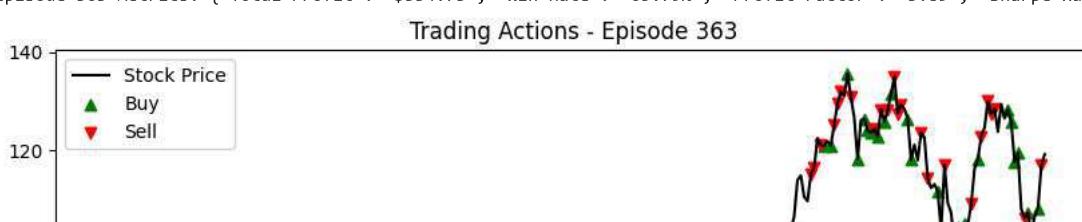
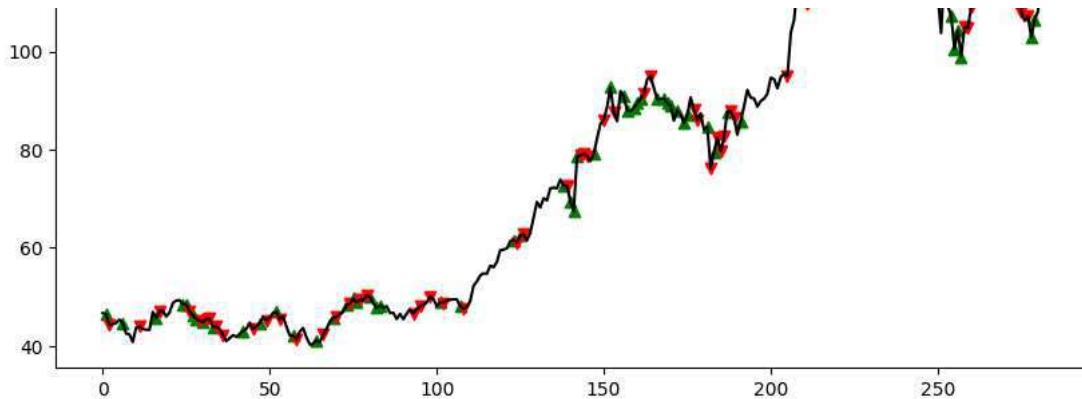


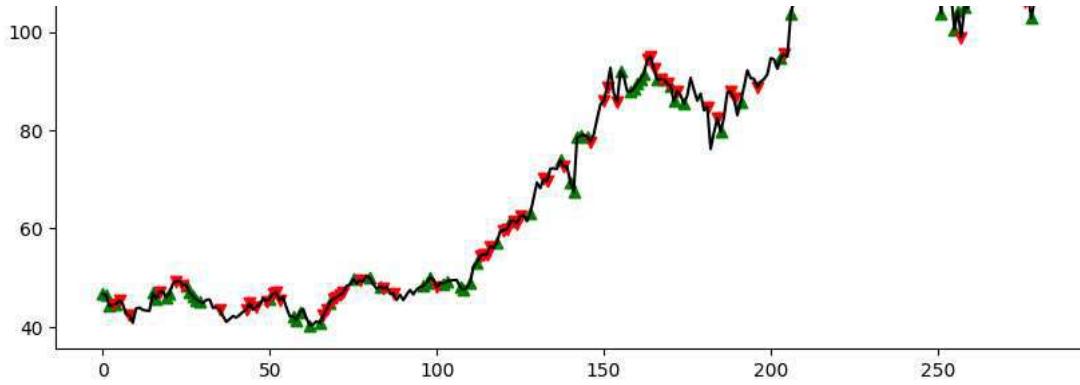
Running Episode 360/500

Episode 360 Metrics: {'Total Profit': '\$200.53', 'Win Rate': '53.62%', 'Profit Factor': '2.30', 'Sharpe Ratio': '0.25', 'Max Drawdown'}

Trading Actions - Episode 360



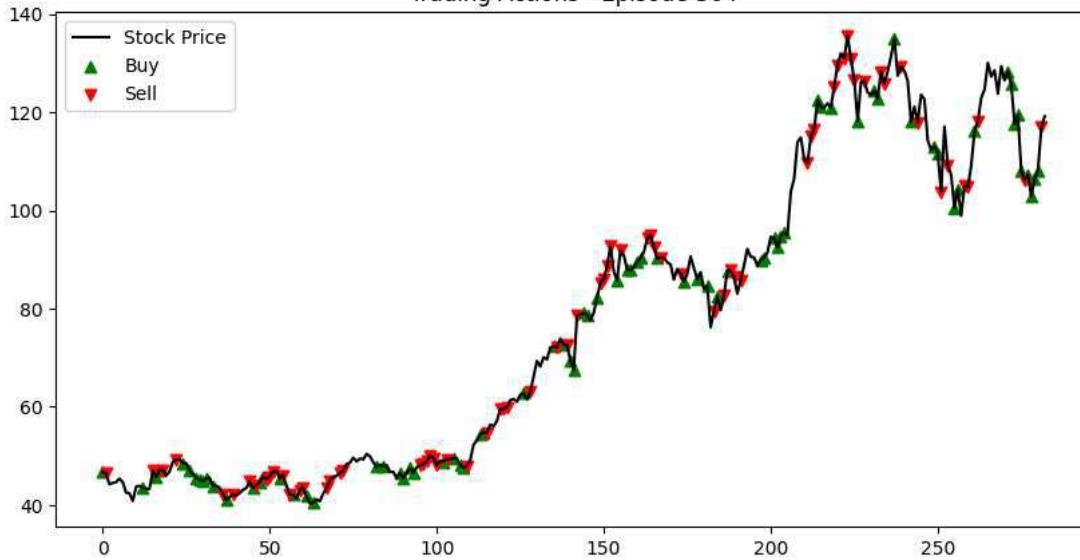




Running Episode 364/500

Episode 364 Metrics: {'Total Profit': '\$290.83', 'Win Rate': '67.61%', 'Profit Factor': '4.44', 'Sharpe Ratio': '0.43', 'Max Drawdown':

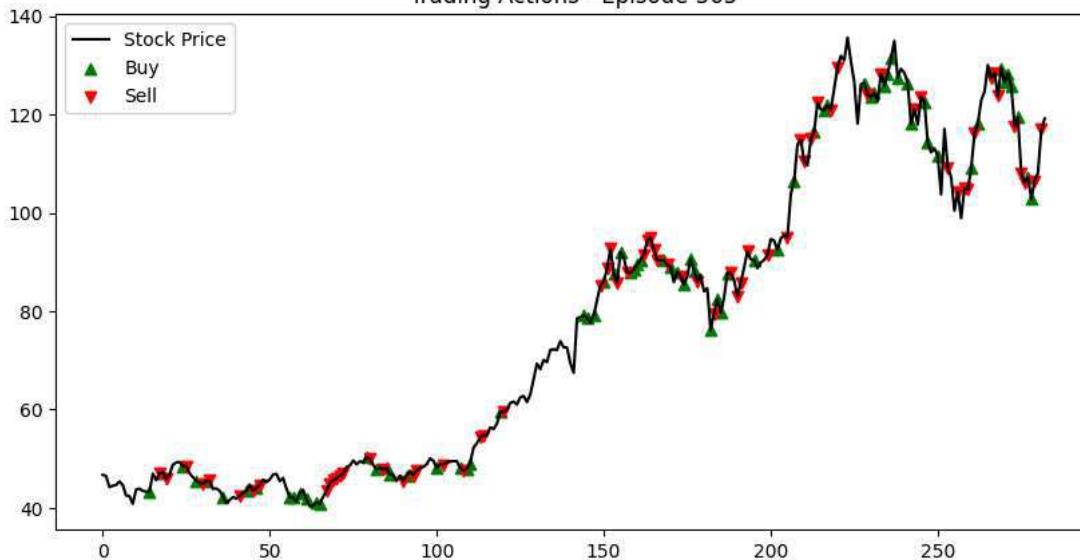
Trading Actions - Episode 364



Running Episode 365/500

Episode 365 Metrics: {'Total Profit': '\$45.74', 'Win Rate': '59.70%', 'Profit Factor': '1.24', 'Sharpe Ratio': '0.07', 'Max Drawdown':

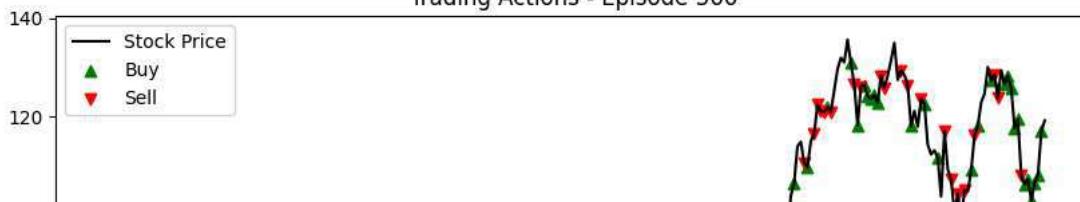
Trading Actions - Episode 365

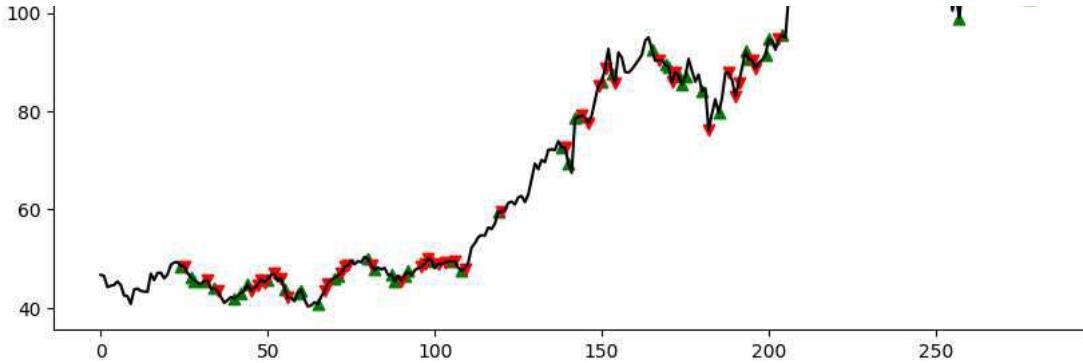


Running Episode 366/500

Episode 366 Metrics: {'Total Profit': '\$119.26', 'Win Rate': '61.29%', 'Profit Factor': '2.35', 'Sharpe Ratio': '0.27', 'Max Drawdown':

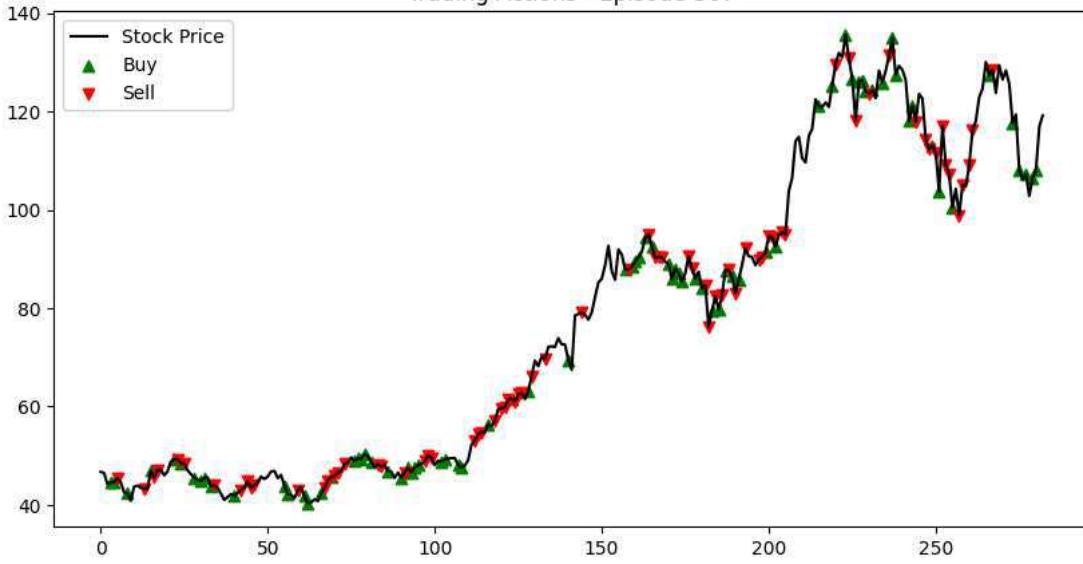
Trading Actions - Episode 366





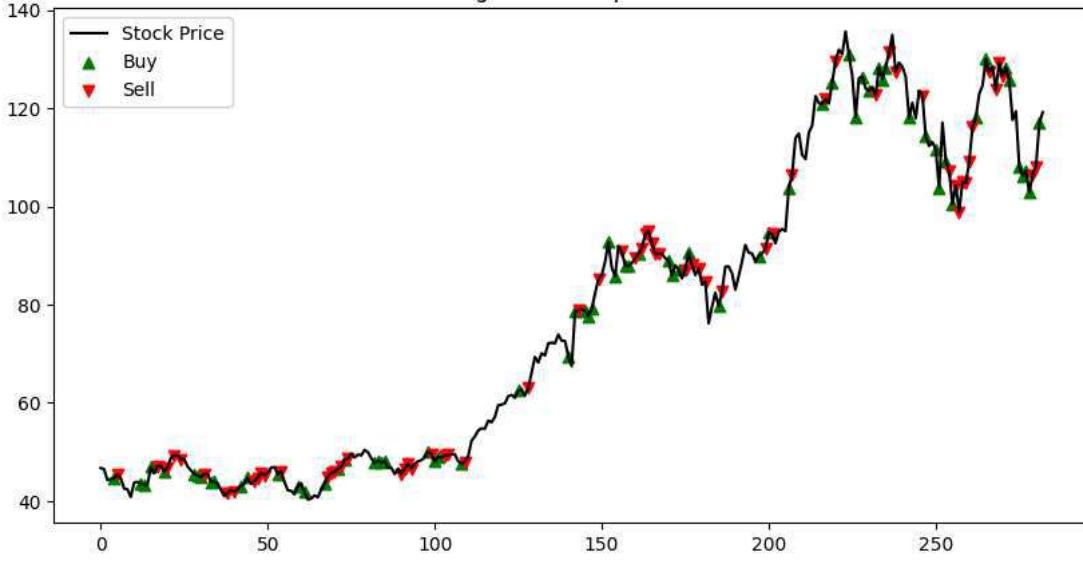
Running Episode 367/500

Episode 367 Metrics: {'Total Profit': '\$65.60', 'Win Rate': '57.53%', 'Profit Factor': '1.36', 'Sharpe Ratio': '0.11', 'Max Drawdown':

Trading Actions - Episode 367

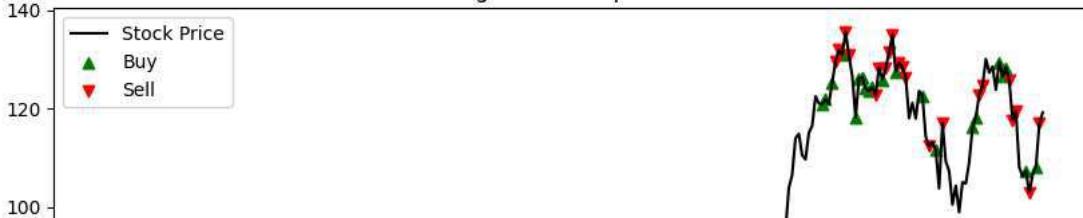
Running Episode 368/500

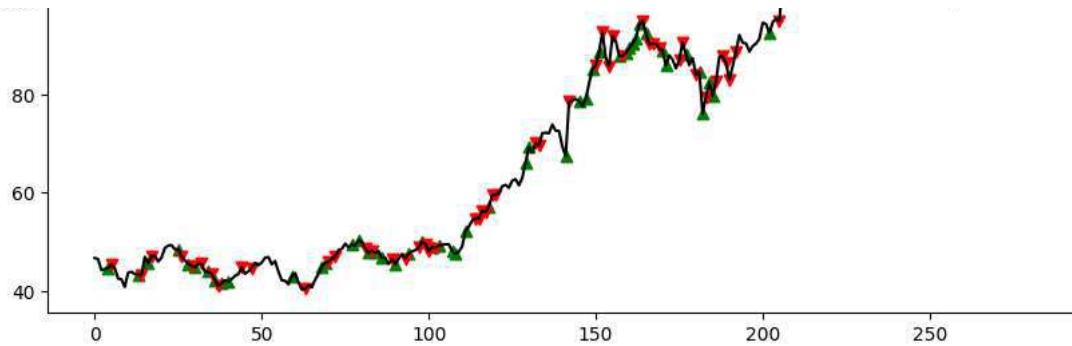
Episode 368 Metrics: {'Total Profit': '\$23.57', 'Win Rate': '64.06%', 'Profit Factor': '1.14', 'Sharpe Ratio': '0.04', 'Max Drawdown':

Trading Actions - Episode 368

Running Episode 369/500

Episode 369 Metrics: {'Total Profit': '\$141.39', 'Win Rate': '62.86%', 'Profit Factor': '2.81', 'Sharpe Ratio': '0.39', 'Max Drawdown':

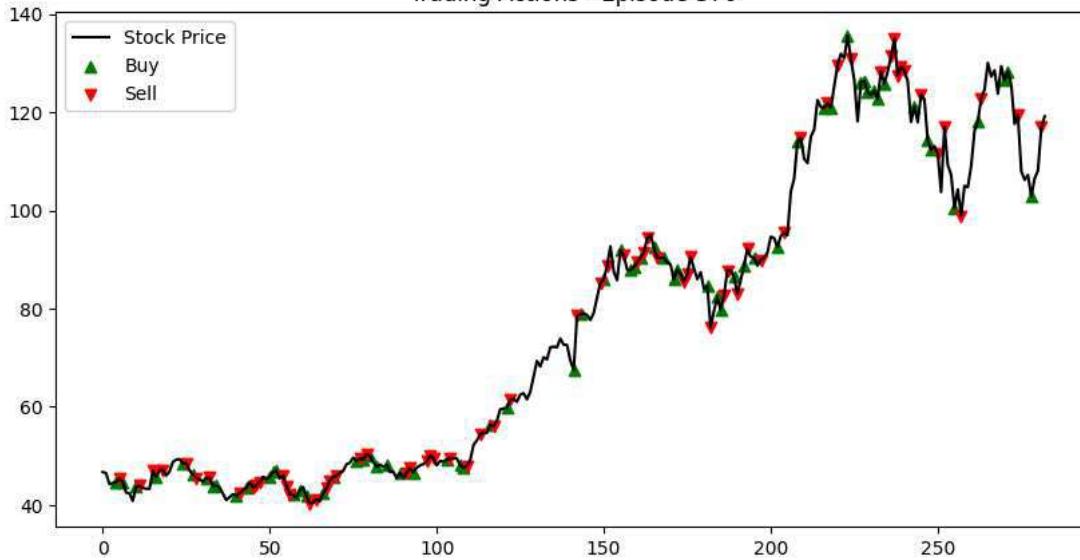
Trading Actions - Episode 369



Running Episode 370/500

Episode 370 Metrics: {'Total Profit': '\$64.18', 'Win Rate': '65.15%', 'Profit Factor': '1.96', 'Sharpe Ratio': '0.24', 'Max Drawdown':

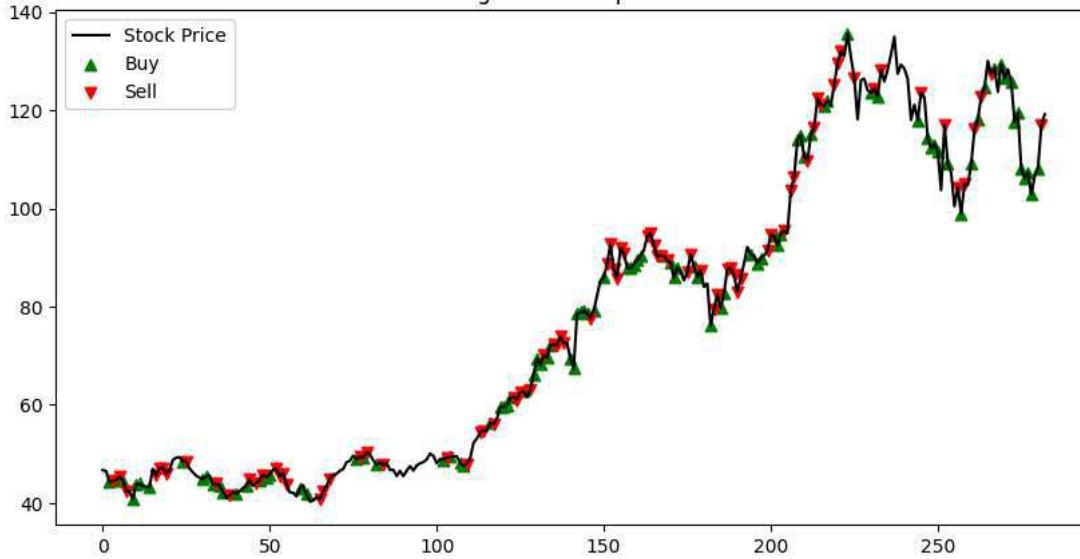
Trading Actions - Episode 370



Running Episode 371/500

Episode 371 Metrics: {'Total Profit': '\$334.12', 'Win Rate': '80.72%', 'Profit Factor': '6.75', 'Sharpe Ratio': '0.62', 'Max Drawdown':

Trading Actions - Episode 371

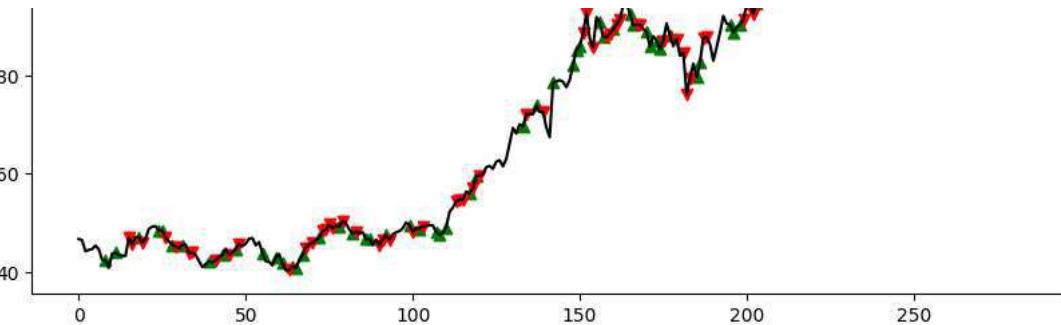


Running Episode 372/500

Episode 372 Metrics: {'Total Profit': '\$22.48', 'Win Rate': '61.64%', 'Profit Factor': '1.14', 'Sharpe Ratio': '0.04', 'Max Drawdown':

Trading Actions - Episode 372

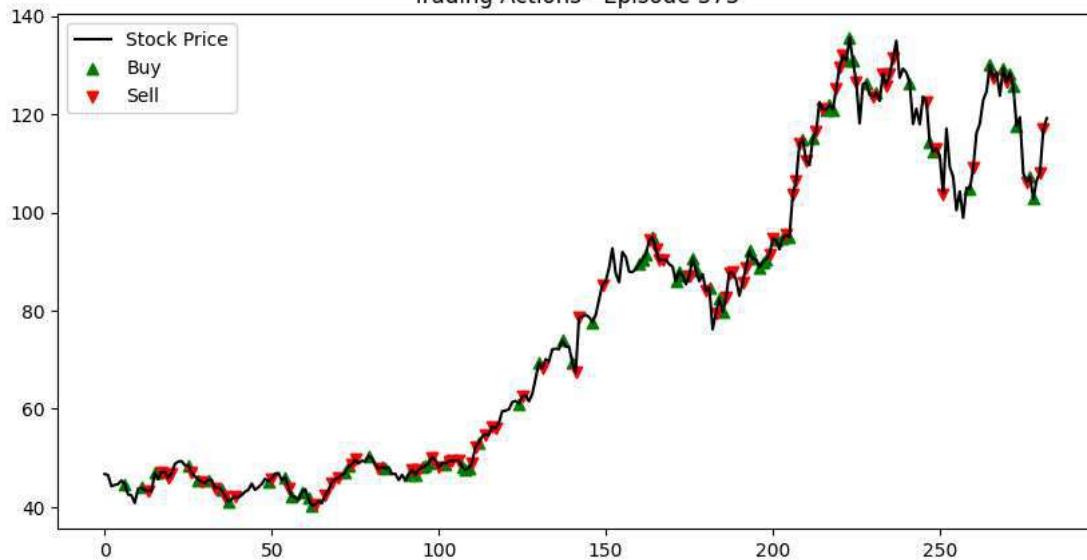




Running Episode 373/500

Episode 373 Metrics: {'Total Profit': '\$112.16', 'Win Rate': '55.41%', 'Profit Factor': '1.87', 'Sharpe Ratio': '0.22', 'Max Drawdown':

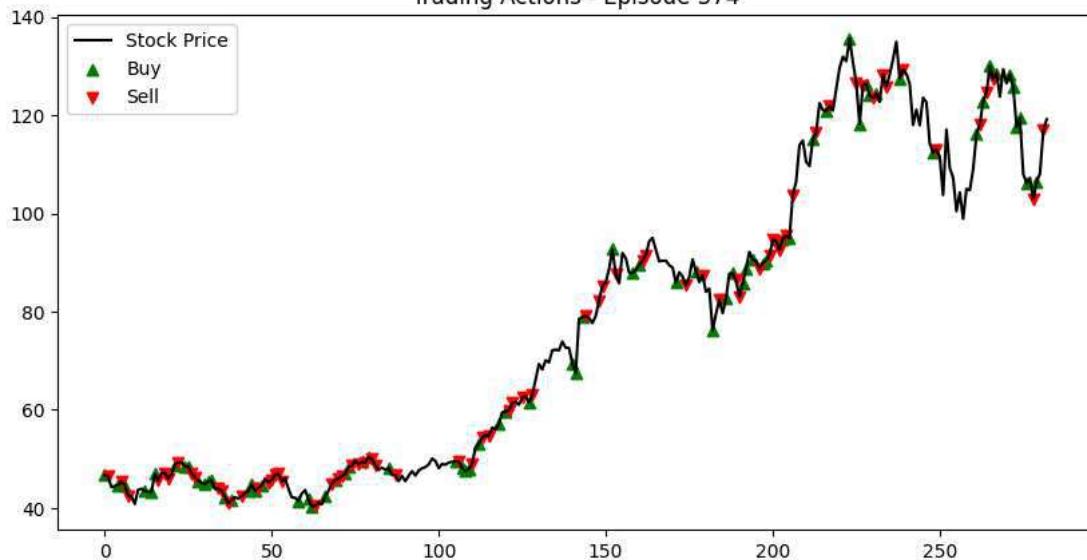
Trading Actions - Episode 373



Running Episode 374/500

Episode 374 Metrics: {'Total Profit': '\$79.36', 'Win Rate': '68.12%', 'Profit Factor': '1.94', 'Sharpe Ratio': '0.22', 'Max Drawdown':

Trading Actions - Episode 374

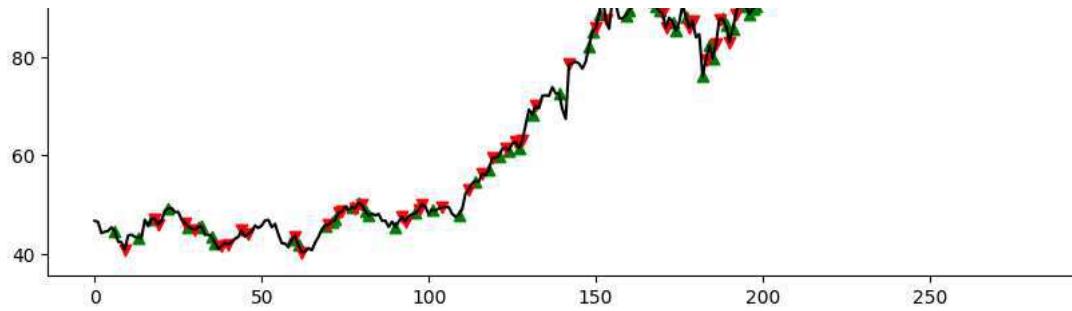


Running Episode 375/500

Episode 375 Metrics: {'Total Profit': '\$81.94', 'Win Rate': '62.12%', 'Profit Factor': '1.65', 'Sharpe Ratio': '0.18', 'Max Drawdown':

Trading Actions - Episode 375

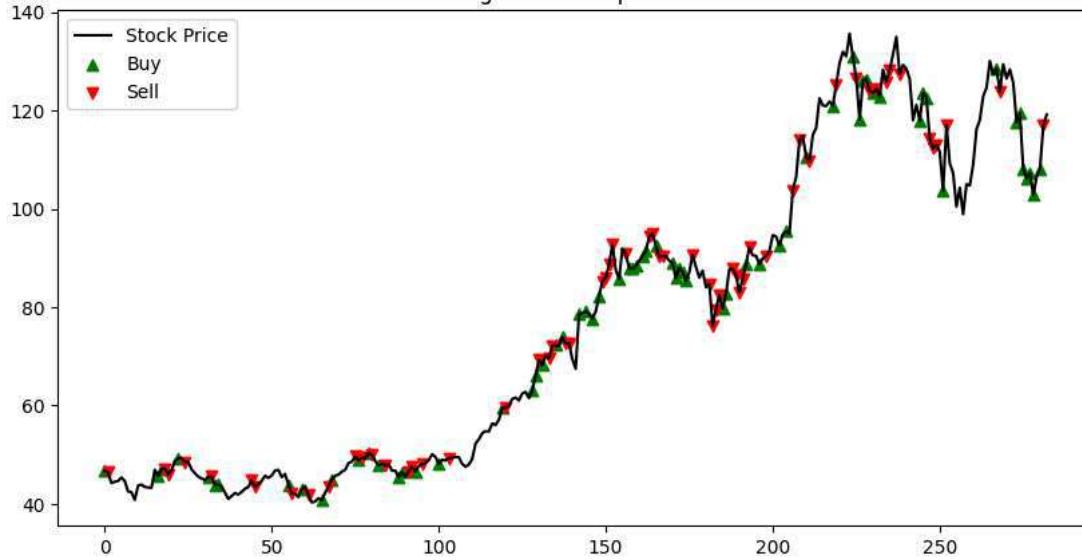




Running Episode 376/500

Episode 376 Metrics: {'Total Profit': '\$82.72', 'Win Rate': '61.67%', 'Profit Factor': '2.06', 'Sharpe Ratio': '0.25', 'Max Drawdown':

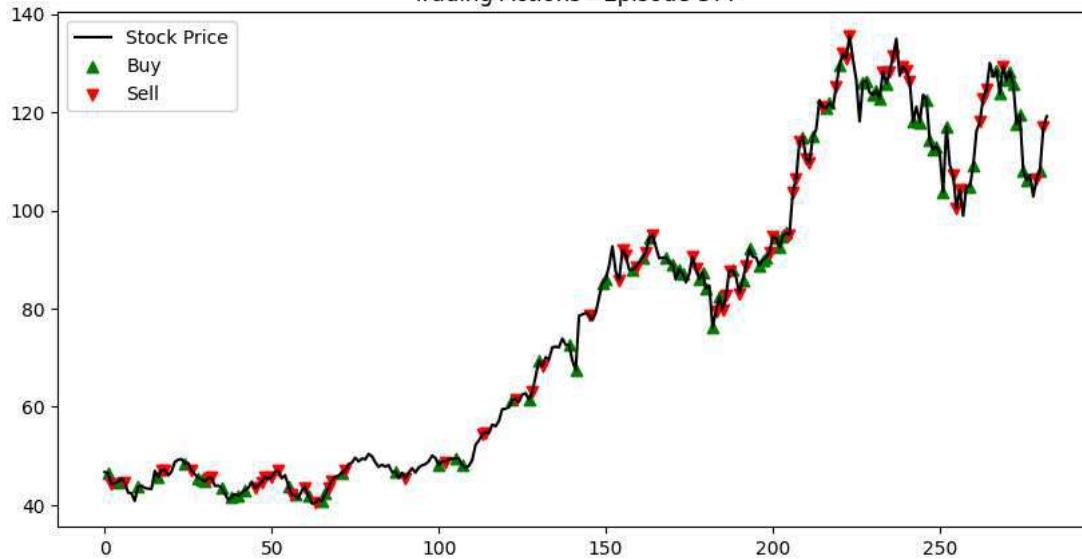
Trading Actions - Episode 376



Running Episode 377/500

Episode 377 Metrics: {'Total Profit': '\$288.36', 'Win Rate': '73.53%', 'Profit Factor': '3.93', 'Sharpe Ratio': '0.42', 'Max Drawdown':

Trading Actions - Episode 377

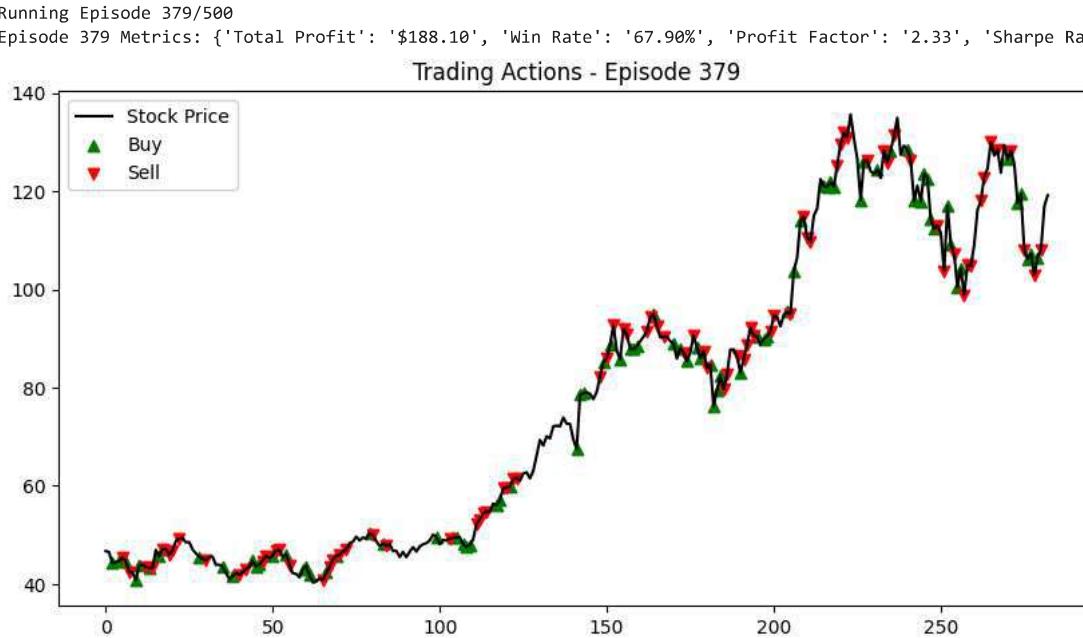
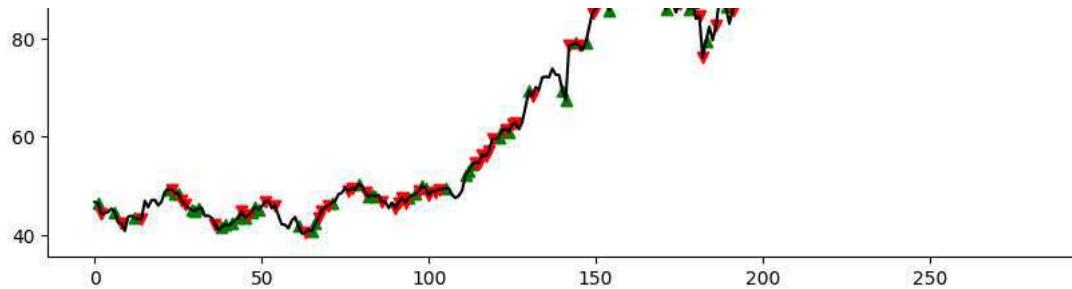


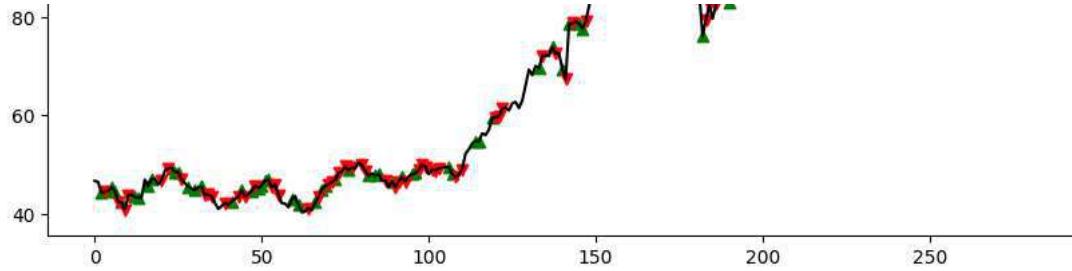
Running Episode 378/500

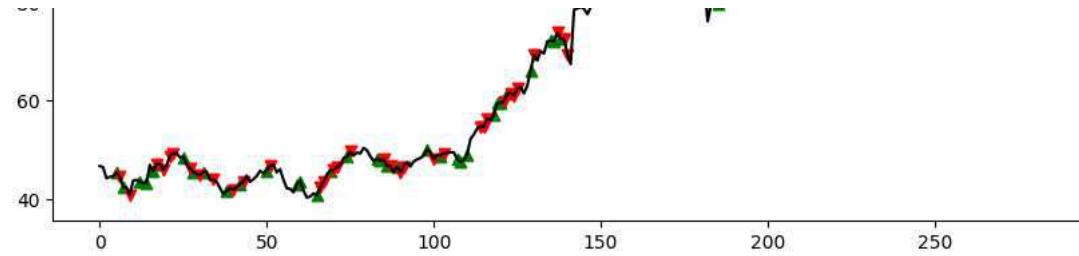
Episode 378 Metrics: {'Total Profit': '\$296.40', 'Win Rate': '66.29%', 'Profit Factor': '3.07', 'Sharpe Ratio': '0.39', 'Max Drawdown':

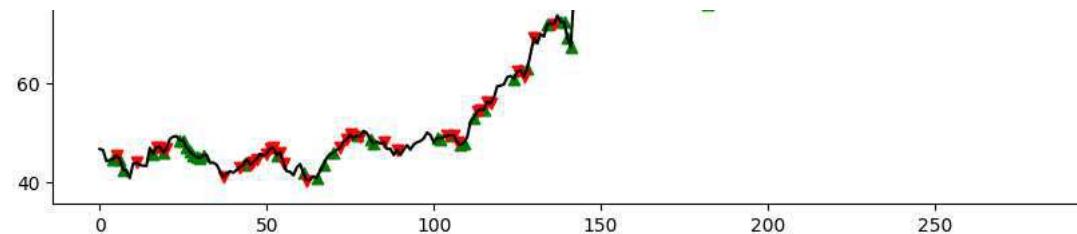
Trading Actions - Episode 378



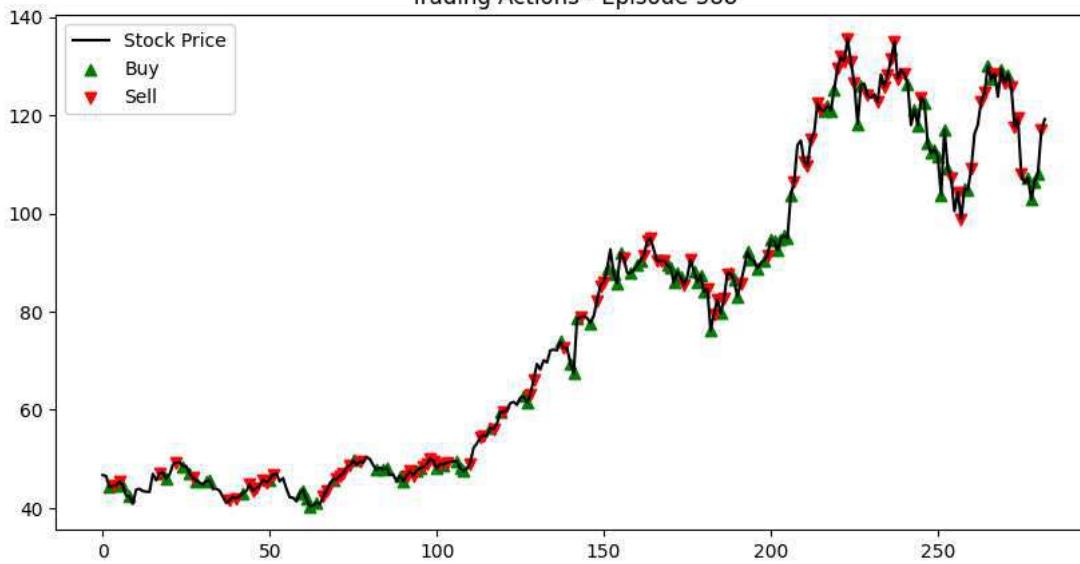




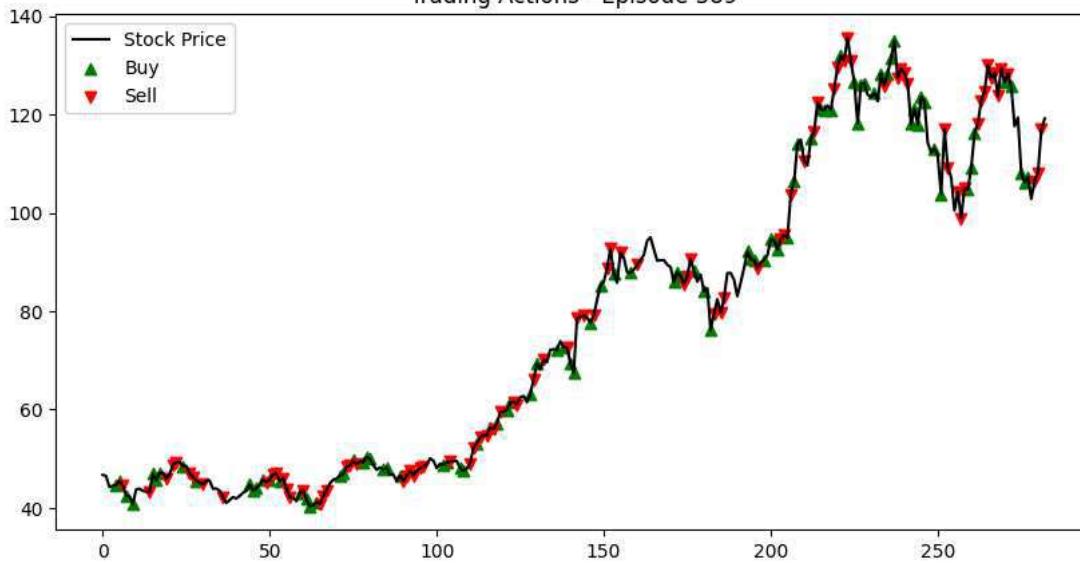




Trading Actions - Episode 388

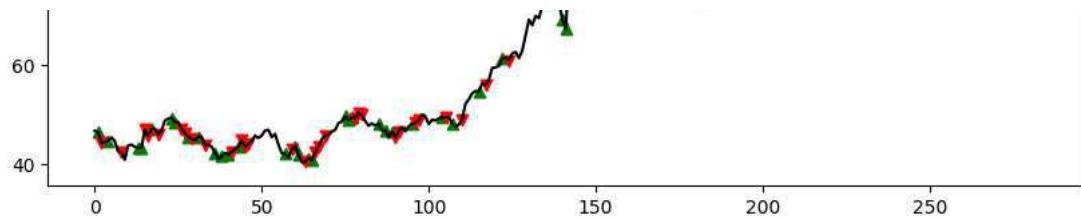


Trading Actions - Episode 389



Trading Actions - Episode 390

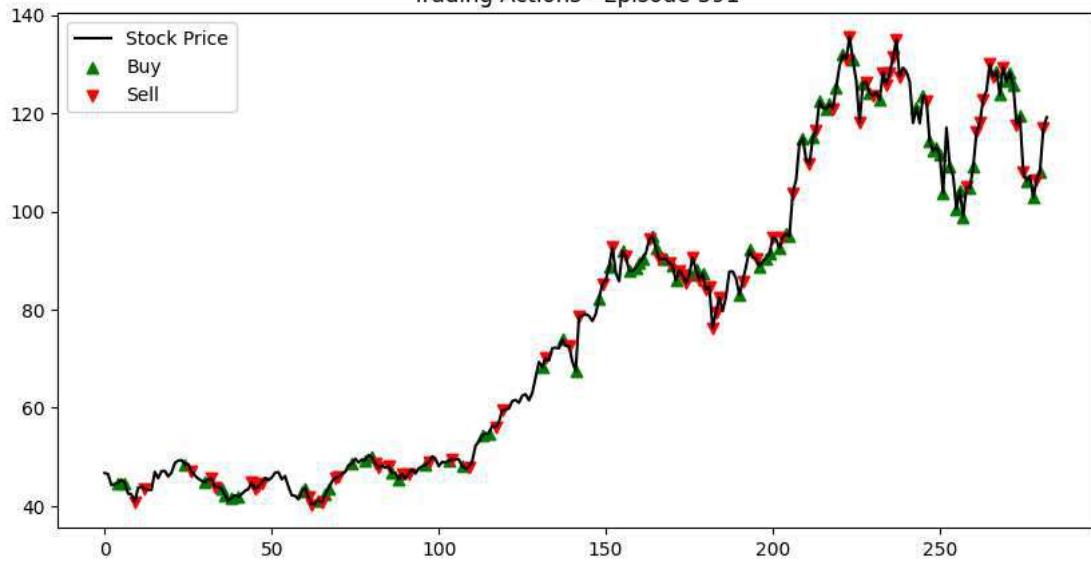




Running Episode 391/500

Episode 391 Metrics: {'Total Profit': '\$225.67', 'Win Rate': '63.51%', 'Profit Factor': '3.16', 'Sharpe Ratio': '0.38', 'Max Drawdown':

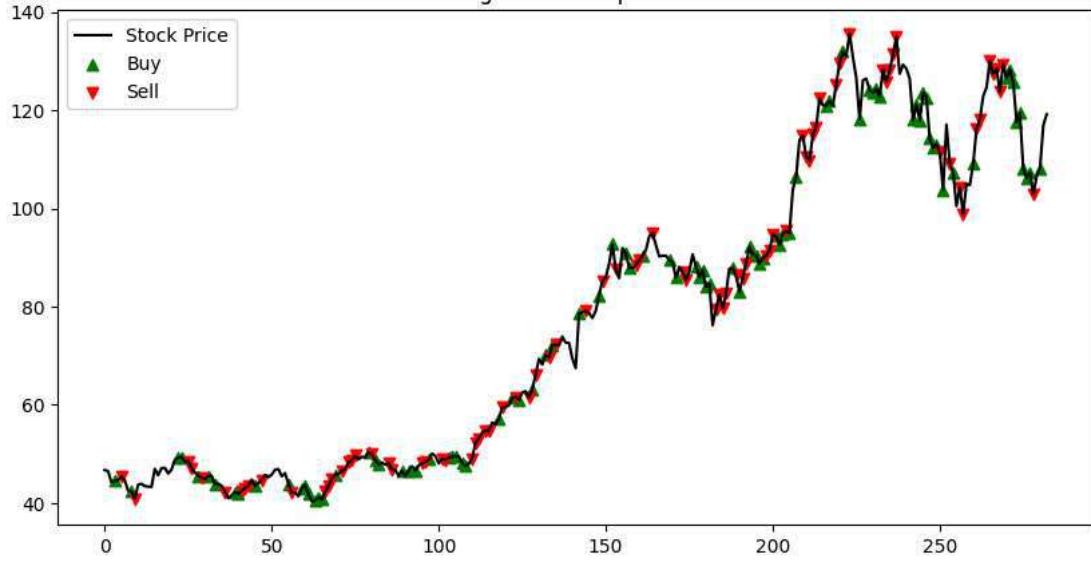
Trading Actions - Episode 391



Running Episode 392/500

Episode 392 Metrics: {'Total Profit': '\$221.73', 'Win Rate': '61.73%', 'Profit Factor': '2.62', 'Sharpe Ratio': '0.31', 'Max Drawdown':

Trading Actions - Episode 392

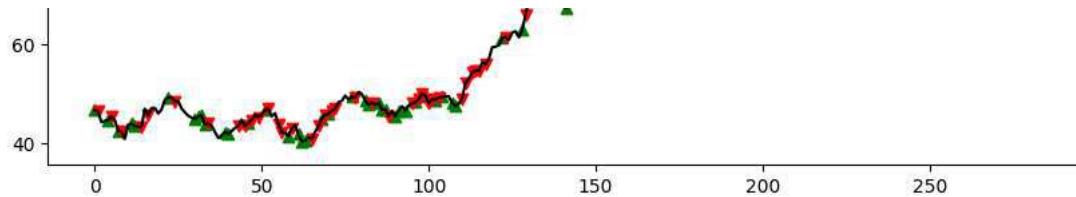


Running Episode 393/500

Episode 393 Metrics: {'Total Profit': '\$454.85', 'Win Rate': '68.13%', 'Profit Factor': '3.52', 'Sharpe Ratio': '0.40', 'Max Drawdown':

Trading Actions - Episode 393

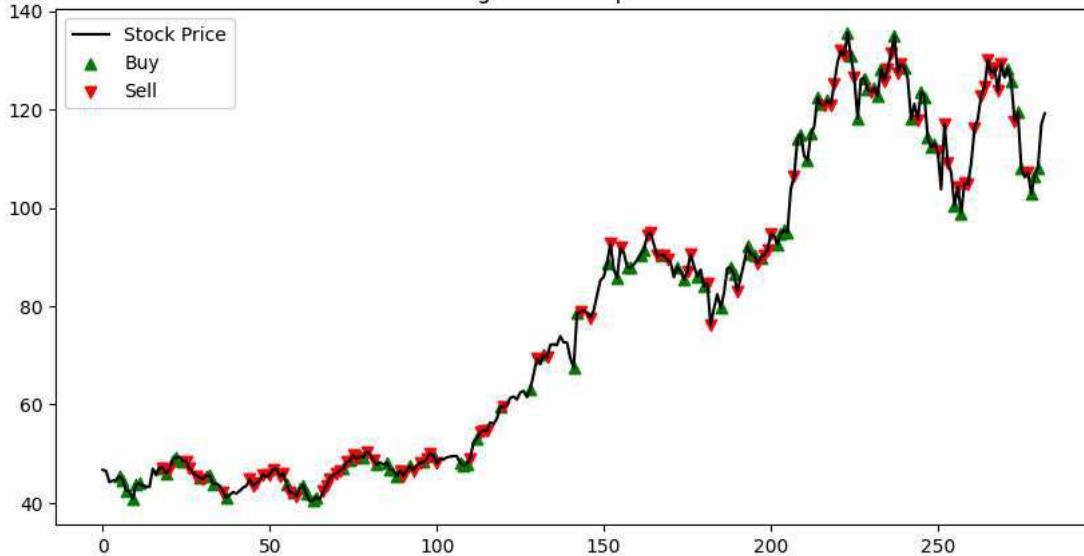




Running Episode 394/500

Episode 394 Metrics: {'Total Profit': '\$257.44', 'Win Rate': '65.17%', 'Profit Factor': '2.41', 'Sharpe Ratio': '0.28', 'Max Drawdown':

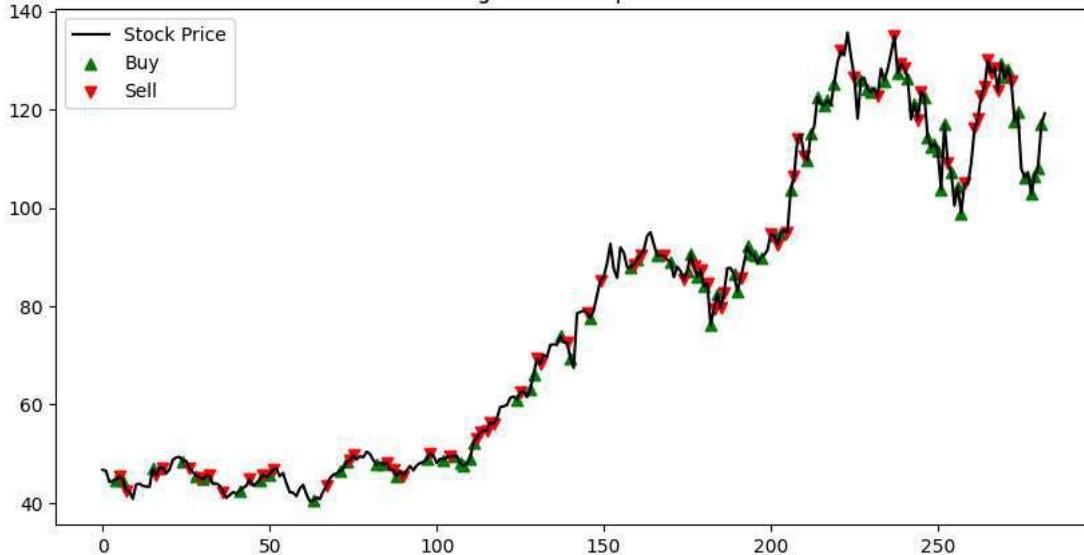
Trading Actions - Episode 394



Running Episode 395/500

Episode 395 Metrics: {'Total Profit': '\$220.16', 'Win Rate': '68.18%', 'Profit Factor': '3.53', 'Sharpe Ratio': '0.39', 'Max Drawdown':

Trading Actions - Episode 395

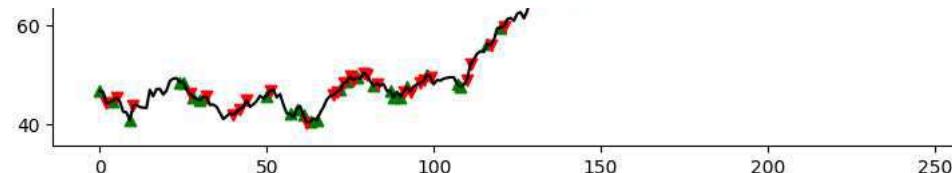


Running Episode 396/500

Episode 396 Metrics: {'Total Profit': '\$558.47', 'Win Rate': '73.42%', 'Profit Factor': '6.66', 'Sharpe Ratio': '0.52', 'Max Drawdown':

Trading Actions - Episode 396

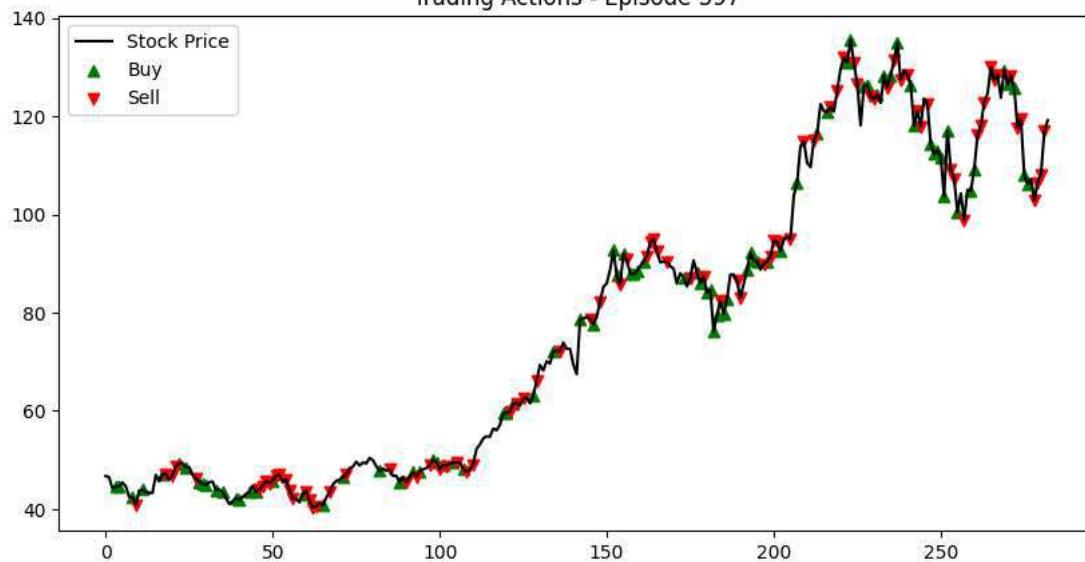




Running Episode 397/500

Episode 397 Metrics: {'Total Profit': '\$264.16', 'Win Rate': '63.53%', 'Profit Factor': '2.43', 'Sharpe Ratio': '0.28', 'Max Drawdown': ''}

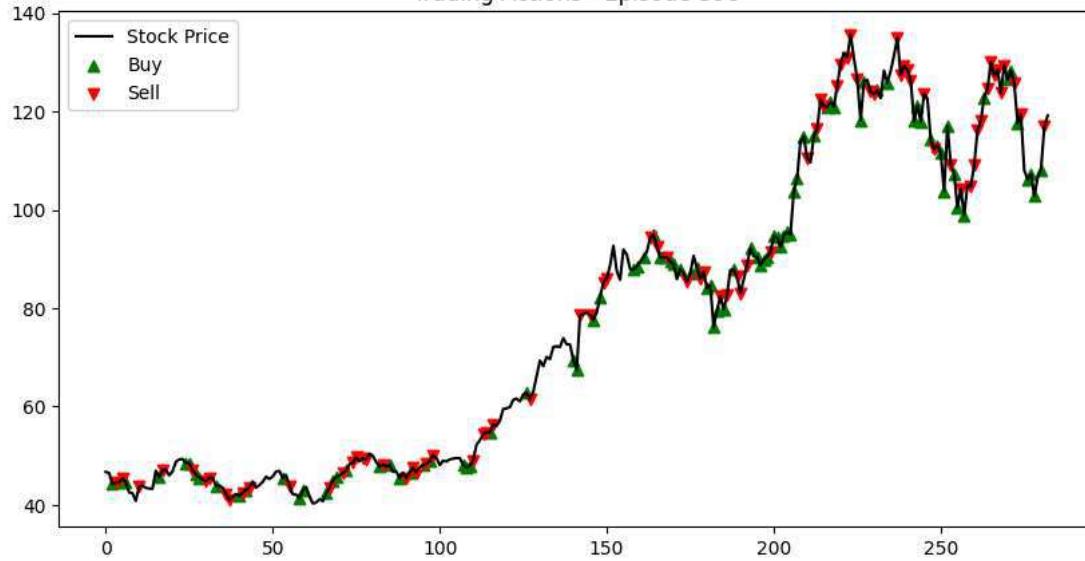
Trading Actions - Episode 397



Running Episode 398/500

Episode 398 Metrics: {'Total Profit': '\$657.01', 'Win Rate': '69.23%', 'Profit Factor': '7.21', 'Sharpe Ratio': '0.54', 'Max Drawdown': ''}

Trading Actions - Episode 398

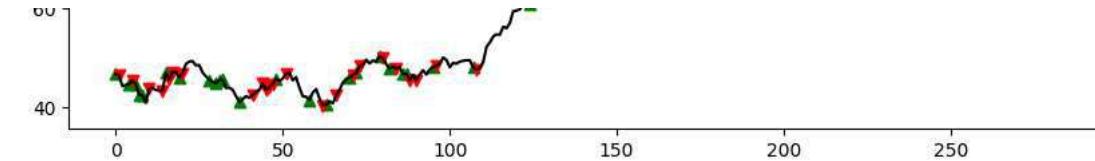


Running Episode 399/500

Episode 399 Metrics: {'Total Profit': '\$457.05', 'Win Rate': '66.67%', 'Profit Factor': '5.56', 'Sharpe Ratio': '0.52', 'Max Drawdown': ''}

Trading Actions - Episode 399

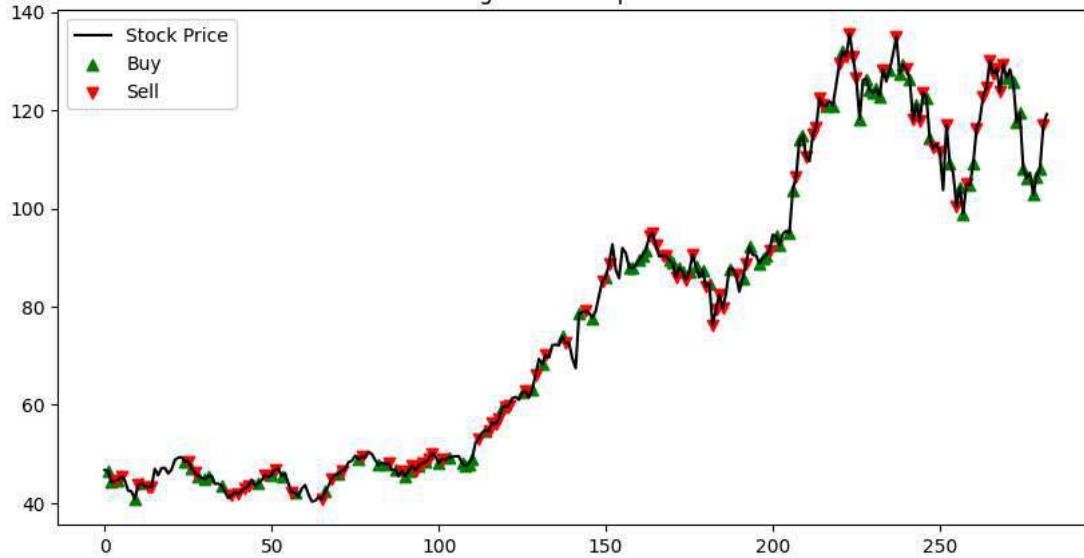




Running Episode 400/500

Episode 400 Metrics: {'Total Profit': '\$277.39', 'Win Rate': '60.92%', 'Profit Factor': '2.53', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

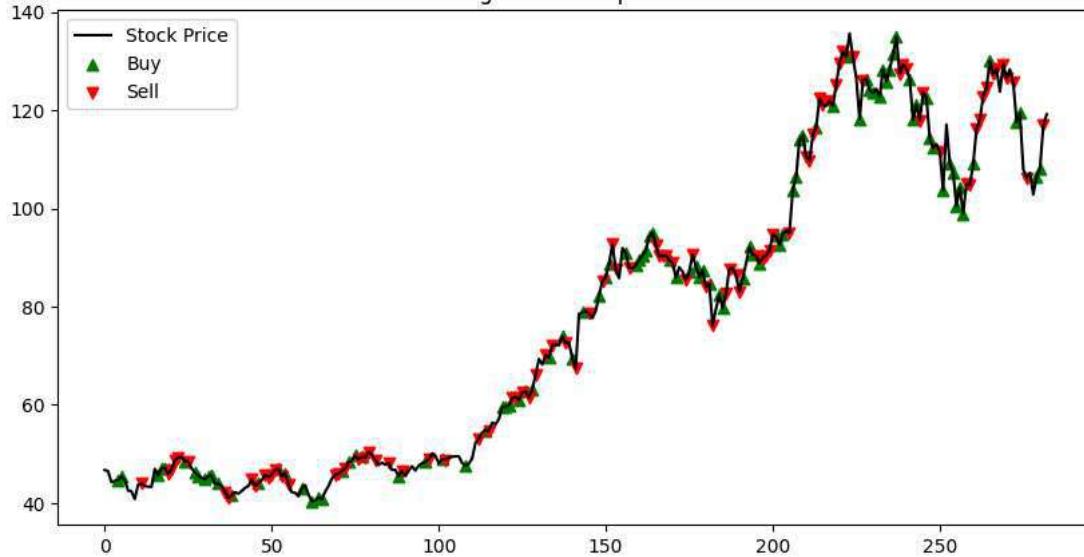
Trading Actions - Episode 400



Running Episode 401/500

Episode 401 Metrics: {'Total Profit': '\$202.26', 'Win Rate': '61.96%', 'Profit Factor': '2.23', 'Sharpe Ratio': '0.27', 'Max Drawdown': ''}

Trading Actions - Episode 401



Running Episode 402/500

Episode 402 Metrics: {'Total Profit': '\$412.20', 'Win Rate': '72.60%', 'Profit Factor': '4.69', 'Sharpe Ratio': '0.44', 'Max Drawdown': ''}

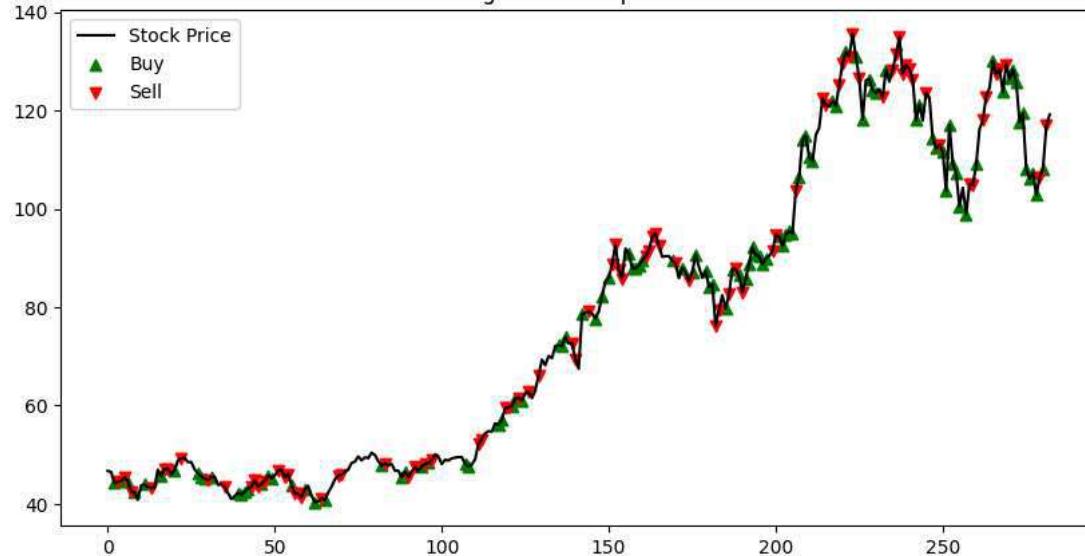
Trading Actions - Episode 402





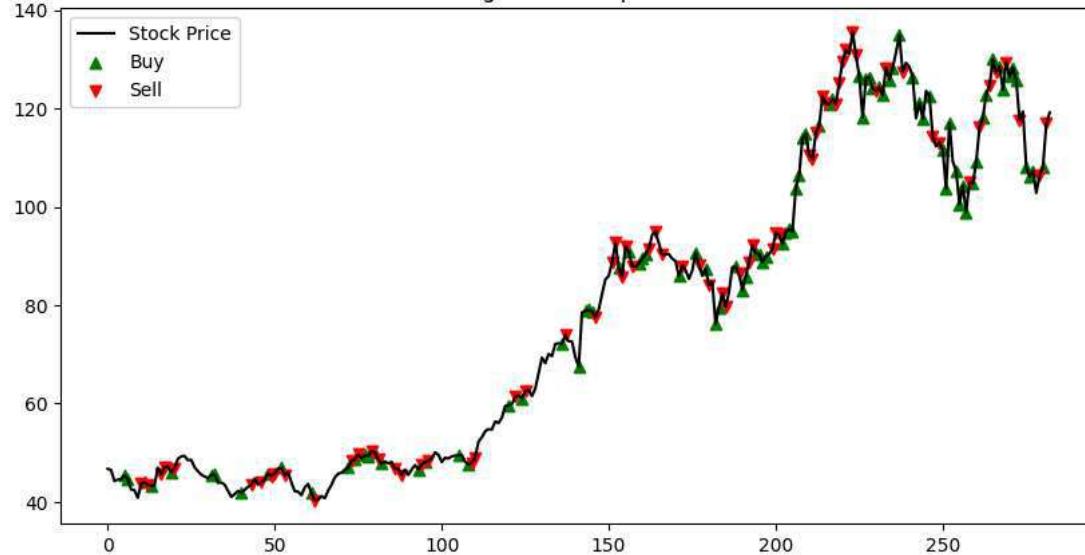
Running Episode 403/500
Episode 403 Metrics: {'Total Profit': '\$536.64', 'Win Rate': '69.51%', 'Profit Factor': '4.92', 'Sharpe Ratio': '0.46', 'Max Drawdown':

Trading Actions - Episode 403



Running Episode 404/500
Episode 404 Metrics: {'Total Profit': '\$210.84', 'Win Rate': '67.65%', 'Profit Factor': '2.74', 'Sharpe Ratio': '0.33', 'Max Drawdown':

Trading Actions - Episode 404



Running Episode 405/500
Episode 405 Metrics: {'Total Profit': '\$301.85', 'Win Rate': '69.74%', 'Profit Factor': '4.20', 'Sharpe Ratio': '0.43', 'Max Drawdown':

Trading Actions - Episode 405

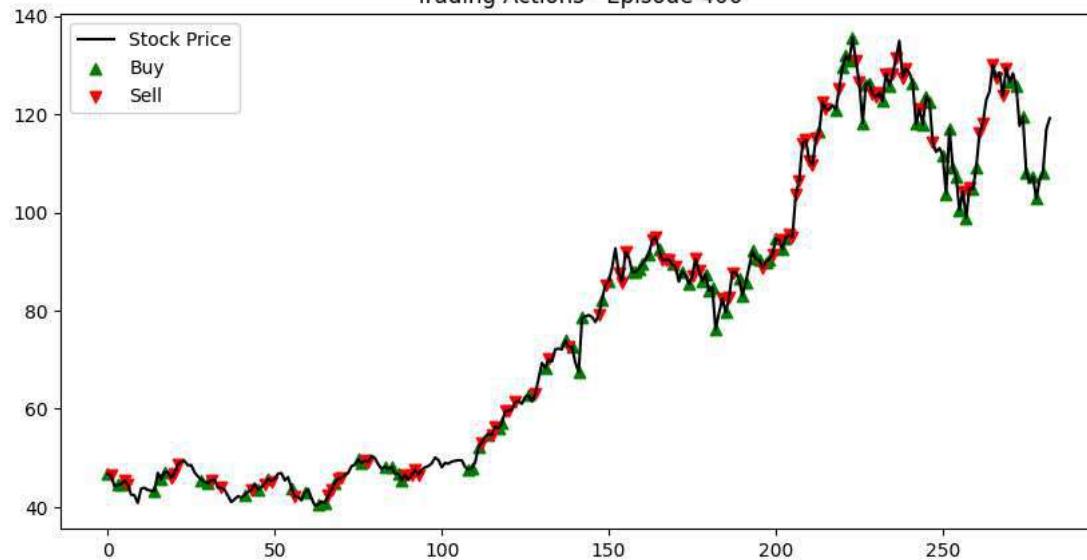




Running Episode 406/500

Episode 406 Metrics: {'Total Profit': '\$392.40', 'Win Rate': '69.88%', 'Profit Factor': '4.86', 'Sharpe Ratio': '0.52', 'Max Drawdown': ''}

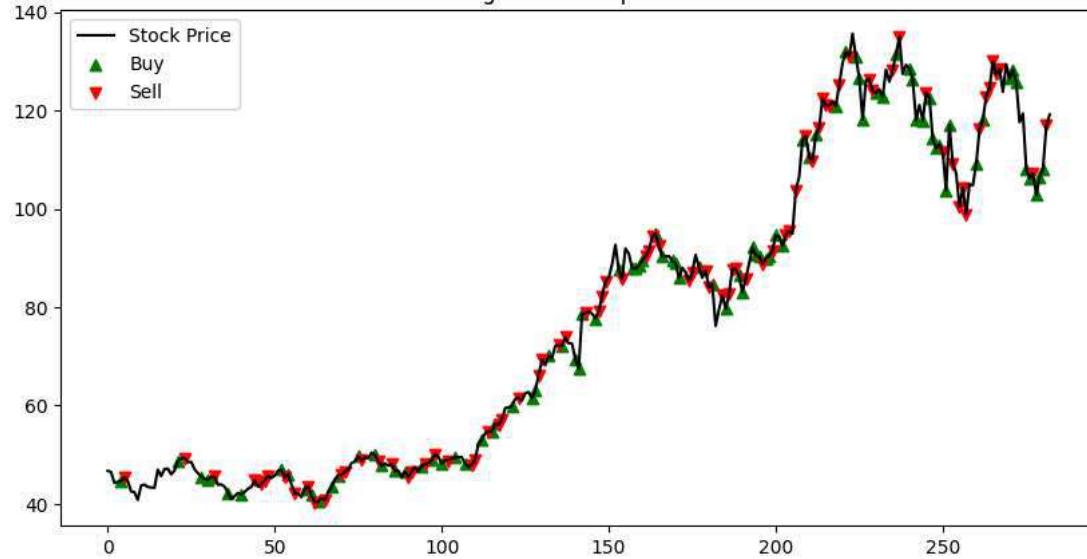
Trading Actions - Episode 406



Running Episode 407/500

Episode 407 Metrics: {'Total Profit': '\$150.95', 'Win Rate': '64.20%', 'Profit Factor': '1.94', 'Sharpe Ratio': '0.22', 'Max Drawdown': ''}

Trading Actions - Episode 407

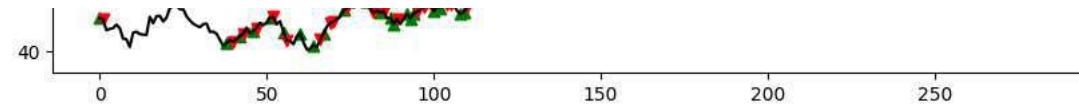


Running Episode 408/500

Episode 408 Metrics: {'Total Profit': '\$278.87', 'Win Rate': '72.97%', 'Profit Factor': '3.33', 'Sharpe Ratio': '0.41', 'Max Drawdown': ''}

Trading Actions - Episode 408

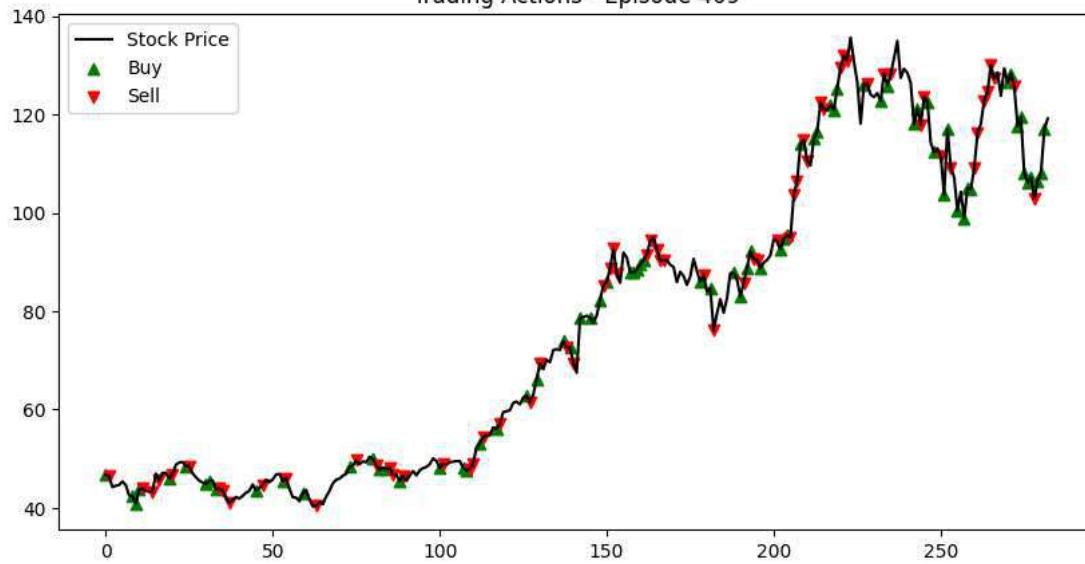




Running Episode 409/500

Episode 409 Metrics: {'Total Profit': '\$200.63', 'Win Rate': '68.18%', 'Profit Factor': '3.80', 'Sharpe Ratio': '0.39', 'Max Drawdown': ''}

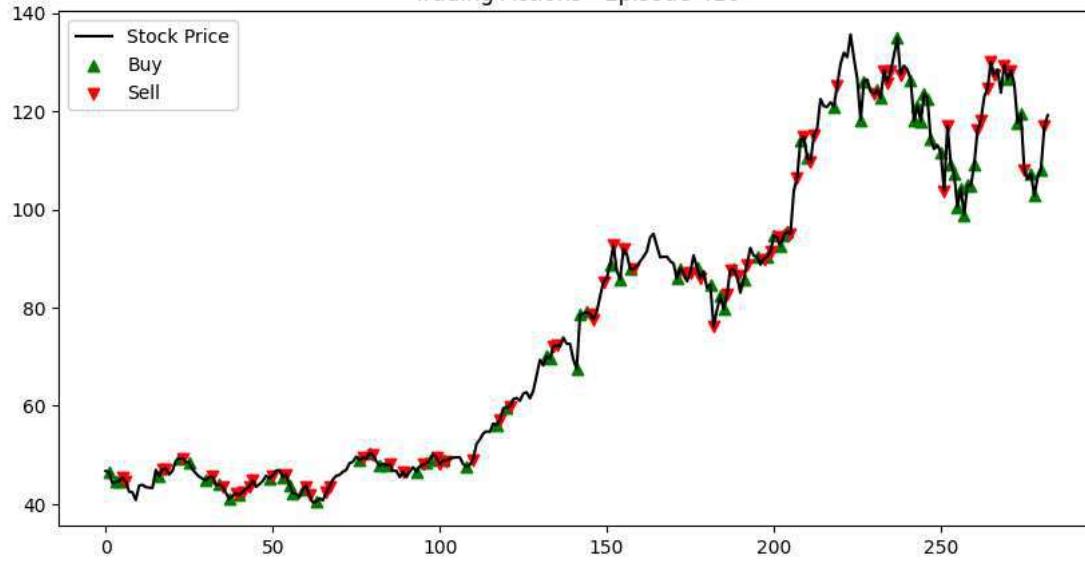
Trading Actions - Episode 409



Running Episode 410/500

Episode 410 Metrics: {'Total Profit': '\$129.17', 'Win Rate': '63.77%', 'Profit Factor': '2.86', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

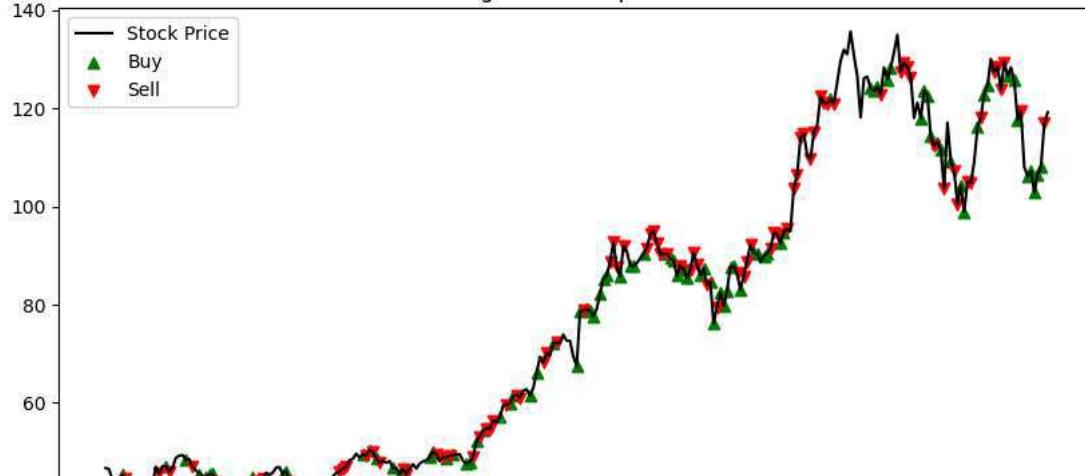
Trading Actions - Episode 410



Running Episode 411/500

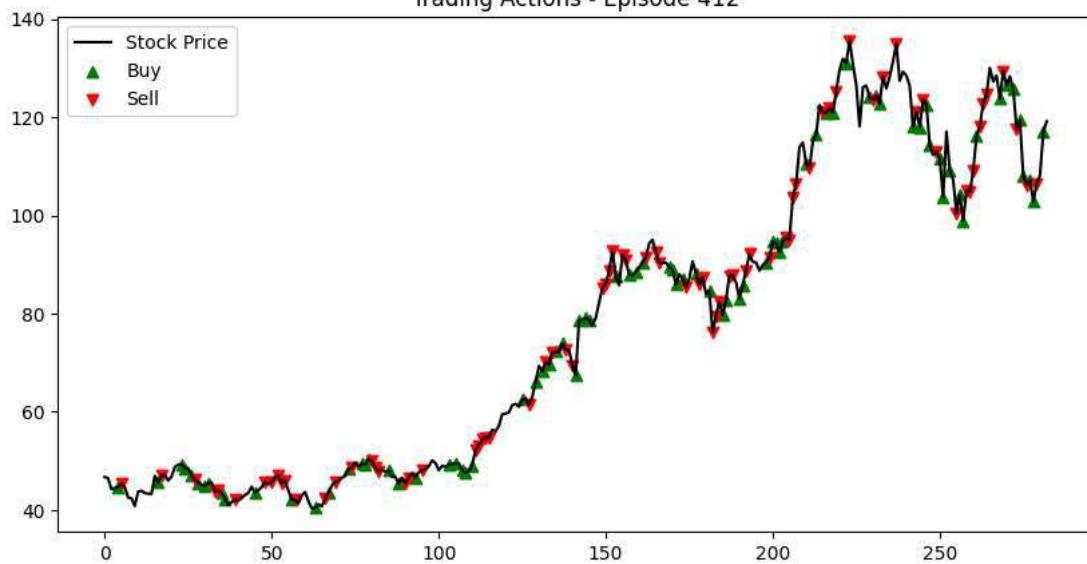
Episode 411 Metrics: {'Total Profit': '\$393.25', 'Win Rate': '59.55%', 'Profit Factor': '4.01', 'Sharpe Ratio': '0.44', 'Max Drawdown': ''}

Trading Actions - Episode 411





Running Episode 412/500
Episode 412 Metrics: {'Total Profit': '\$152.95', 'Win Rate': '67.53%', 'Profit Factor': '2.22', 'Sharpe Ratio': '0.29', 'Max Drawdown': '10.00%'}
Trading Actions - Episode 412



Running Episode 413/500
Episode 413 Metrics: {'Total Profit': '\$223.77', 'Win Rate': '65.22%', 'Profit Factor': '2.30', 'Sharpe Ratio': '0.28', 'Max Drawdown': '10.00%'}
Trading Actions - Episode 413



Running Episode 414/500
Episode 414 Metrics: {'Total Profit': '\$241.54', 'Win Rate': '70.00%', 'Profit Factor': '5.84', 'Sharpe Ratio': '0.51', 'Max Drawdown': '10.00%'}
Trading Actions - Episode 414

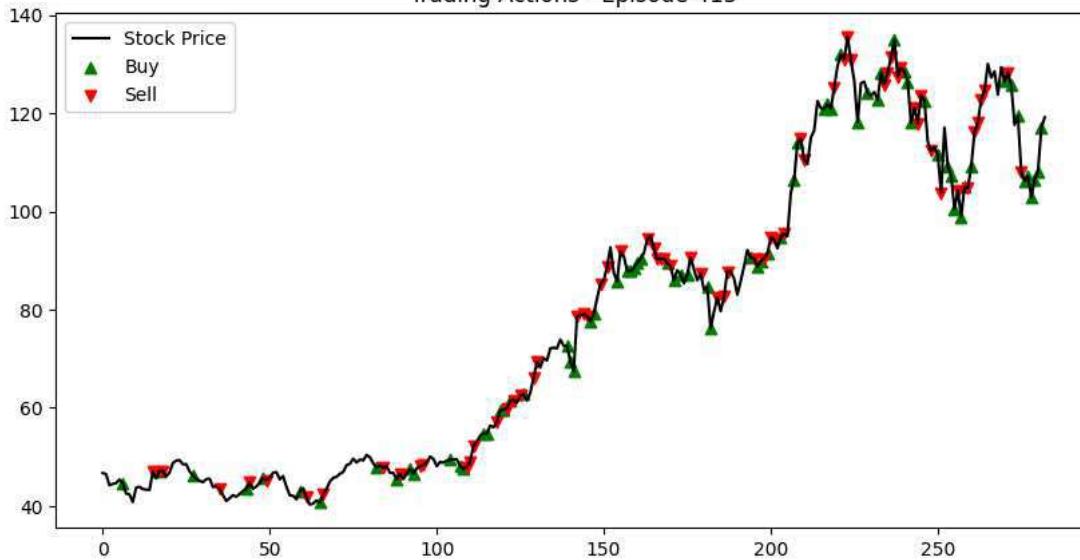




Running Episode 415/500

Episode 415 Metrics: {'Total Profit': '\$178.05', 'Win Rate': '69.70%', 'Profit Factor': '3.14', 'Sharpe Ratio': '0.41', 'Max Drawdown': ''}

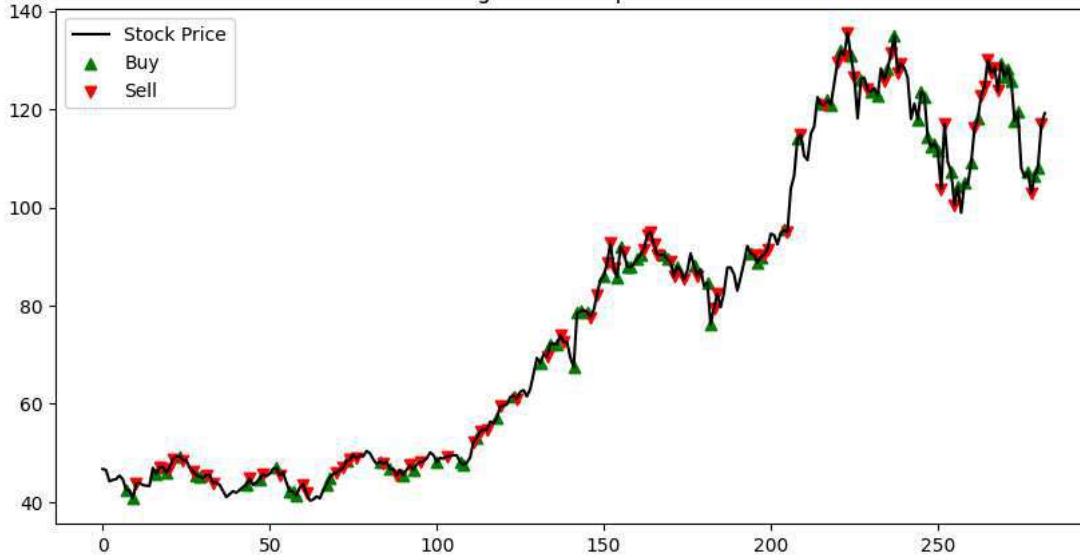
Trading Actions - Episode 415



Running Episode 416/500

Episode 416 Metrics: {'Total Profit': '\$173.53', 'Win Rate': '63.51%', 'Profit Factor': '2.98', 'Sharpe Ratio': '0.34', 'Max Drawdown': ''}

Trading Actions - Episode 416

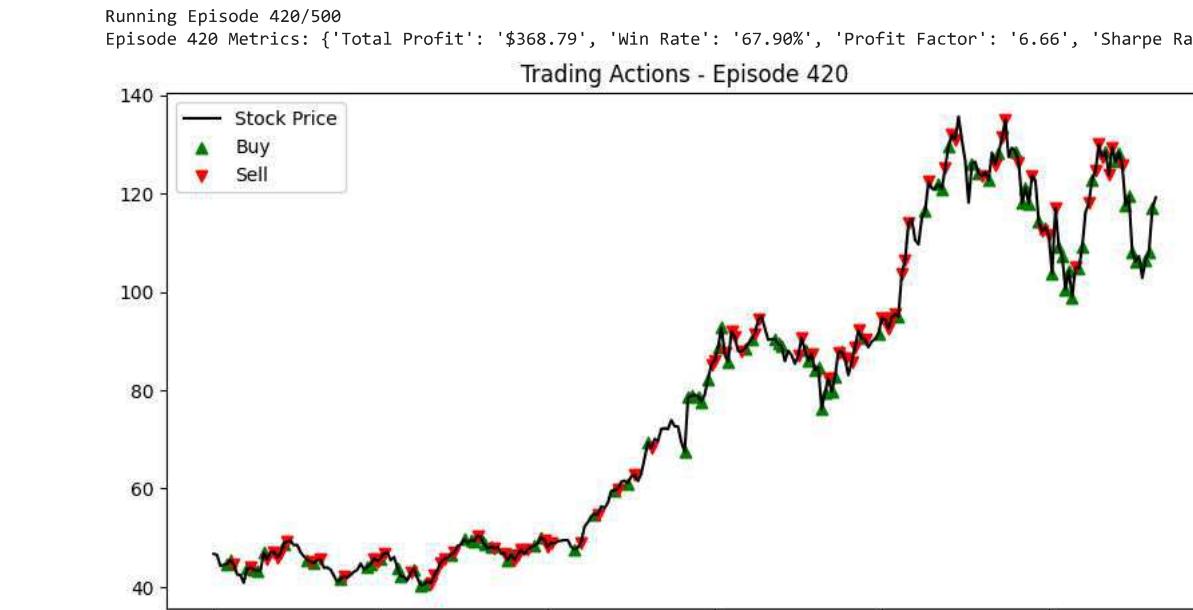
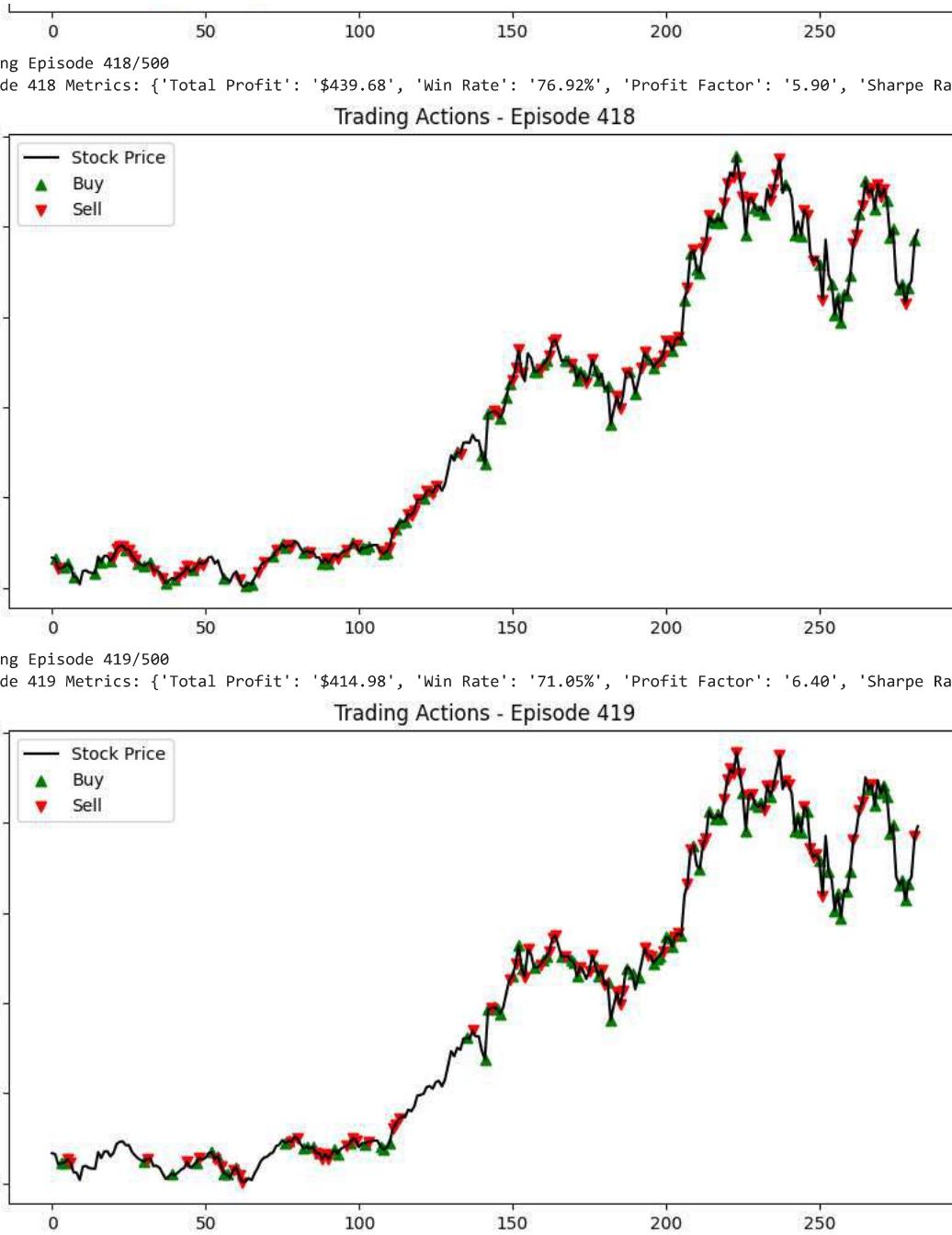


Running Episode 417/500

Episode 417 Metrics: {'Total Profit': '\$146.67', 'Win Rate': '58.33%', 'Profit Factor': '2.00', 'Sharpe Ratio': '0.23', 'Max Drawdown': ''}

Trading Actions - Episode 417

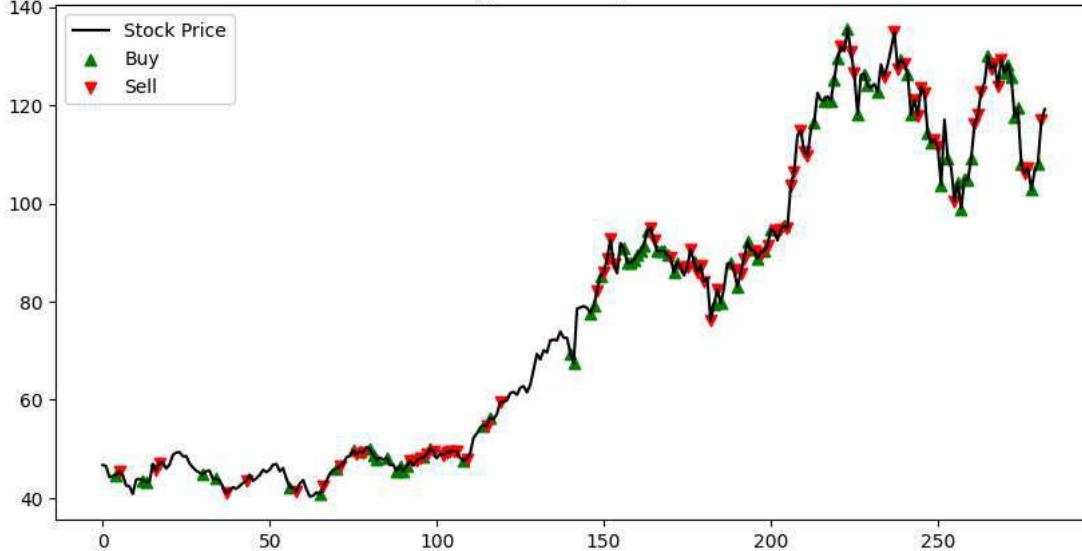




0 50 100 150 200 250

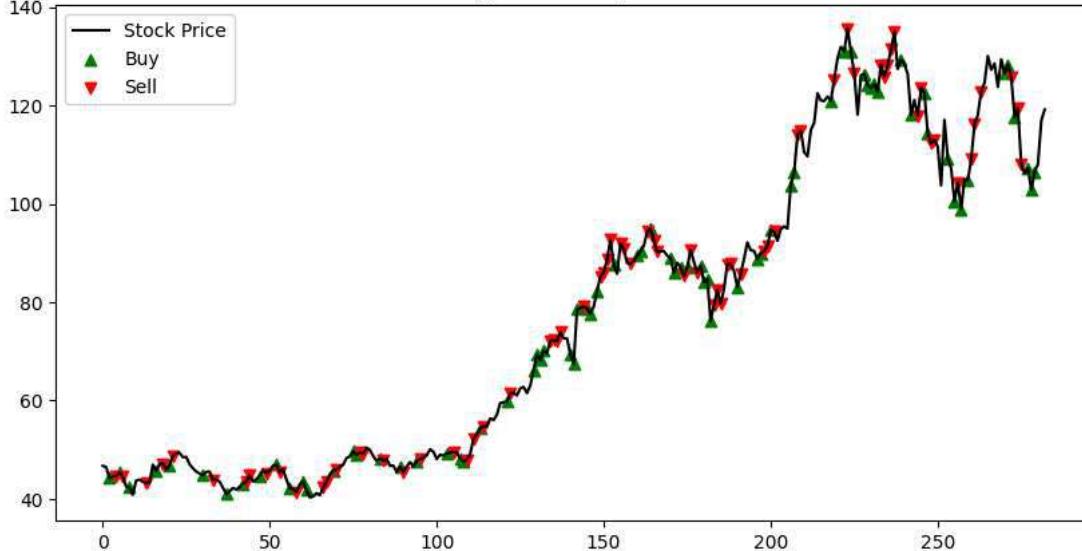
Running Episode 421/500
 Episode 421 Metrics: {'Total Profit': '\$251.03', 'Win Rate': '63.64%', 'Profit Factor': '2.65', 'Sharpe Ratio': '0.34', 'Max Drawdown':

Trading Actions - Episode 421



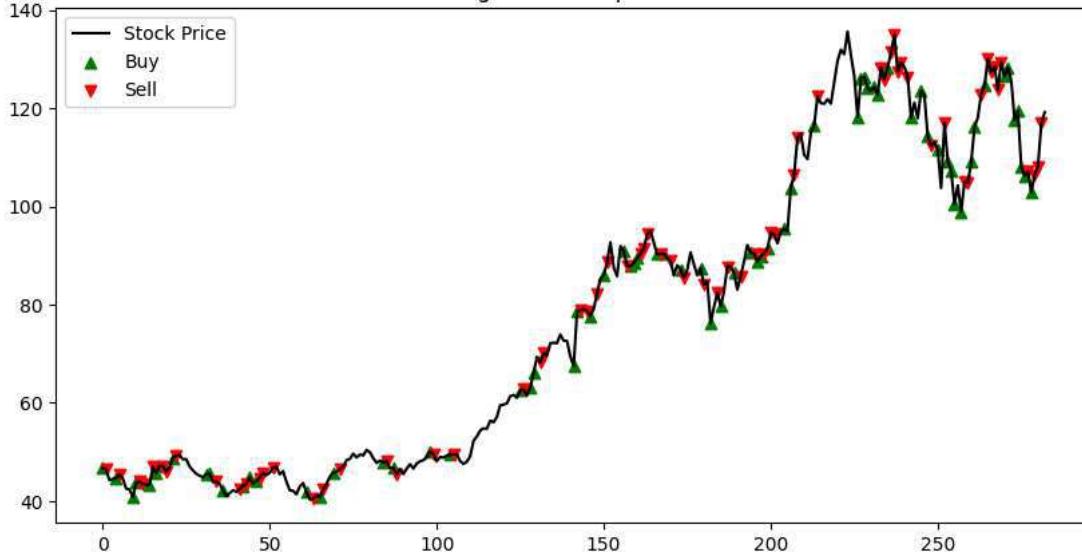
Running Episode 422/500
 Episode 422 Metrics: {'Total Profit': '\$169.33', 'Win Rate': '66.67%', 'Profit Factor': '2.99', 'Sharpe Ratio': '0.38', 'Max Drawdown':

Trading Actions - Episode 422



Running Episode 423/500
 Episode 423 Metrics: {'Total Profit': '\$156.87', 'Win Rate': '64.18%', 'Profit Factor': '2.45', 'Sharpe Ratio': '0.28', 'Max Drawdown':

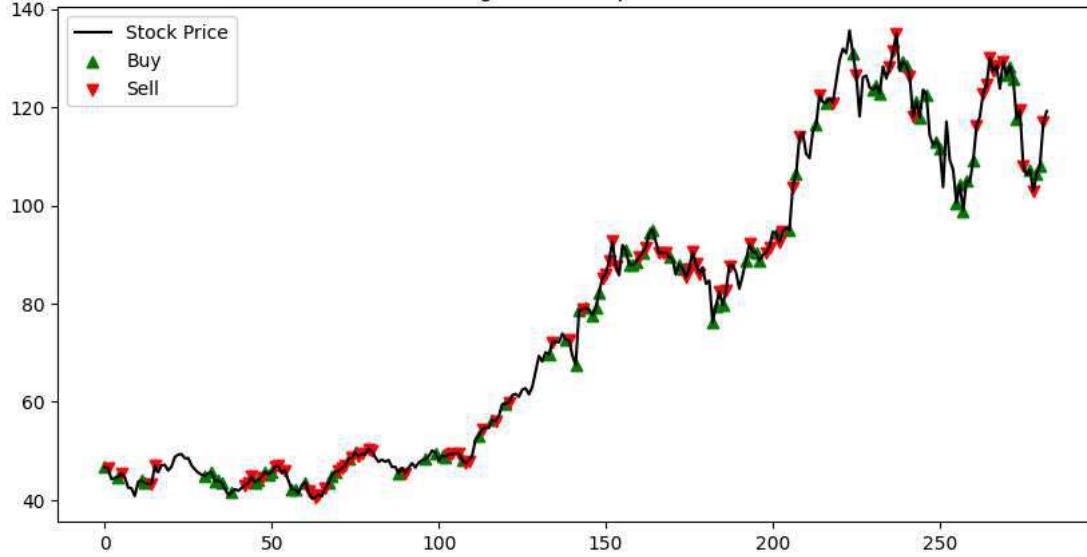
Trading Actions - Episode 423



Running Episode 424/500

Episode 424 Metrics: {'Total Profit': '\$221.48', 'Win Rate': '67.09%', 'Profit Factor': '3.78', 'Sharpe Ratio': '0.42', 'Max Drawdown':

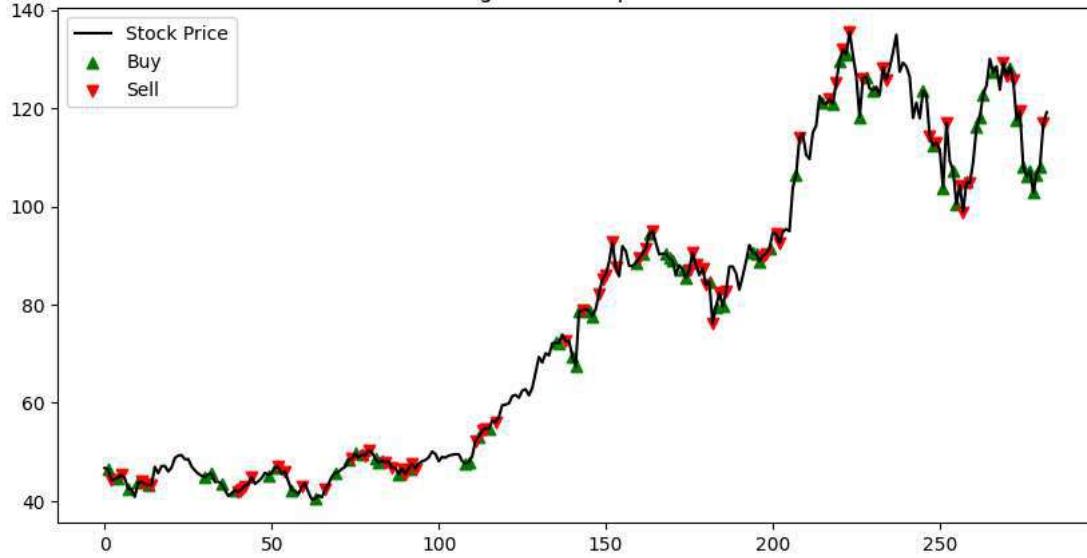
Trading Actions - Episode 424



Running Episode 425/500

Episode 425 Metrics: {'Total Profit': '\$120.07', 'Win Rate': '65.67%', 'Profit Factor': '2.84', 'Sharpe Ratio': '0.34', 'Max Drawdown':

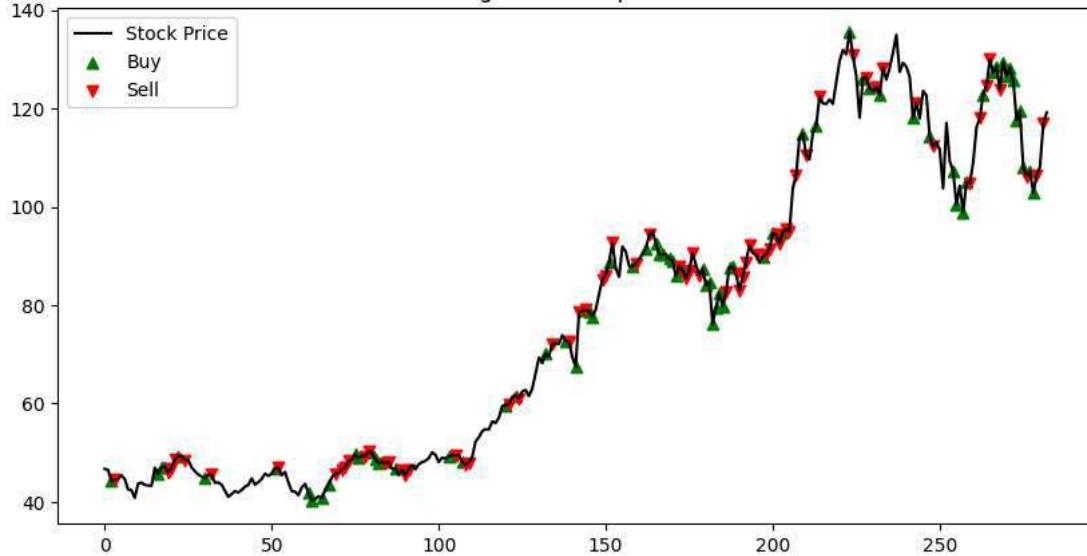
Trading Actions - Episode 425



Running Episode 426/500

Episode 426 Metrics: {'Total Profit': '\$124.77', 'Win Rate': '61.19%', 'Profit Factor': '2.20', 'Sharpe Ratio': '0.24', 'Max Drawdown':

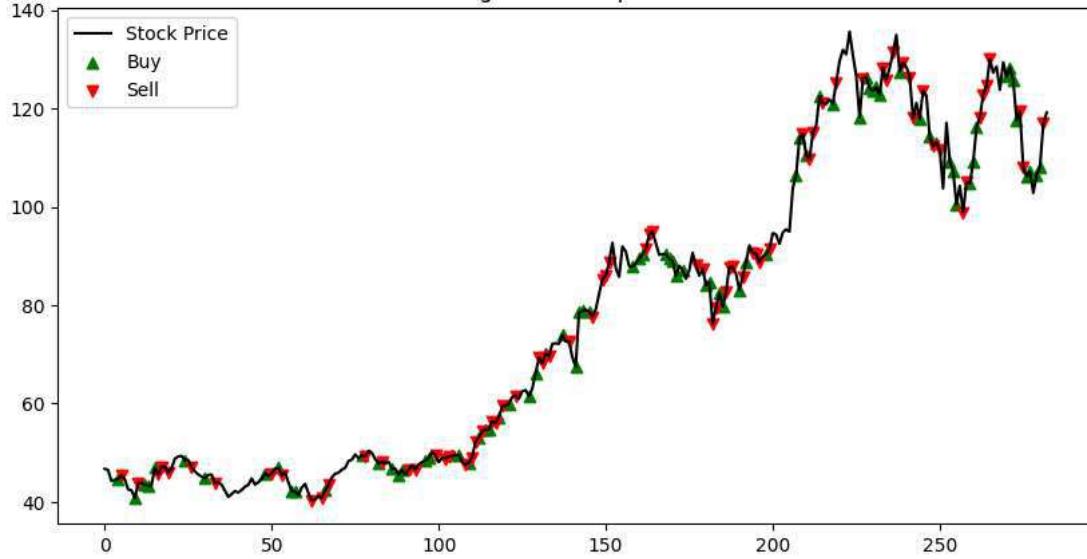
Trading Actions - Episode 426



Running Episode 427/500

Episode 427 Metrics: {'Total Profit': '\$123.71', 'Win Rate': '62.16%', 'Profit Factor': '2.15', 'Sharpe Ratio': '0.27', 'Max Drawdown':

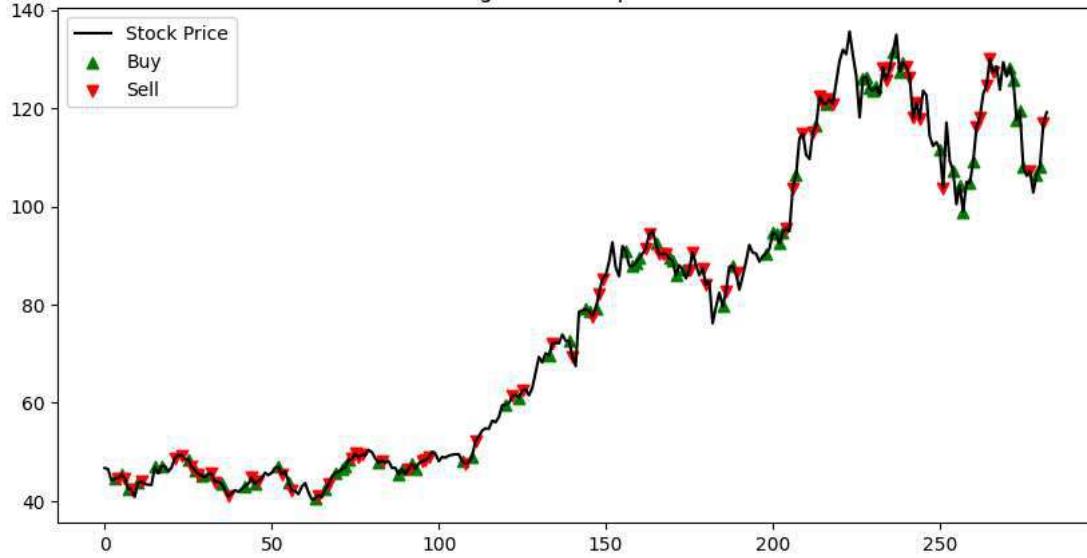
Trading Actions - Episode 427



Running Episode 428/500

Episode 428 Metrics: {'Total Profit': '\$174.49', 'Win Rate': '68.57%', 'Profit Factor': '2.86', 'Sharpe Ratio': '0.30', 'Max Drawdown':

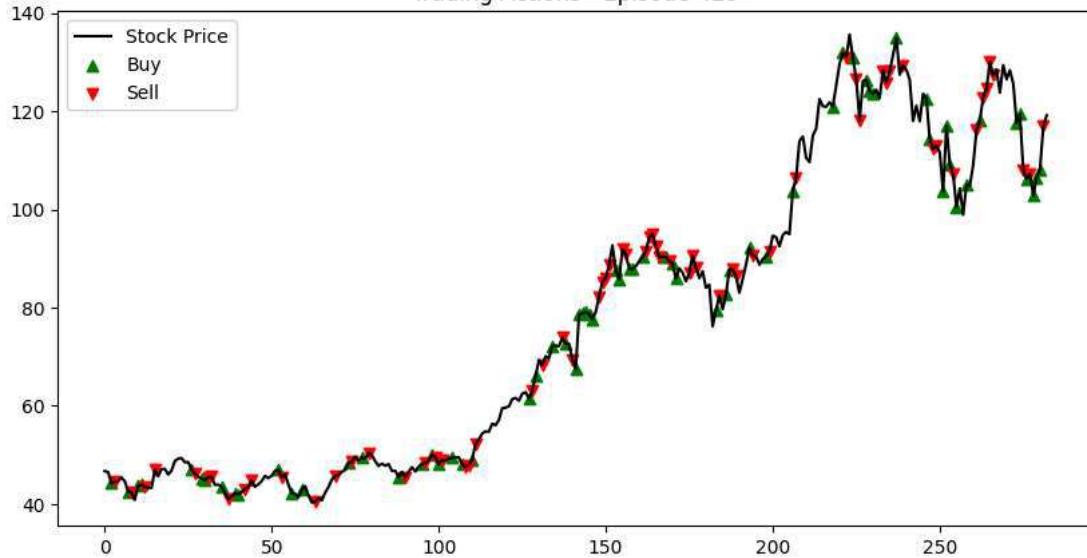
Trading Actions - Episode 428



Running Episode 429/500

Episode 429 Metrics: {'Total Profit': '\$153.12', 'Win Rate': '63.08%', 'Profit Factor': '2.97', 'Sharpe Ratio': '0.35', 'Max Drawdown':

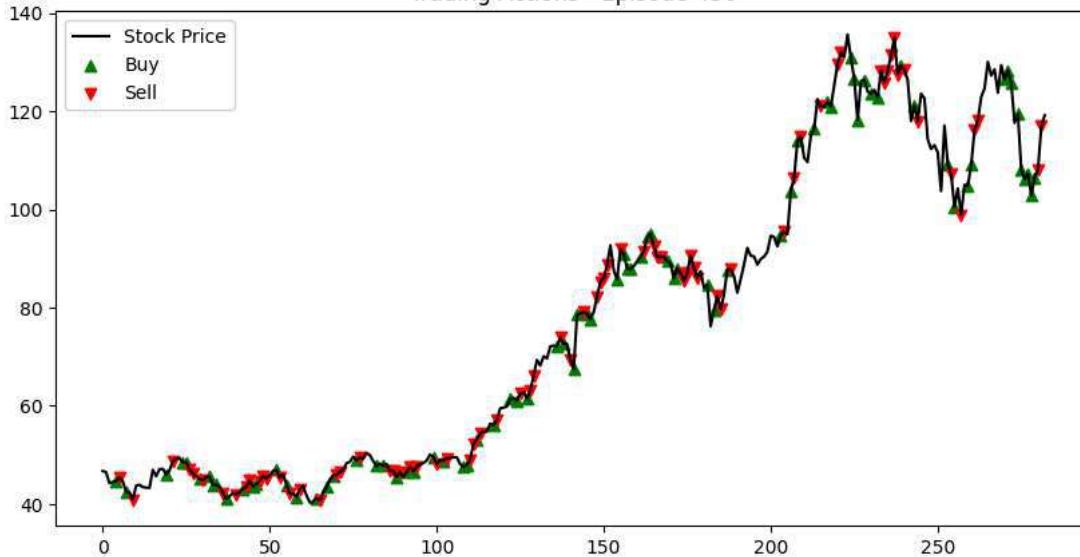
Trading Actions - Episode 429



Running Episode 430/500

Episode 430 Metrics: {'Total Profit': '\$88.63', 'Win Rate': '62.67%', 'Profit Factor': '2.02', 'Sharpe Ratio': '0.24', 'Max Drawdown':

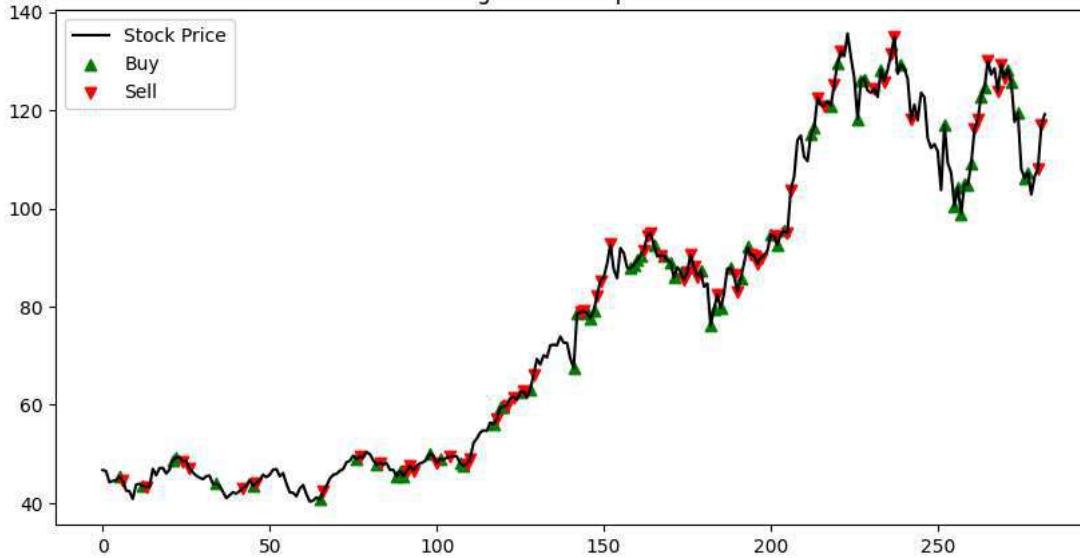
Trading Actions - Episode 430



Running Episode 431/500

Episode 431 Metrics: {'Total Profit': '\$217.44', 'Win Rate': '69.35%', 'Profit Factor': '5.85', 'Sharpe Ratio': '0.49', 'Max Drawdown':

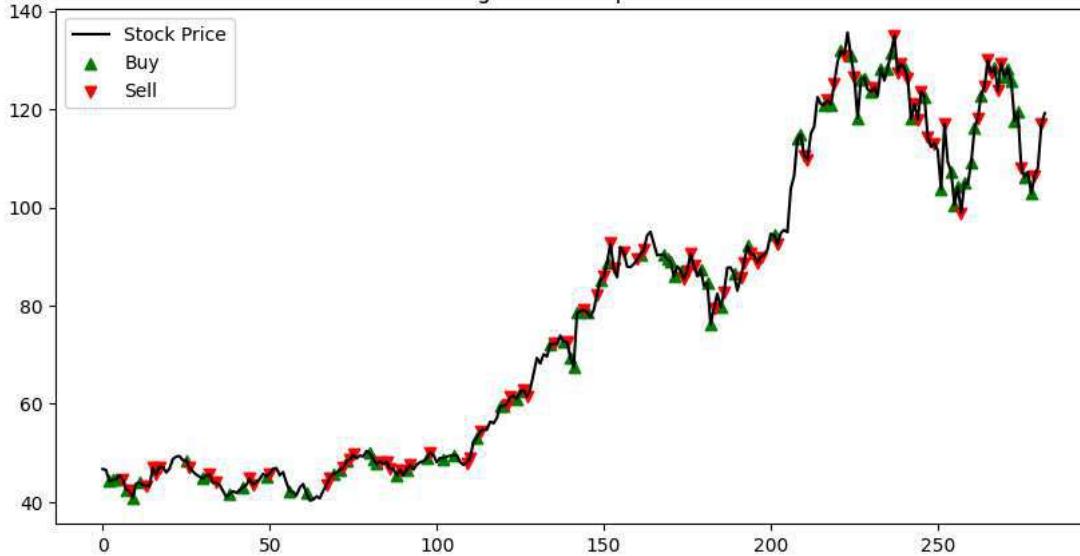
Trading Actions - Episode 431



Running Episode 432/500

Episode 432 Metrics: {'Total Profit': '\$112.87', 'Win Rate': '60.76%', 'Profit Factor': '1.75', 'Sharpe Ratio': '0.19', 'Max Drawdown':

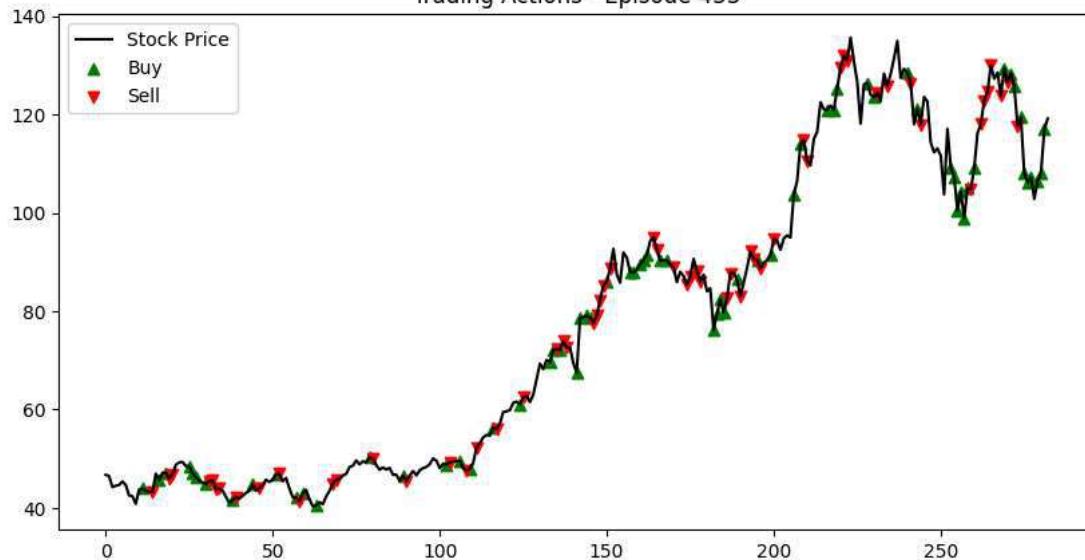
Trading Actions - Episode 432



Running Episode 433/500

Episode 433 Metrics: {'Total Profit': '\$190.28', 'Win Rate': '59.32%', 'Profit Factor': '4.23', 'Sharpe Ratio': '0.43', 'Max Drawdown':

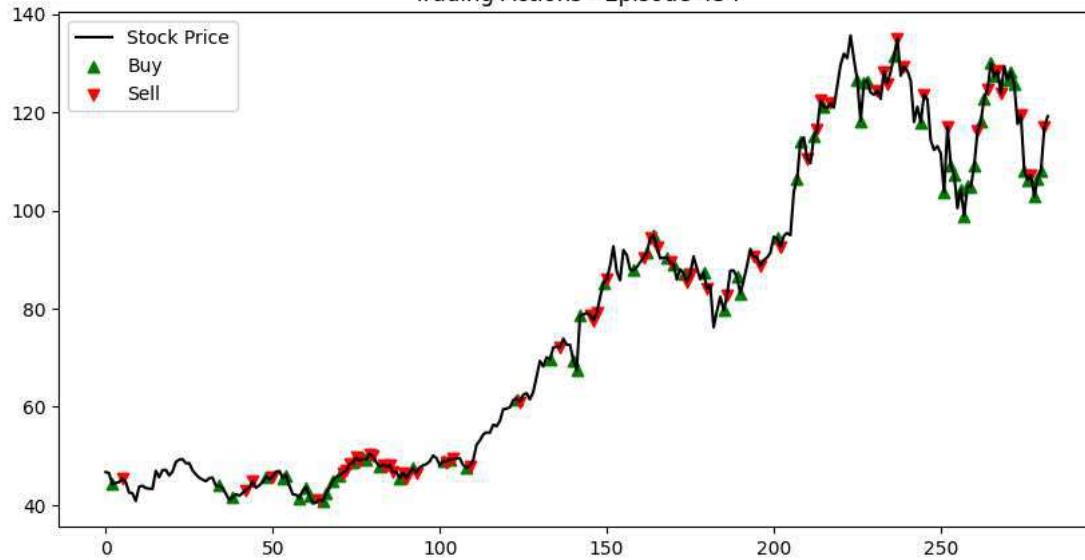
Trading Actions - Episode 433



Running Episode 434/500

Episode 434 Metrics: {'Total Profit': '\$209.14', 'Win Rate': '66.67%', 'Profit Factor': '8.05', 'Sharpe Ratio': '0.60', 'Max Drawdown':

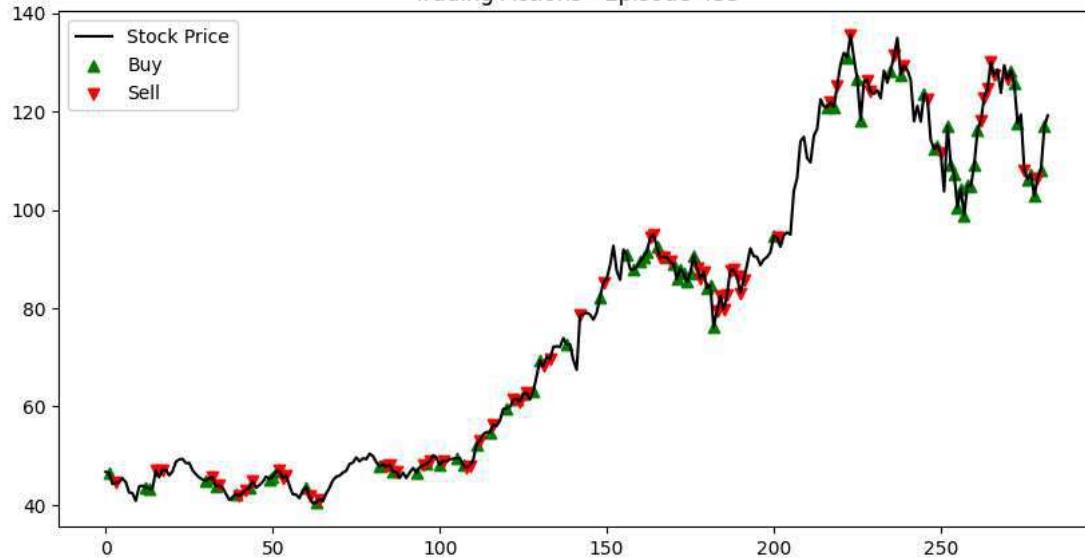
Trading Actions - Episode 434



Running Episode 435/500

Episode 435 Metrics: {'Total Profit': '\$135.39', 'Win Rate': '60.00%', 'Profit Factor': '3.59', 'Sharpe Ratio': '0.34', 'Max Drawdown':

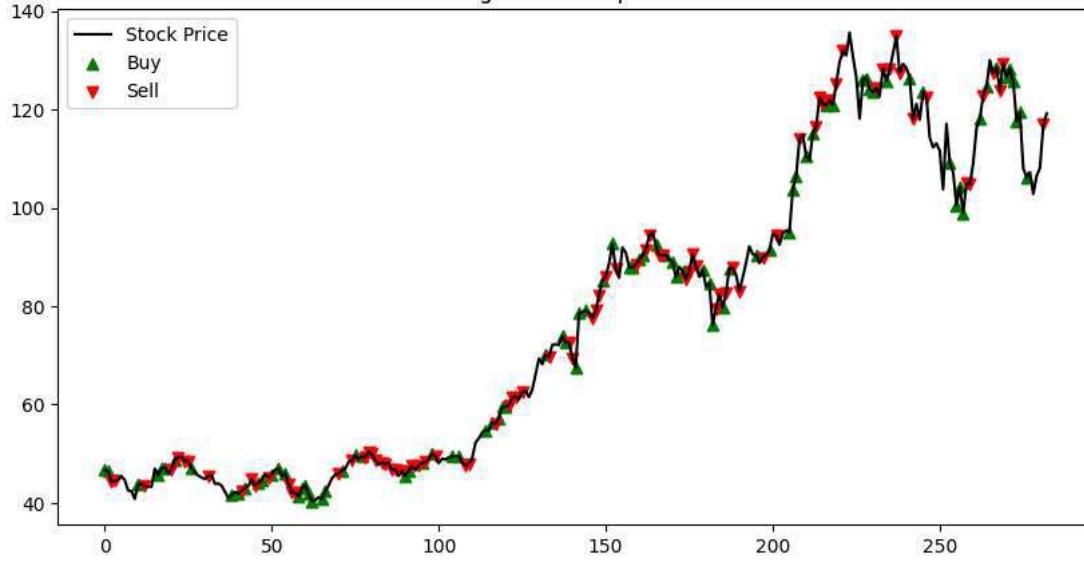
Trading Actions - Episode 435



Running Episode 436/500

Episode 436 Metrics: {'Total Profit': '\$197.94', 'Win Rate': '62.20%', 'Profit Factor': '3.27', 'Sharpe Ratio': '0.39', 'Max Drawdown':

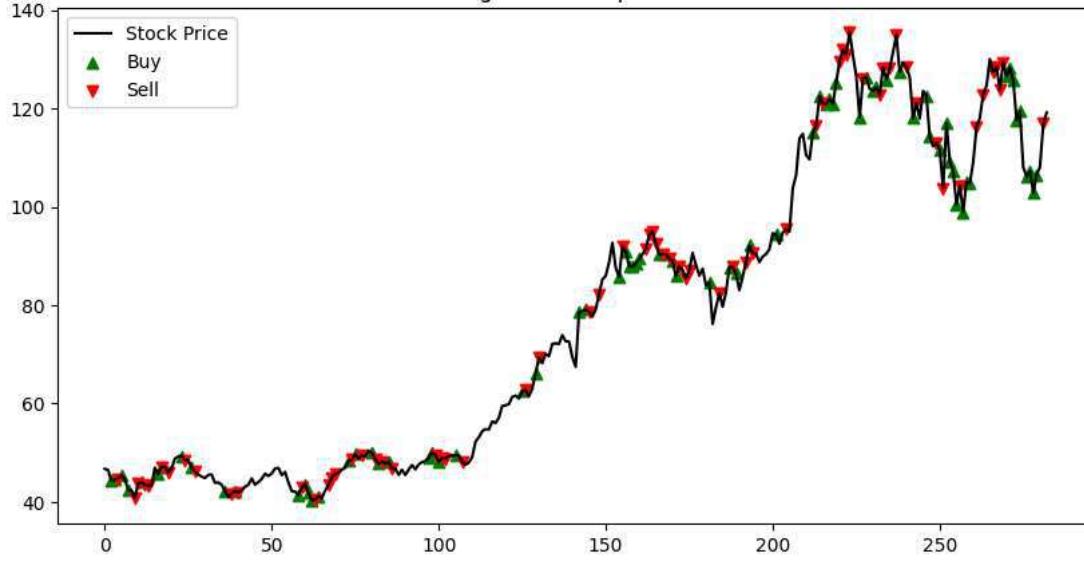
Trading Actions - Episode 436



Running Episode 437/500

Episode 437 Metrics: {'Total Profit': '\$185.74', 'Win Rate': '62.69%', 'Profit Factor': '3.99', 'Sharpe Ratio': '0.39', 'Max Drawdown':

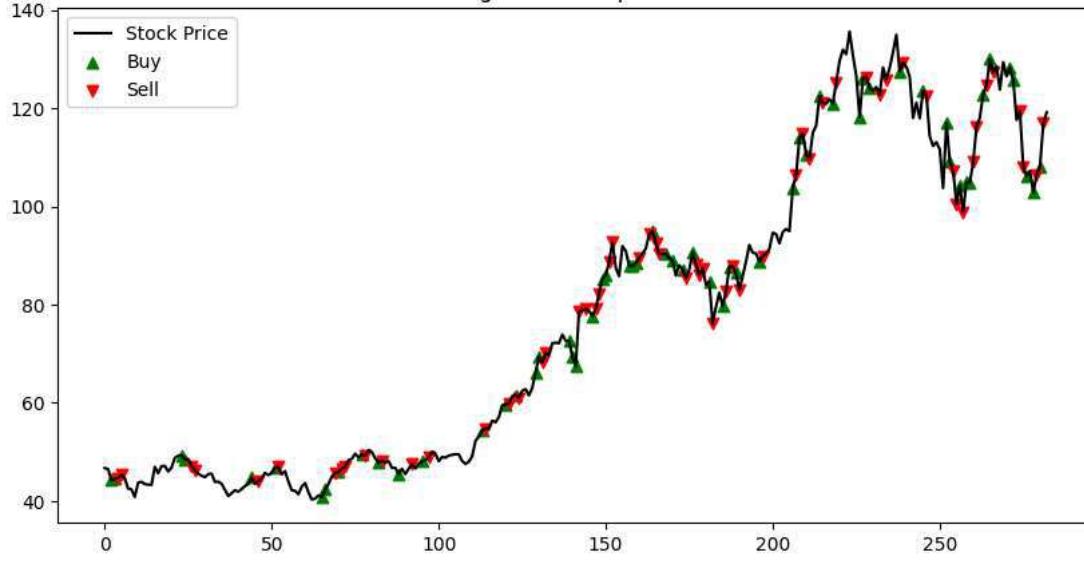
Trading Actions - Episode 437



Running Episode 438/500

Episode 438 Metrics: {'Total Profit': '\$35.32', 'Win Rate': '62.07%', 'Profit Factor': '1.38', 'Sharpe Ratio': '0.11', 'Max Drawdown':

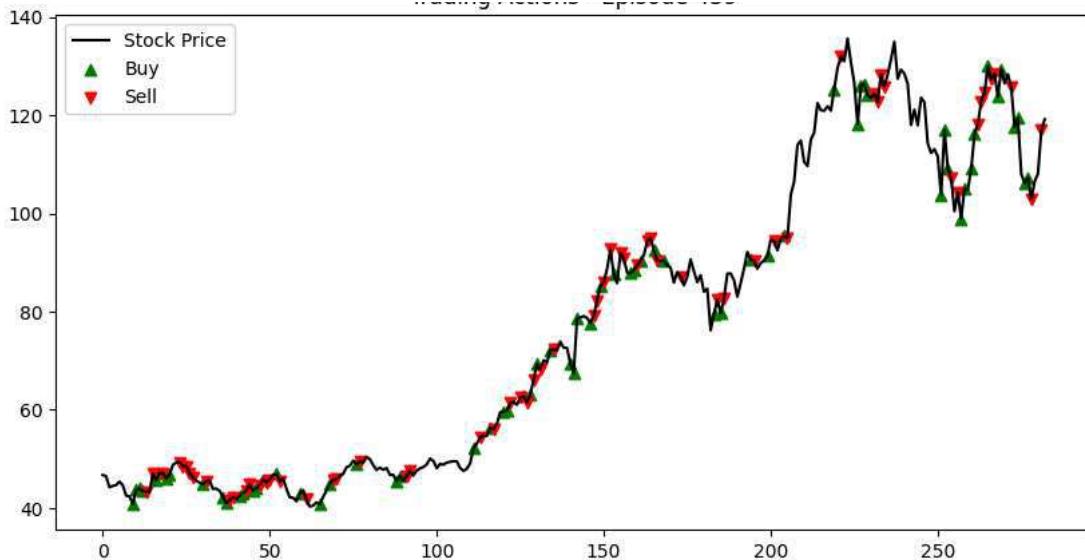
Trading Actions - Episode 438



Running Episode 439/500

Episode 439 Metrics: {'Total Profit': '\$159.59', 'Win Rate': '74.19%', 'Profit Factor': '3.39', 'Sharpe Ratio': '0.38', 'Max Drawdown':

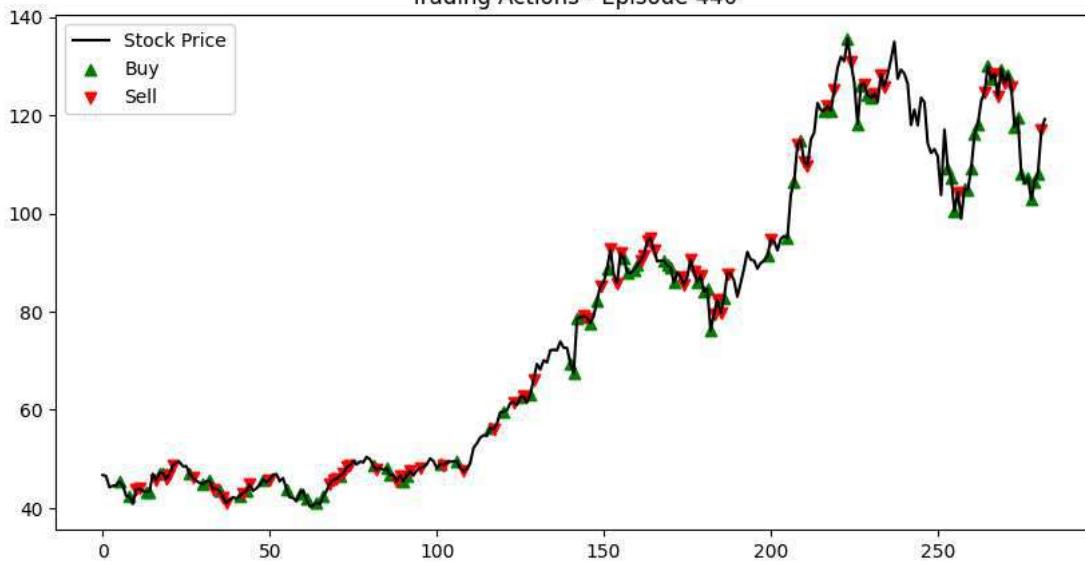
Trading Actions - Episode 439



Running Episode 440/500

Episode 440 Metrics: {'Total Profit': '\$235.17', 'Win Rate': '70.59%', 'Profit Factor': '6.04', 'Sharpe Ratio': '0.53', 'Max Drawdown': ''}

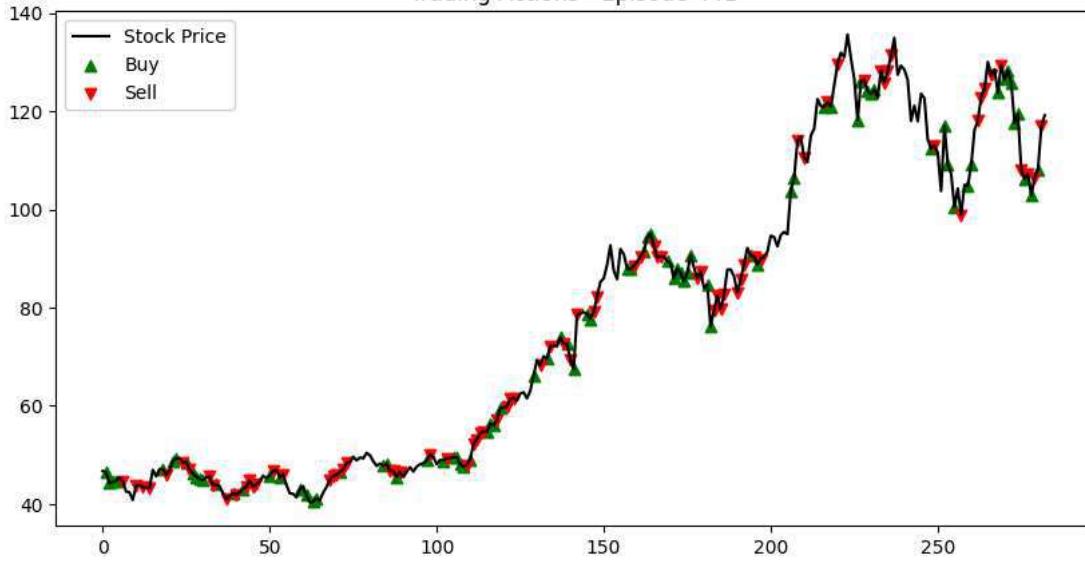
Trading Actions - Episode 440



Running Episode 441/500

Episode 441 Metrics: {'Total Profit': '\$72.81', 'Win Rate': '60.76%', 'Profit Factor': '1.48', 'Sharpe Ratio': '0.13', 'Max Drawdown': ''}

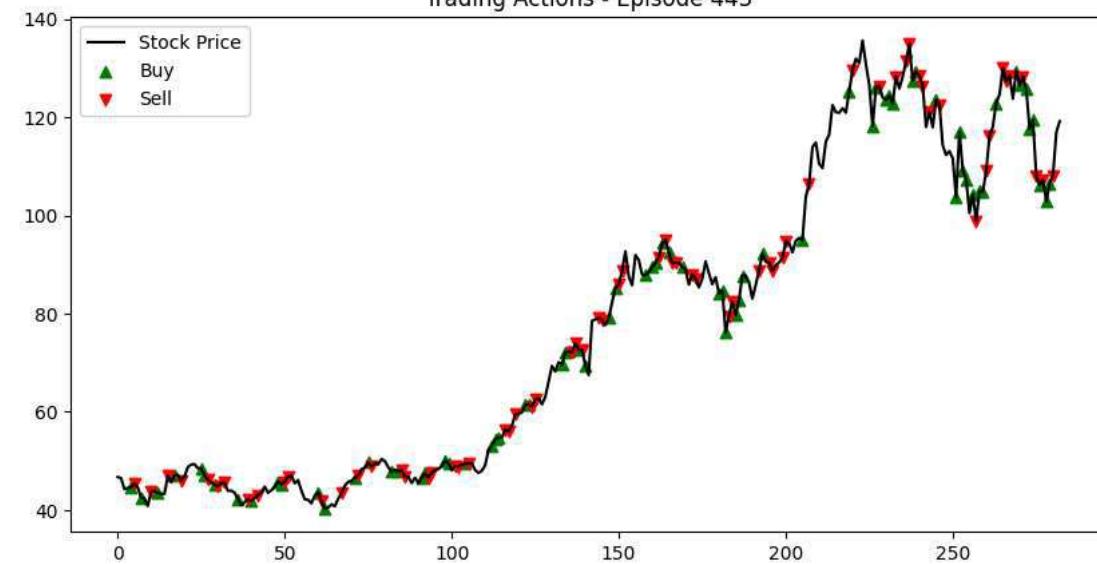
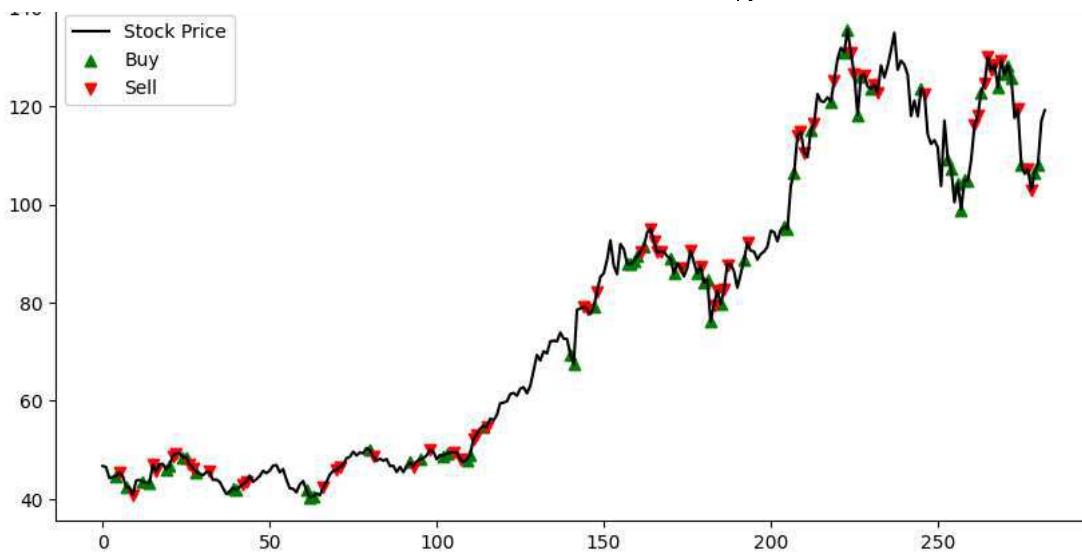
Trading Actions - Episode 441

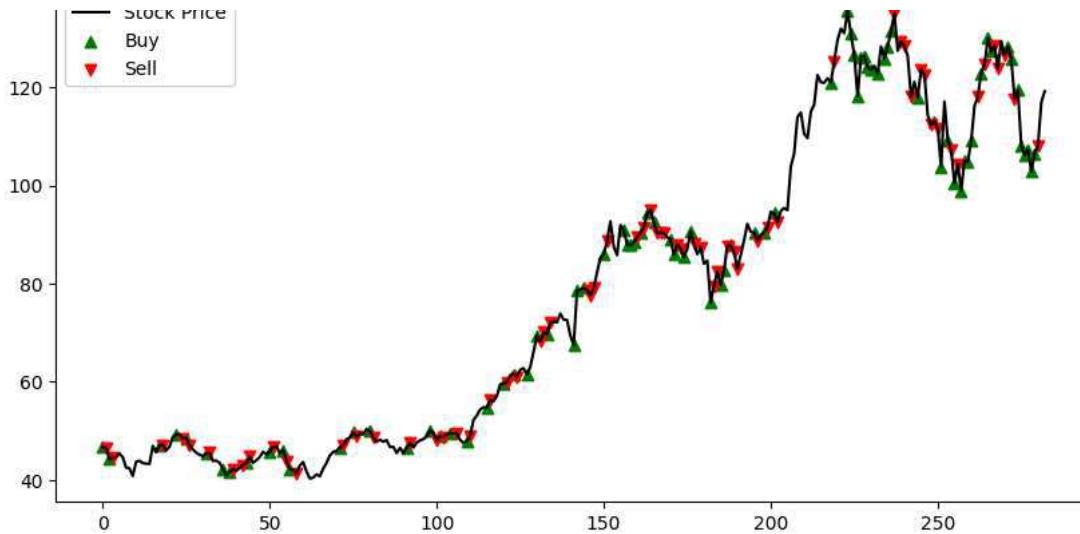


Running Episode 442/500

Episode 442 Metrics: {'Total Profit': '\$197.80', 'Win Rate': '67.80%', 'Profit Factor': '3.46', 'Sharpe Ratio': '0.38', 'Max Drawdown': ''}

Trading Actions - Episode 442

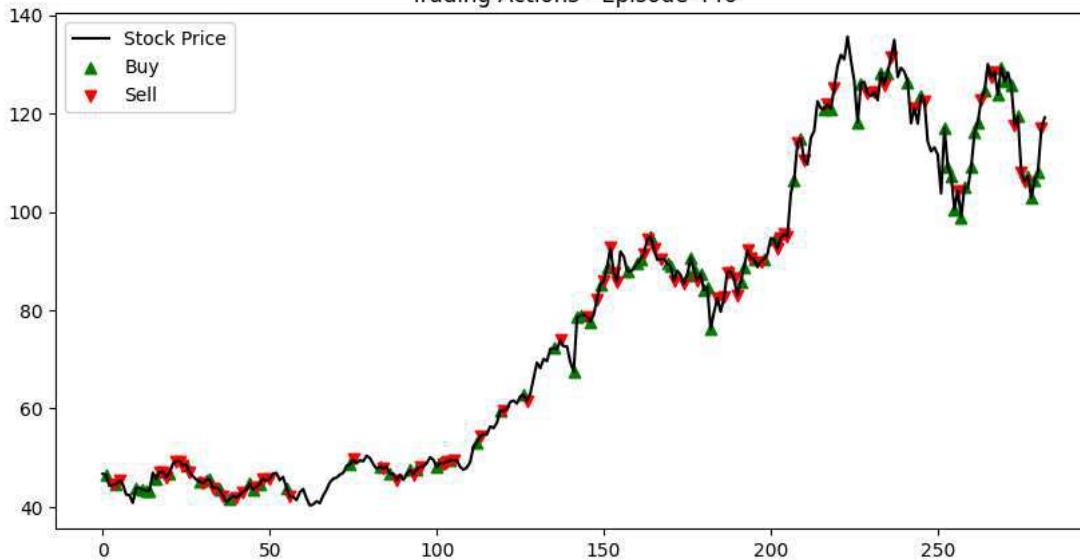




Running Episode 446/500

Episode 446 Metrics: {'Total Profit': '\$149.04', 'Win Rate': '63.01%', 'Profit Factor': '2.91', 'Sharpe Ratio': '0.33', 'Max Drawdown'}

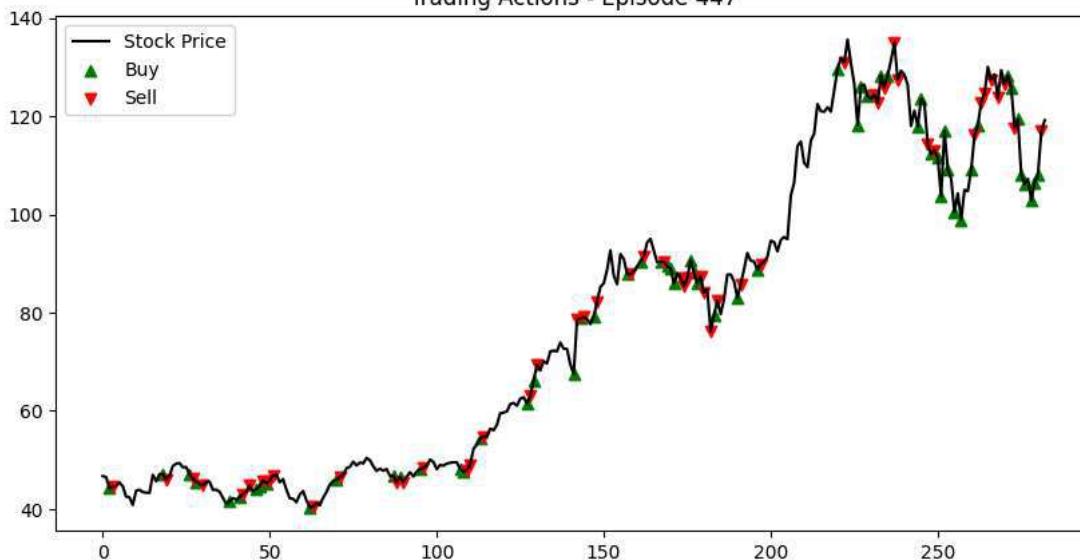
Trading Actions - Episode 446



Running Episode 447/500

Episode 447 Metrics: {'Total Profit': '\$122.28', 'Win Rate': '68.00%', 'Profit Factor': '3.62', 'Sharpe Ratio': '0.37', 'Max Drawdown'}

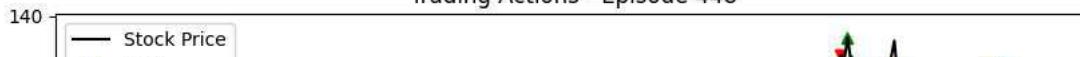
Trading Actions - Episode 447

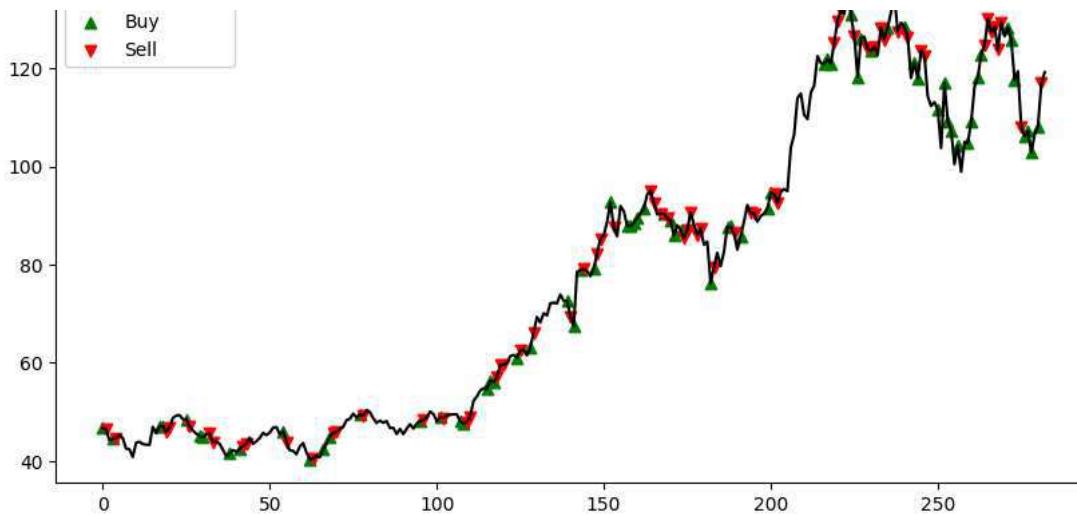


Running Episode 448/500

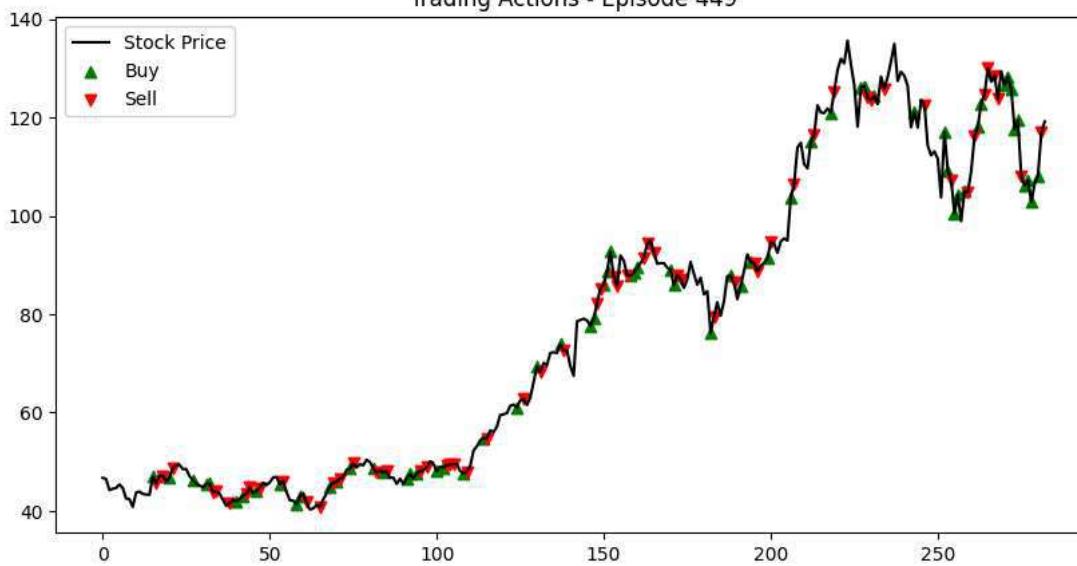
Episode 448 Metrics: {'Total Profit': '\$175.18', 'Win Rate': '66.67%', 'Profit Factor': '4.59', 'Sharpe Ratio': '0.44', 'Max Drawdown'}

Trading Actions - Episode 448





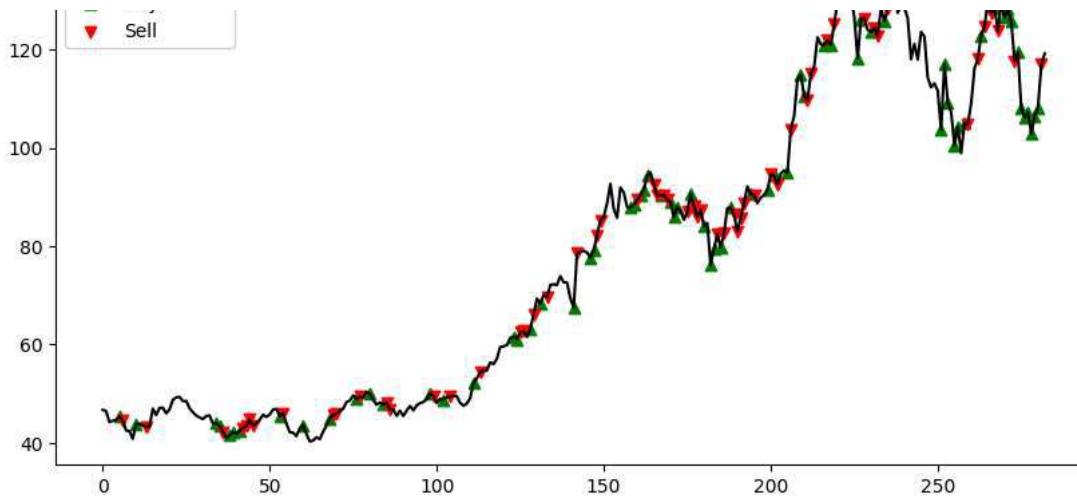
Running Episode 449/500
 Episode 449 Metrics: {'Total Profit': '\$63.91', 'Win Rate': '65.52%', 'Profit Factor': '1.85', 'Sharpe Ratio': '0.18', 'Max Drawdown': ''}



Running Episode 450/500
 Episode 450 Metrics: {'Total Profit': '-\$0.28', 'Win Rate': '54.10%', 'Profit Factor': '1.00', 'Sharpe Ratio': '-0.00', 'Max Drawdown': ''}



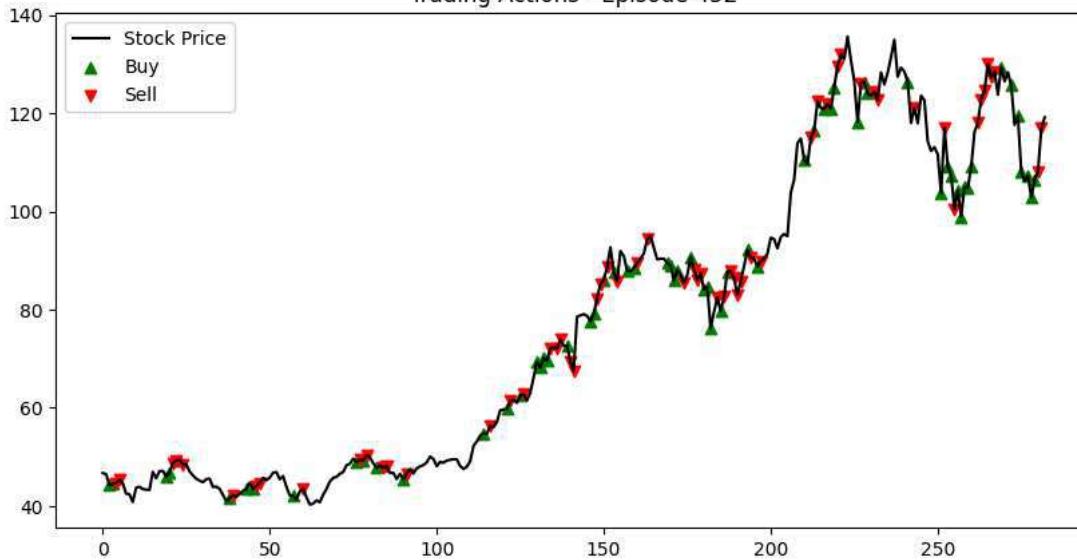
Running Episode 451/500
 Episode 451 Metrics: {'Total Profit': '\$138.51', 'Win Rate': '62.71%', 'Profit Factor': '3.42', 'Sharpe Ratio': '0.35', 'Max Drawdown': ''}



Running Episode 452/500

Episode 452 Metrics: {'Total Profit': '\$161.88', 'Win Rate': '69.49%', 'Profit Factor': '3.19', 'Sharpe Ratio': '0.35', 'Max Drawdown':

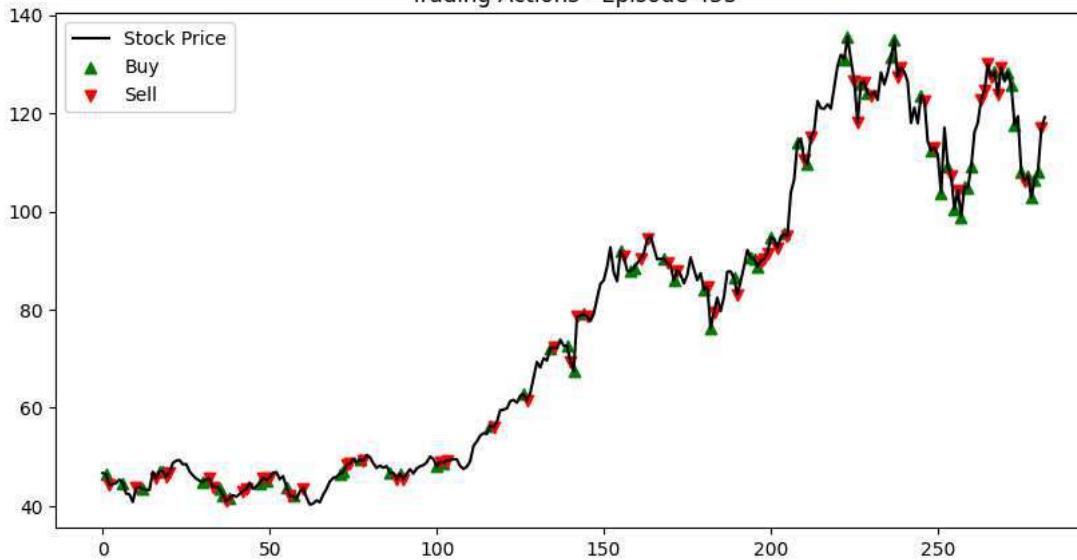
Trading Actions - Episode 452



Running Episode 453/500

Episode 453 Metrics: {'Total Profit': '\$64.27', 'Win Rate': '48.33%', 'Profit Factor': '1.65', 'Sharpe Ratio': '0.14', 'Max Drawdown':

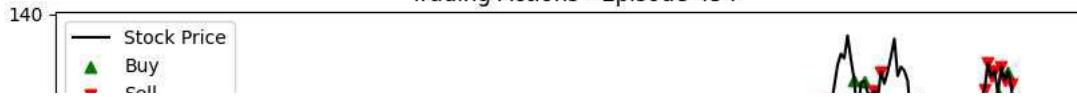
Trading Actions - Episode 453

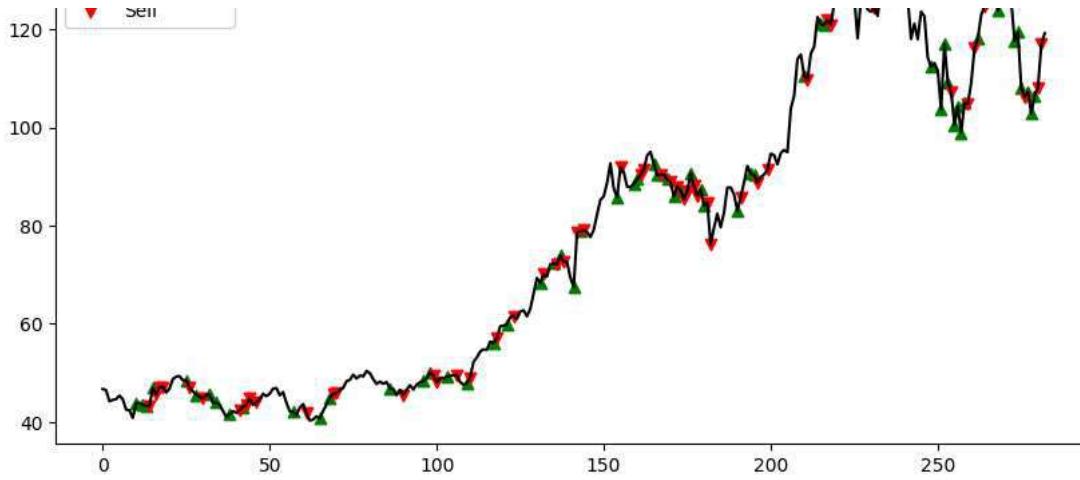


Running Episode 454/500

Episode 454 Metrics: {'Total Profit': '\$105.53', 'Win Rate': '56.90%', 'Profit Factor': '2.30', 'Sharpe Ratio': '0.22', 'Max Drawdown':

Trading Actions - Episode 454

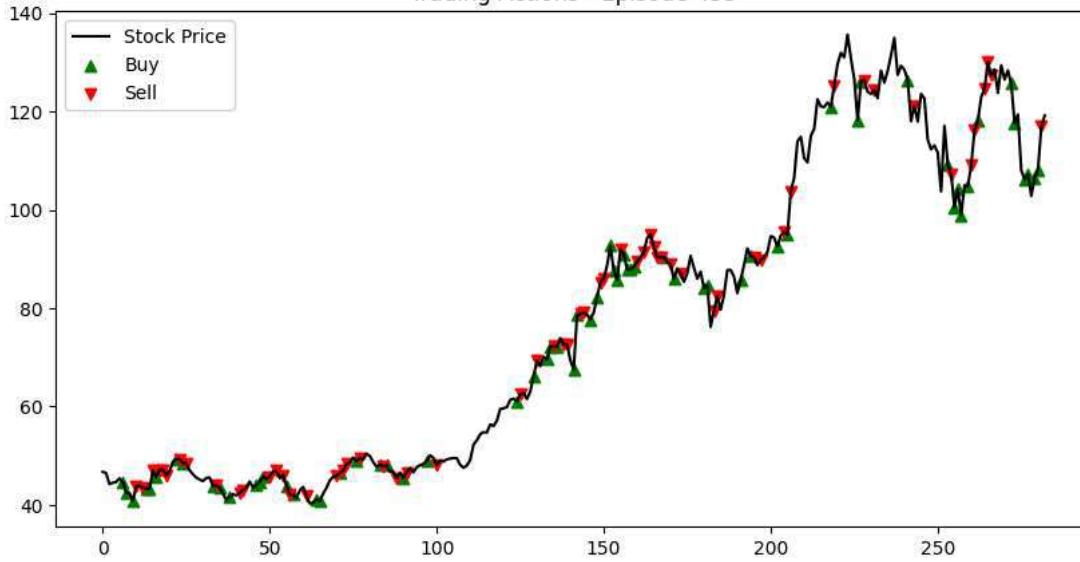




Running Episode 455/500

Episode 455 Metrics: {'Total Profit': '\$162.98', 'Win Rate': '72.88%', 'Profit Factor': '5.64', 'Sharpe Ratio': '0.48', 'Max Drawdown'}

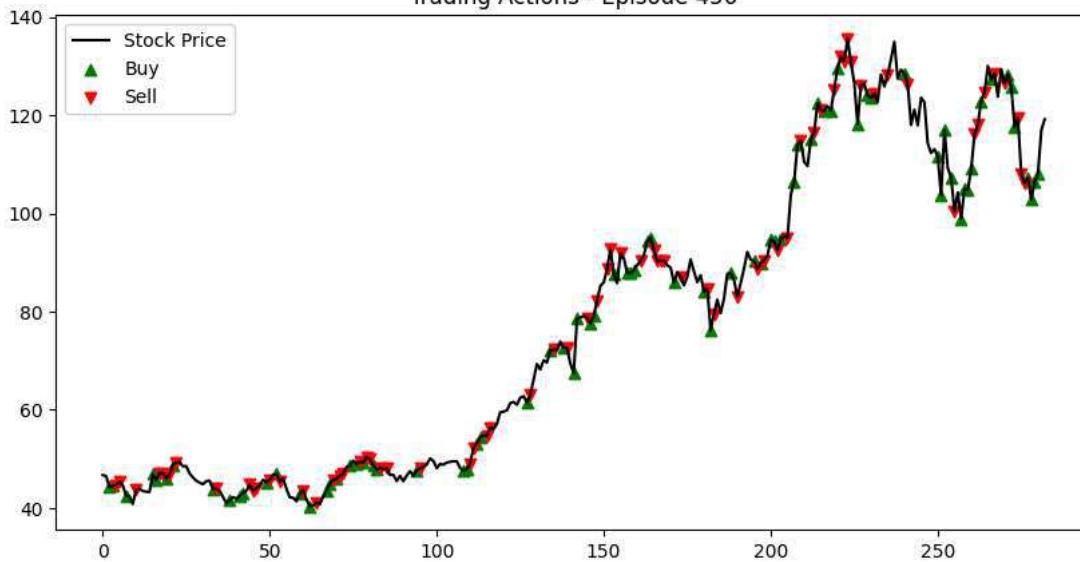
Trading Actions - Episode 455



Running Episode 456/500

Episode 456 Metrics: {'Total Profit': '\$233.68', 'Win Rate': '82.86%', 'Profit Factor': '5.67', 'Sharpe Ratio': '0.48', 'Max Drawdown'}

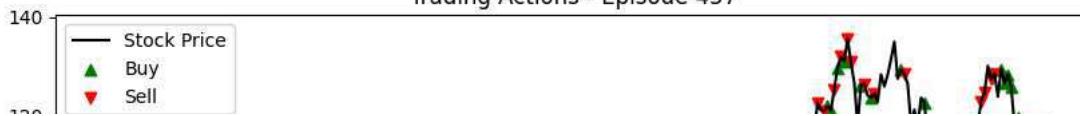
Trading Actions - Episode 456

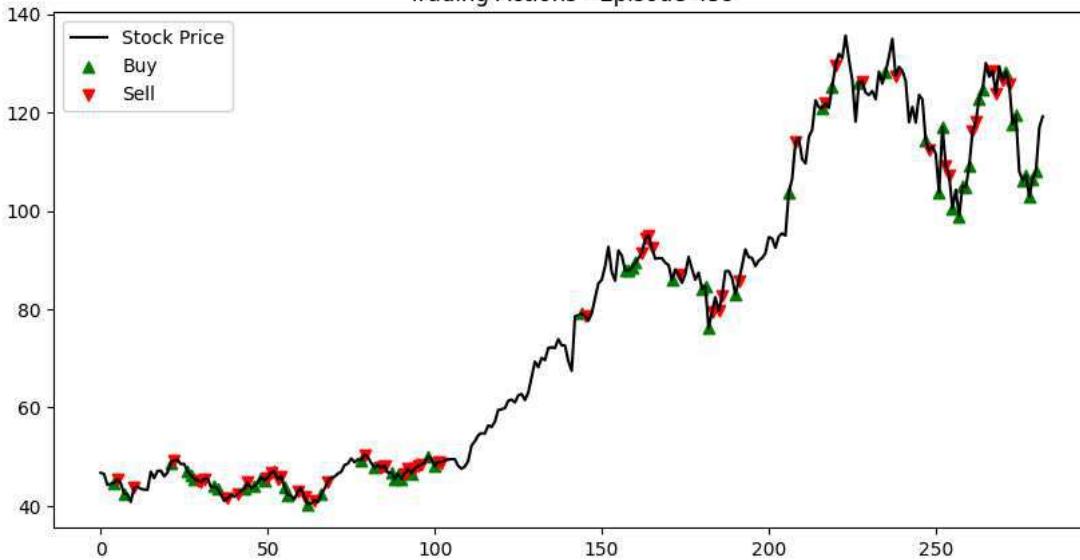
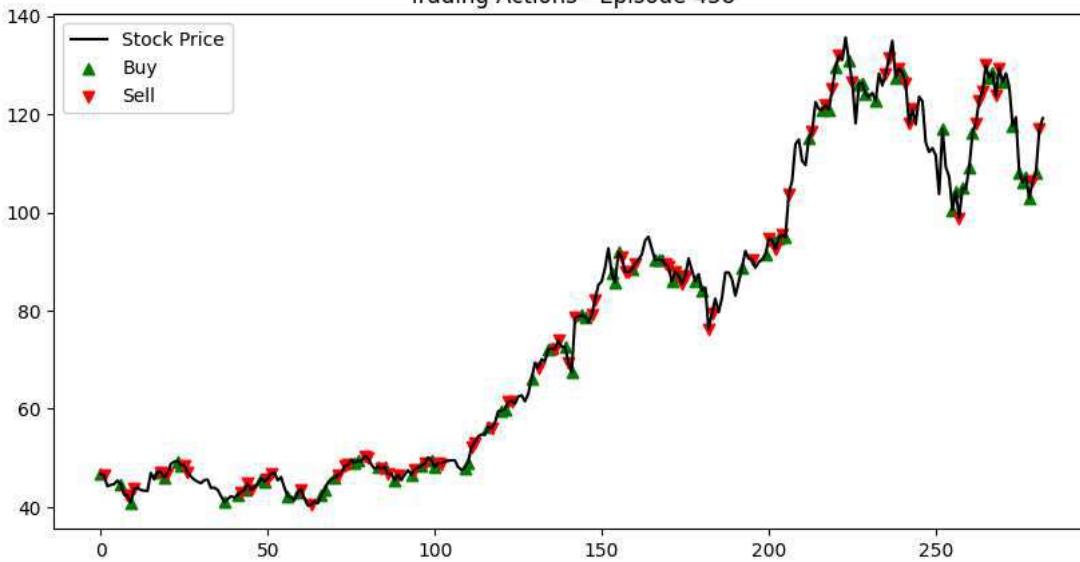
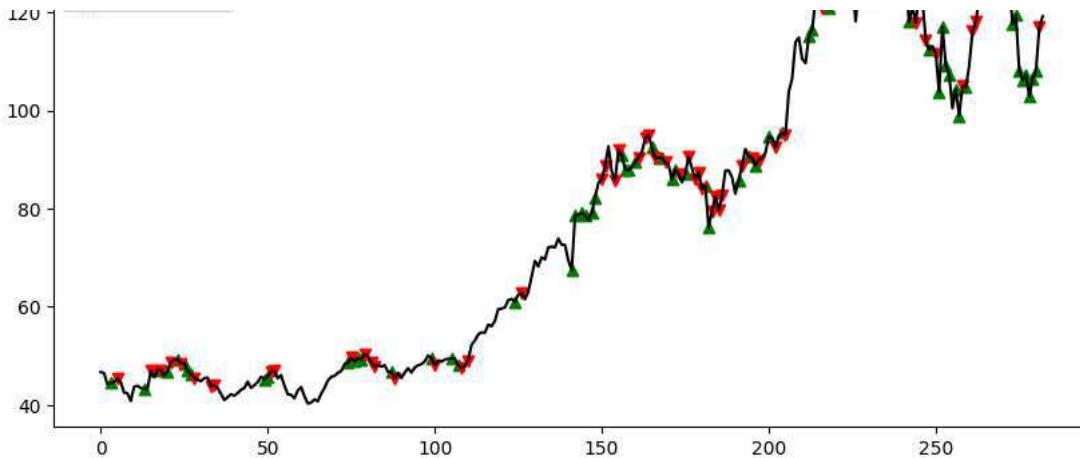


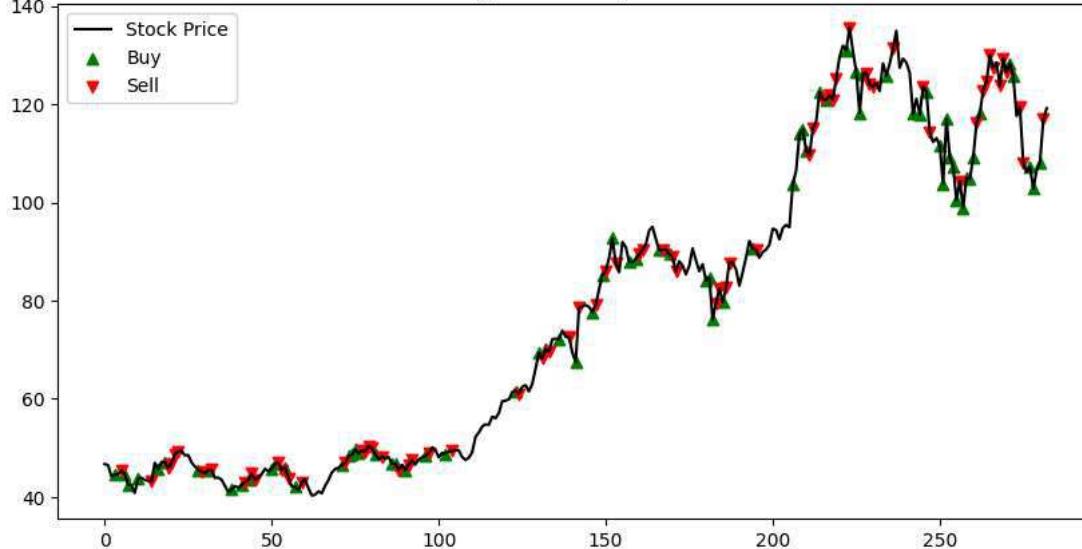
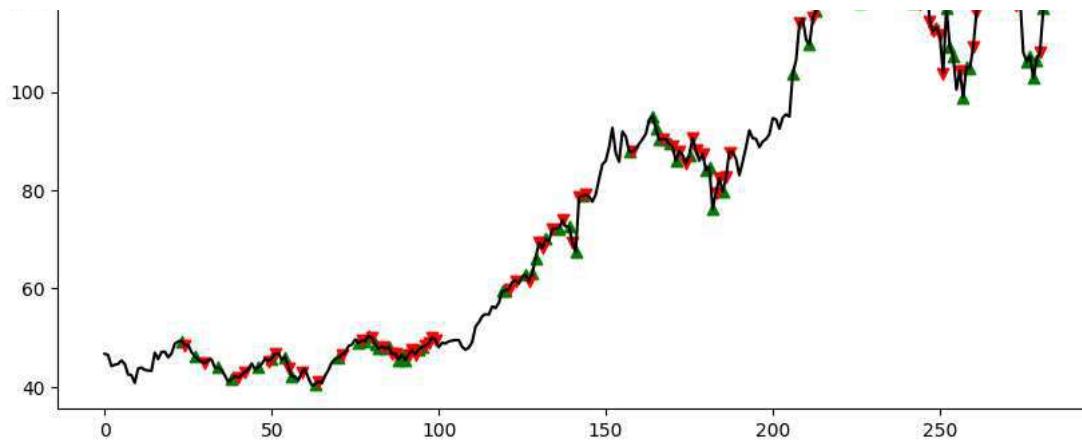
Running Episode 457/500

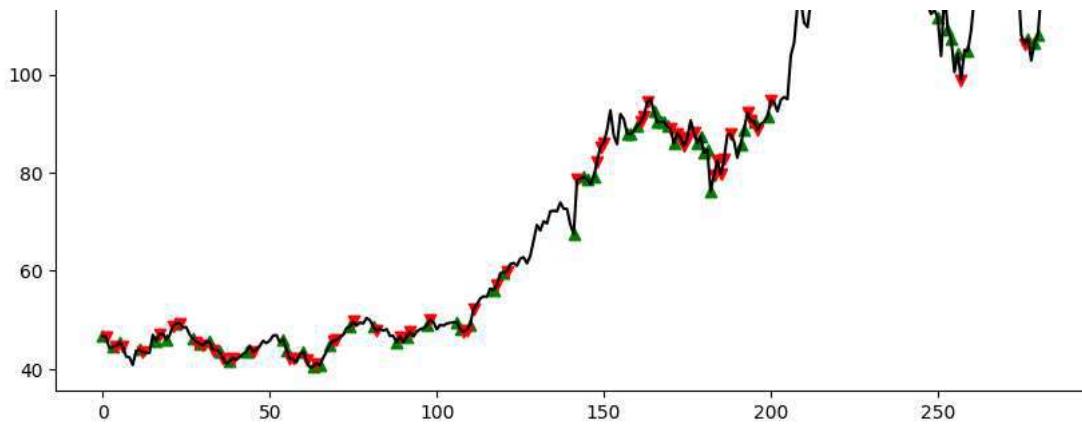
Episode 457 Metrics: {'Total Profit': '\$162.36', 'Win Rate': '56.45%', 'Profit Factor': '3.20', 'Sharpe Ratio': '0.35', 'Max Drawdown'}

Trading Actions - Episode 457





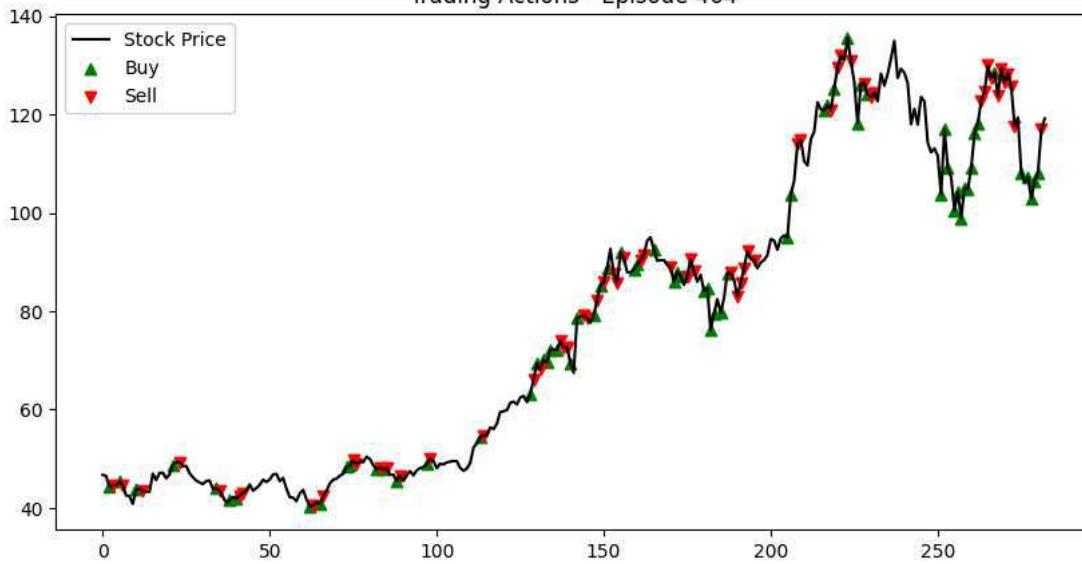




Running Episode 464/500

Episode 464 Metrics: {'Total Profit': '\$315.82', 'Win Rate': '81.67%', 'Profit Factor': '16.58', 'Sharpe Ratio': '0.66', 'Max Drawdown':

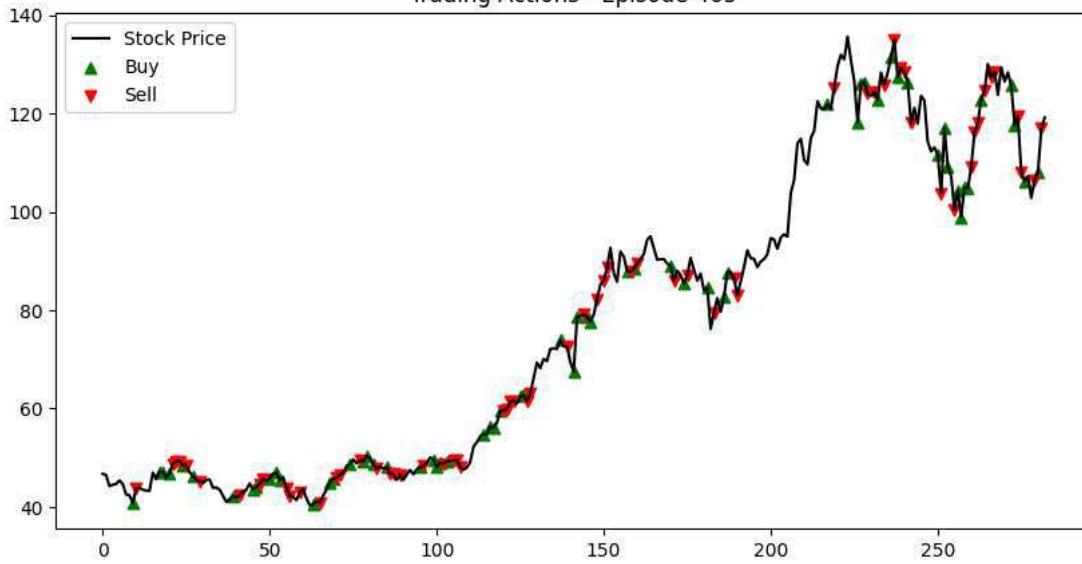
Trading Actions - Episode 464



Running Episode 465/500

Episode 465 Metrics: {'Total Profit': '\$94.71', 'Win Rate': '60.32%', 'Profit Factor': '2.06', 'Sharpe Ratio': '0.23', 'Max Drawdown':

Trading Actions - Episode 465

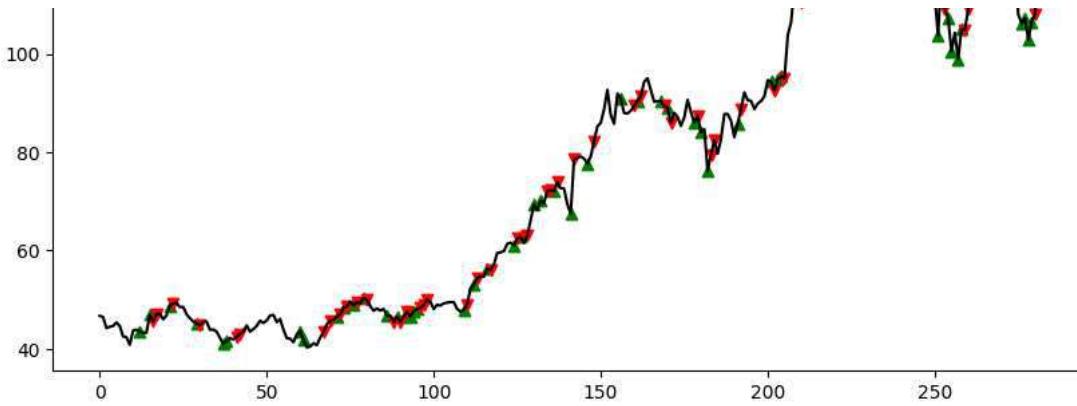


Running Episode 466/500

Episode 466 Metrics: {'Total Profit': '\$117.19', 'Win Rate': '70.18%', 'Profit Factor': '2.82', 'Sharpe Ratio': '0.30', 'Max Drawdown':

Trading Actions - Episode 466





Running Episode 467/500

Episode 467 Metrics: {'Total Profit': '\$148.07', 'Win Rate': '68.00%', 'Profit Factor': '3.58', 'Sharpe Ratio': '0.36', 'Max Drawdown': ''}



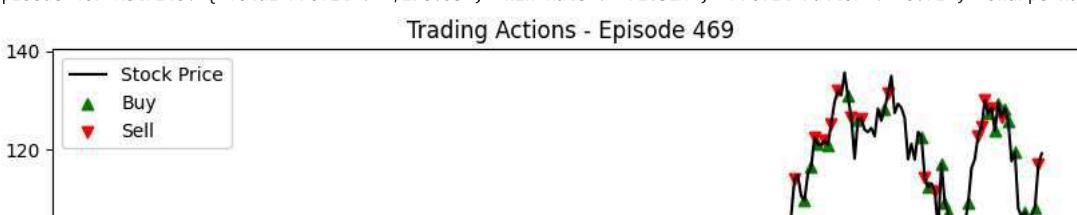
Running Episode 468/500

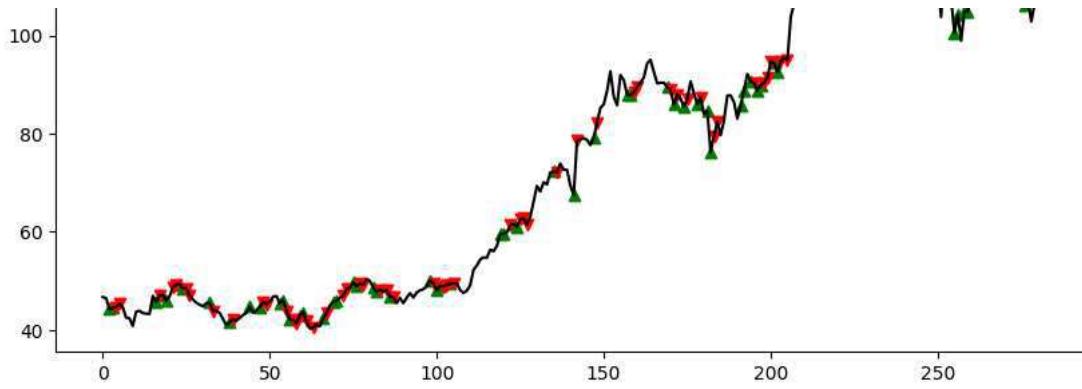
Episode 468 Metrics: {'Total Profit': '\$50.61', 'Win Rate': '53.85%', 'Profit Factor': '1.49', 'Sharpe Ratio': '0.12', 'Max Drawdown': ''}



Running Episode 469/500

Episode 469 Metrics: {'Total Profit': '\$198.53', 'Win Rate': '72.31%', 'Profit Factor': '6.71', 'Sharpe Ratio': '0.46', 'Max Drawdown': ''}

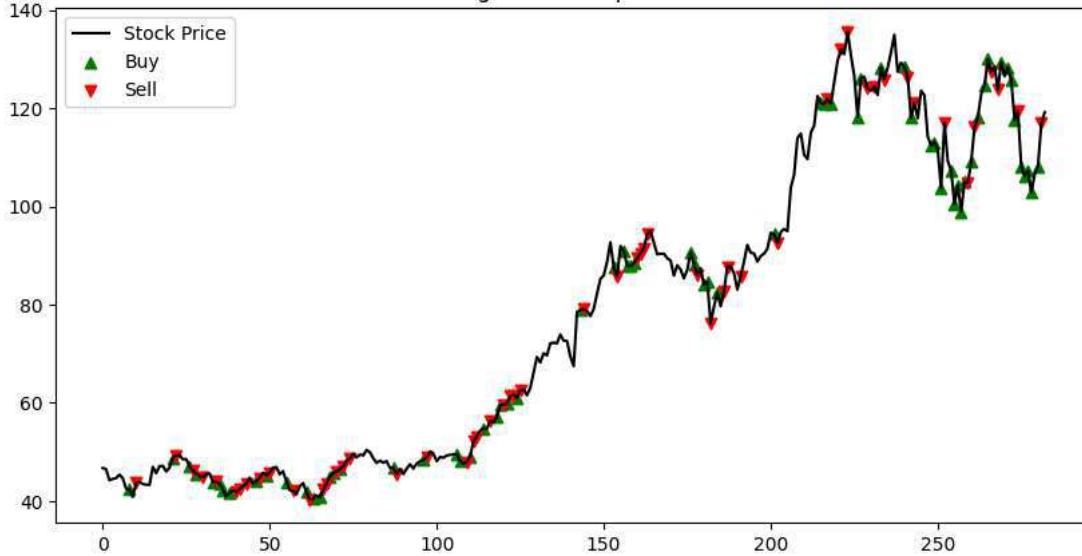




Running Episode 470/500

Episode 470 Metrics: {'Total Profit': '\$132.38', 'Win Rate': '68.52%', 'Profit Factor': '3.82', 'Sharpe Ratio': '0.39', 'Max Drawdown':

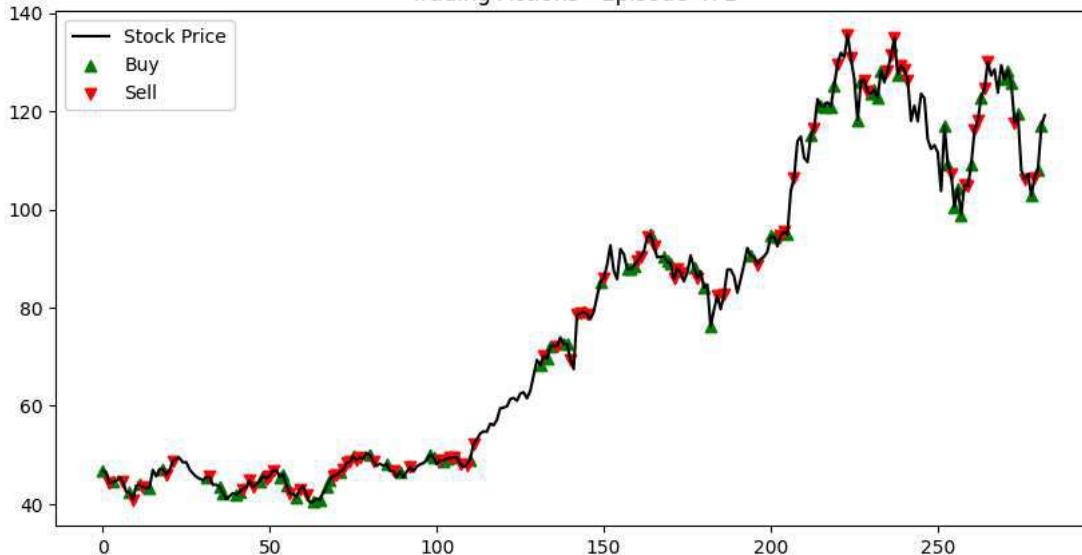
Trading Actions - Episode 470



Running Episode 471/500

Episode 471 Metrics: {'Total Profit': '\$114.30', 'Win Rate': '61.33%', 'Profit Factor': '2.10', 'Sharpe Ratio': '0.25', 'Max Drawdown':

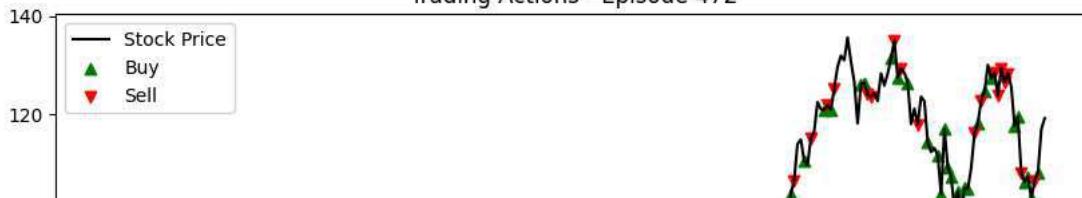
Trading Actions - Episode 471

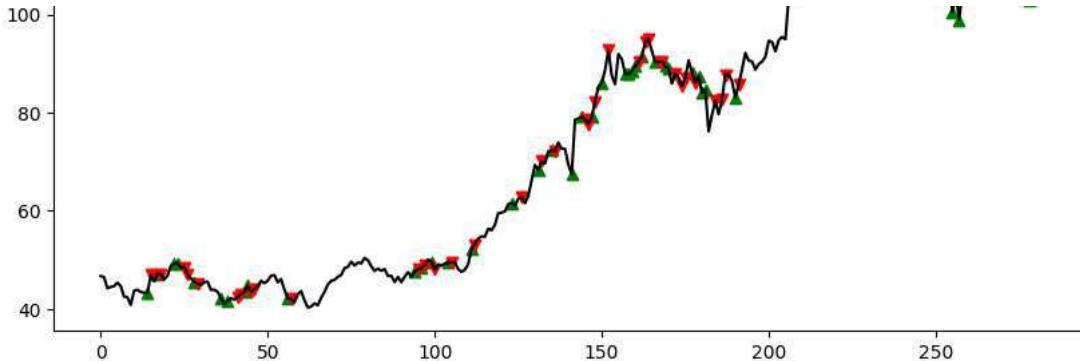


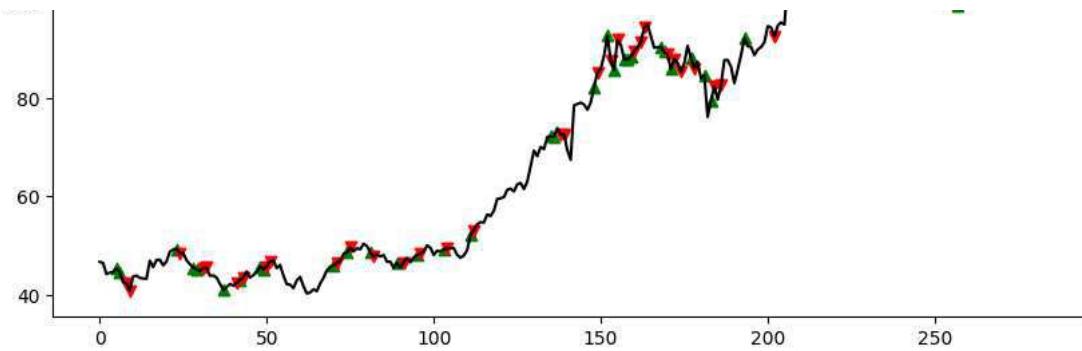
Running Episode 472/500

Episode 472 Metrics: {'Total Profit': '\$156.07', 'Win Rate': '66.04%', 'Profit Factor': '5.04', 'Sharpe Ratio': '0.43', 'Max Drawdown':

Trading Actions - Episode 472



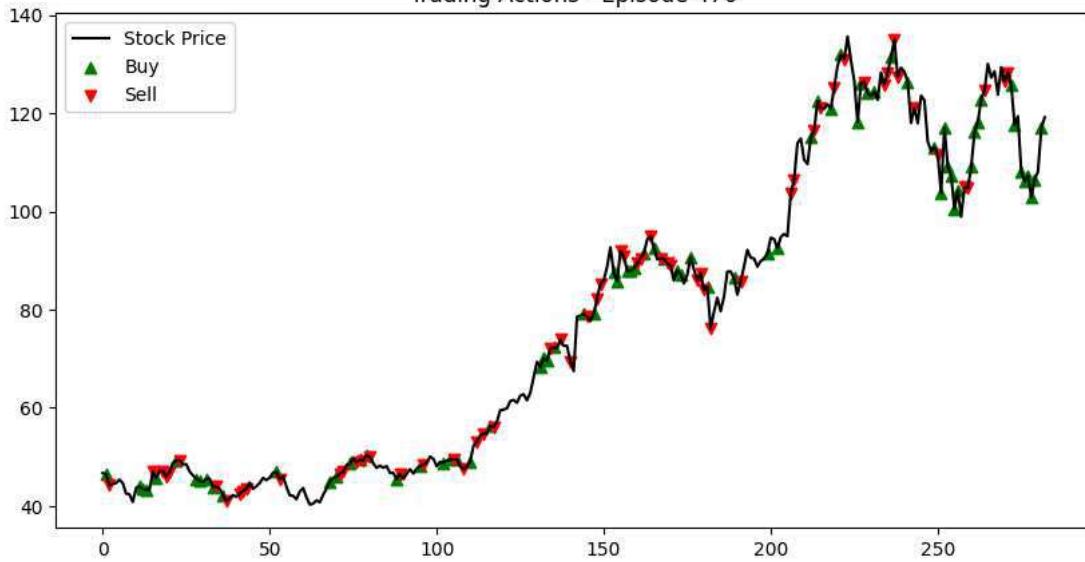




Running Episode 476/500

Episode 476 Metrics: {'Total Profit': '\$123.64', 'Win Rate': '59.02%', 'Profit Factor': '2.90', 'Sharpe Ratio': '0.32', 'Max Drawdown': ''}

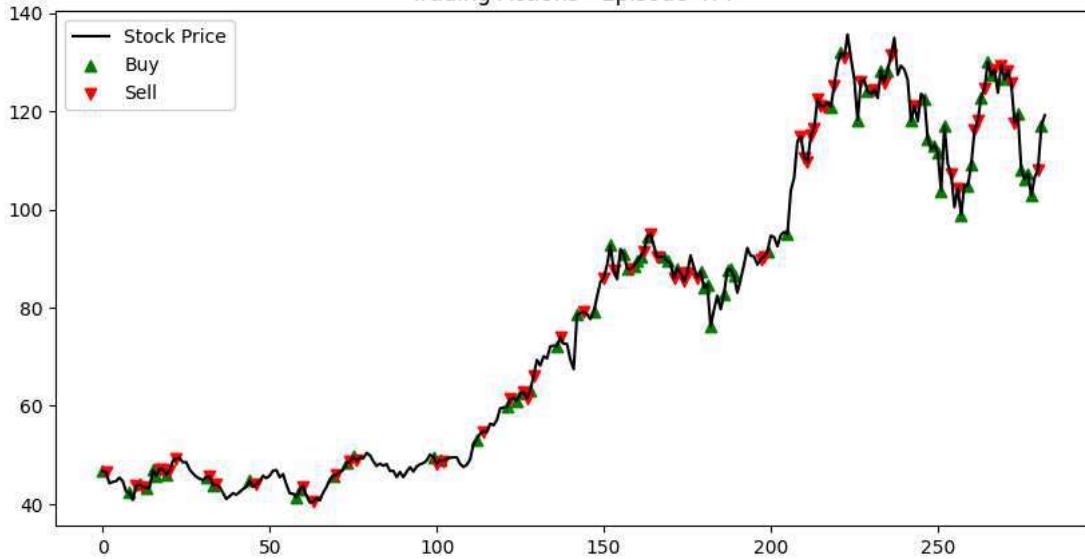
Trading Actions - Episode 476



Running Episode 477/500

Episode 477 Metrics: {'Total Profit': '\$327.66', 'Win Rate': '66.67%', 'Profit Factor': '4.55', 'Sharpe Ratio': '0.43', 'Max Drawdown': ''}

Trading Actions - Episode 477

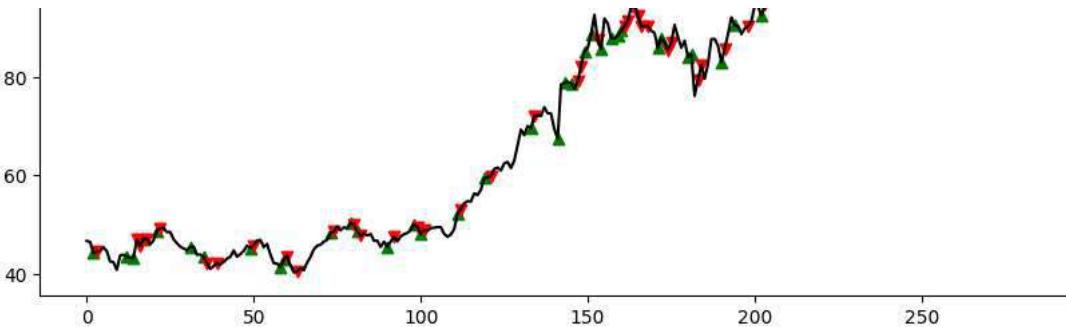


Running Episode 478/500

Episode 478 Metrics: {'Total Profit': '\$102.75', 'Win Rate': '64.71%', 'Profit Factor': '2.35', 'Sharpe Ratio': '0.26', 'Max Drawdown': ''}

Trading Actions - Episode 478

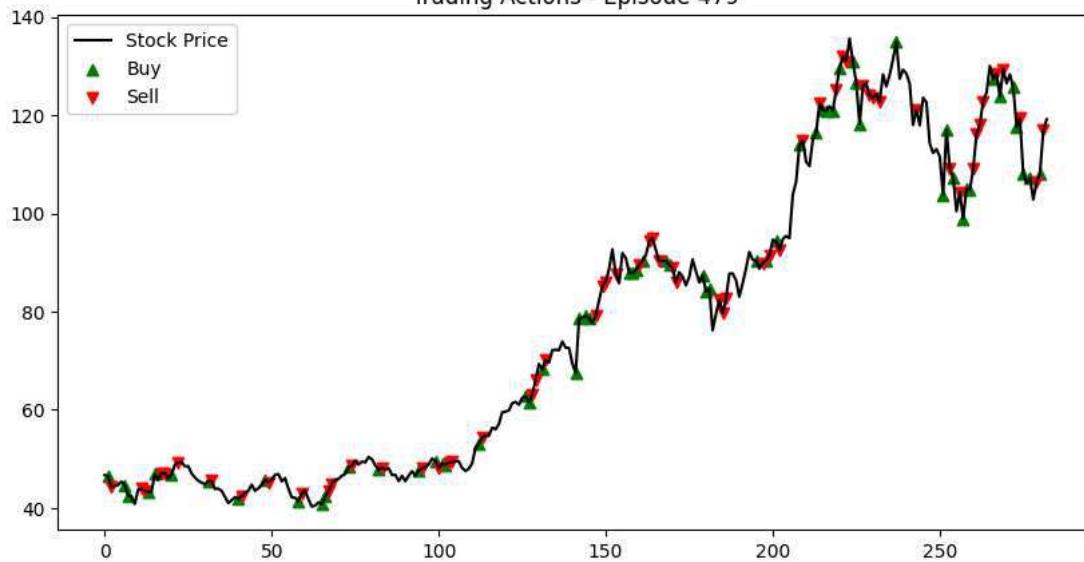




Running Episode 479/500

Episode 479 Metrics: {'Total Profit': '\$101.57', 'Win Rate': '67.80%', 'Profit Factor': '2.25', 'Sharpe Ratio': '0.28', 'Max Drawdown': ''}

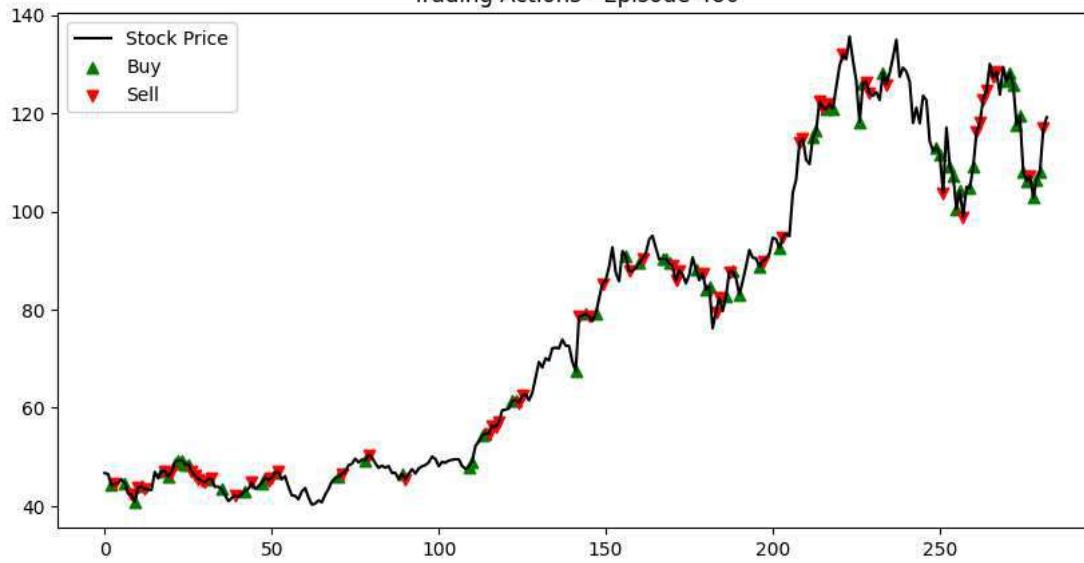
Trading Actions - Episode 479



Running Episode 480/500

Episode 480 Metrics: {'Total Profit': '\$150.05', 'Win Rate': '59.32%', 'Profit Factor': '2.56', 'Sharpe Ratio': '0.30', 'Max Drawdown': ''}

Trading Actions - Episode 480

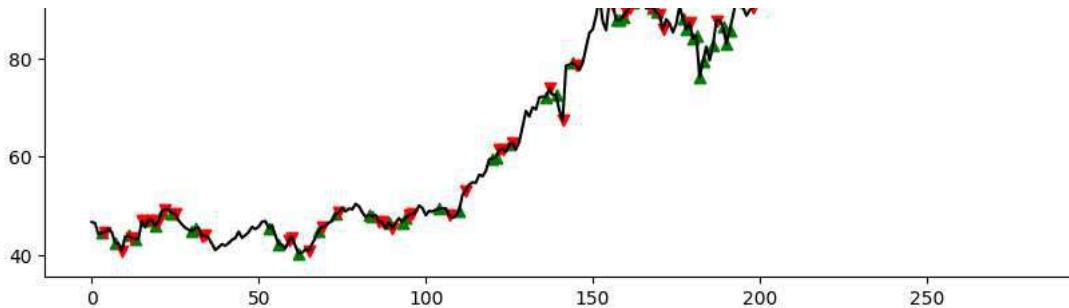


Running Episode 481/500

Episode 481 Metrics: {'Total Profit': '\$335.37', 'Win Rate': '68.75%', 'Profit Factor': '9.71', 'Sharpe Ratio': '0.54', 'Max Drawdown': ''}

Trading Actions - Episode 481

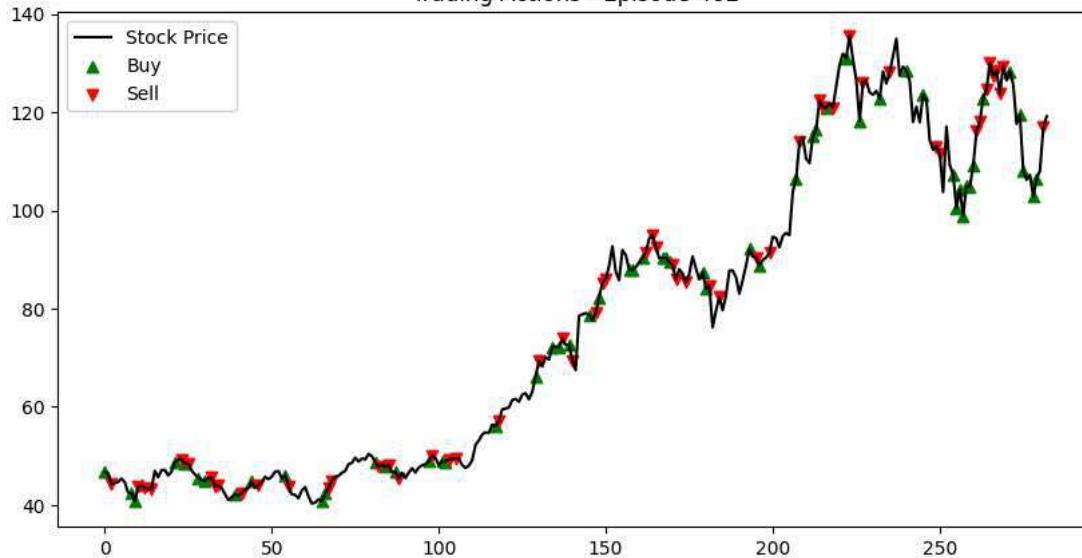




Running Episode 482/500

Episode 482 Metrics: {'Total Profit': '\$165.56', 'Win Rate': '67.27%', 'Profit Factor': '3.43', 'Sharpe Ratio': '0.37', 'Max Drawdown':

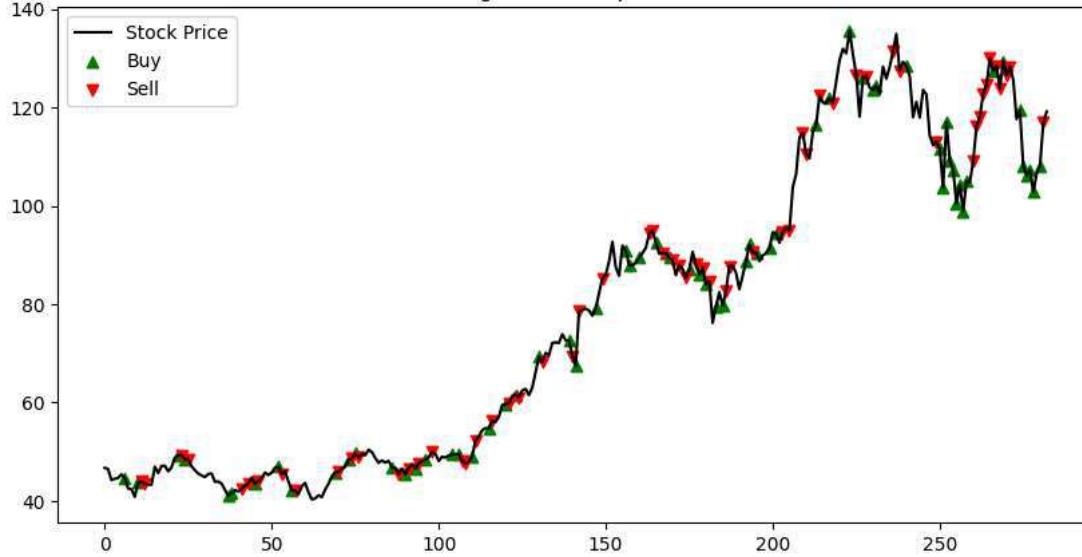
Trading Actions - Episode 482



Running Episode 483/500

Episode 483 Metrics: {'Total Profit': '\$204.76', 'Win Rate': '68.33%', 'Profit Factor': '4.25', 'Sharpe Ratio': '0.40', 'Max Drawdown':

Trading Actions - Episode 483

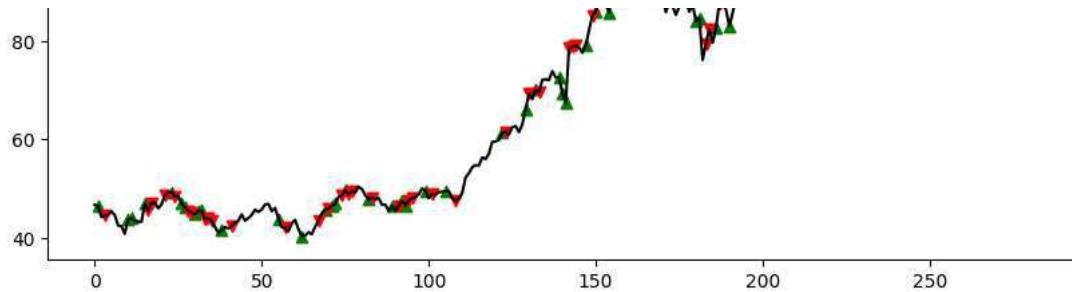


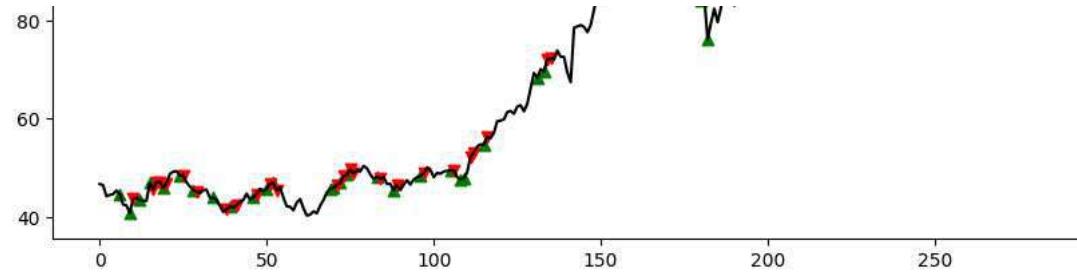
Running Episode 484/500

Episode 484 Metrics: {'Total Profit': '\$161.40', 'Win Rate': '62.07%', 'Profit Factor': '3.57', 'Sharpe Ratio': '0.39', 'Max Drawdown':

Trading Actions - Episode 484





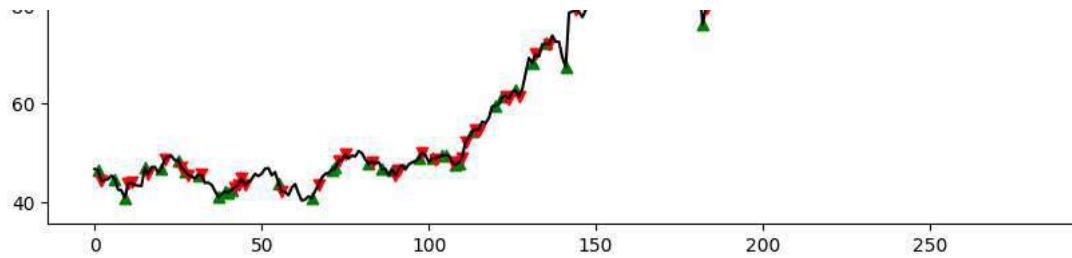


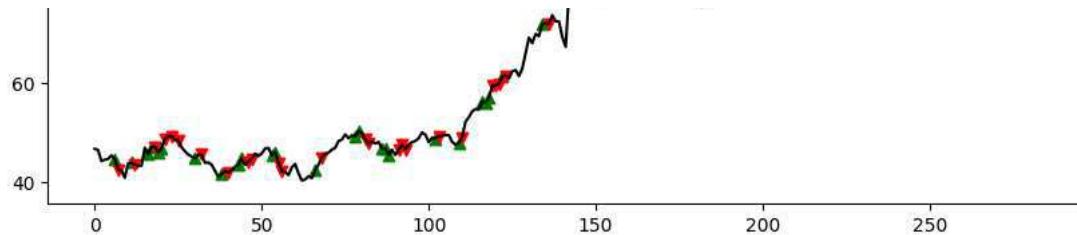
Running Episode 489/500
Episode 489 Metrics: {'Total Profit': '\$219.62', 'Win Rate': '73.08%', 'Profit Factor': '6.71', 'Sharpe Ratio': '0.55', 'Max Drawdown': ''}



Running Episode 490/500
Episode 490 Metrics: {'Total Profit': '\$78.99', 'Win Rate': '54.69%', 'Profit Factor': '1.70', 'Sharpe Ratio': '0.16', 'Max Drawdown': ''}



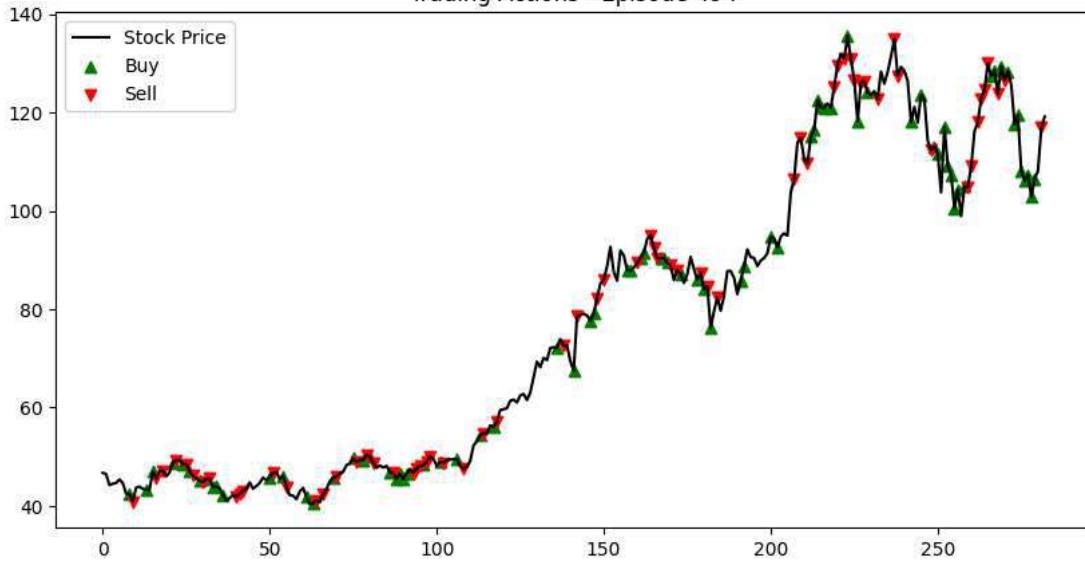




Running Episode 494/500

Episode 494 Metrics: {'Total Profit': '\$310.08', 'Win Rate': '64.62%', 'Profit Factor': '5.21', 'Sharpe Ratio': '0.43', 'Max Drawdown': ''}

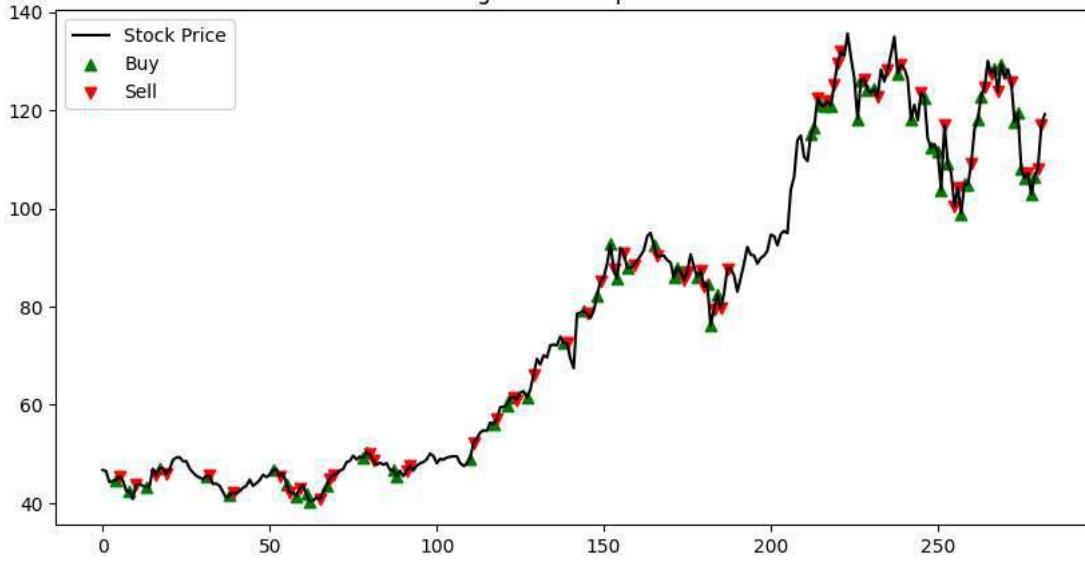
Trading Actions - Episode 494



Running Episode 495/500

Episode 495 Metrics: {'Total Profit': '\$104.65', 'Win Rate': '58.93%', 'Profit Factor': '2.29', 'Sharpe Ratio': '0.26', 'Max Drawdown': ''}

Trading Actions - Episode 495

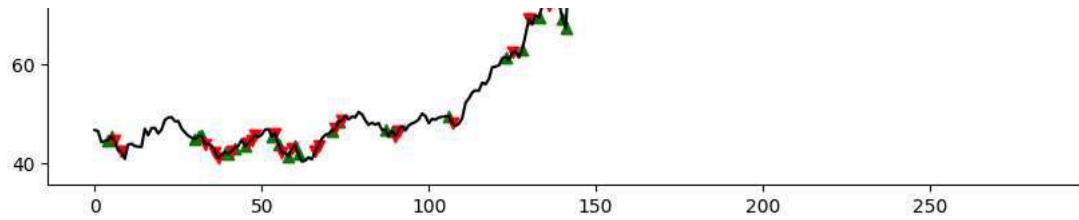


Running Episode 496/500

Episode 496 Metrics: {'Total Profit': '\$103.38', 'Win Rate': '57.69%', 'Profit Factor': '2.70', 'Sharpe Ratio': '0.31', 'Max Drawdown': ''}

Trading Actions - Episode 496

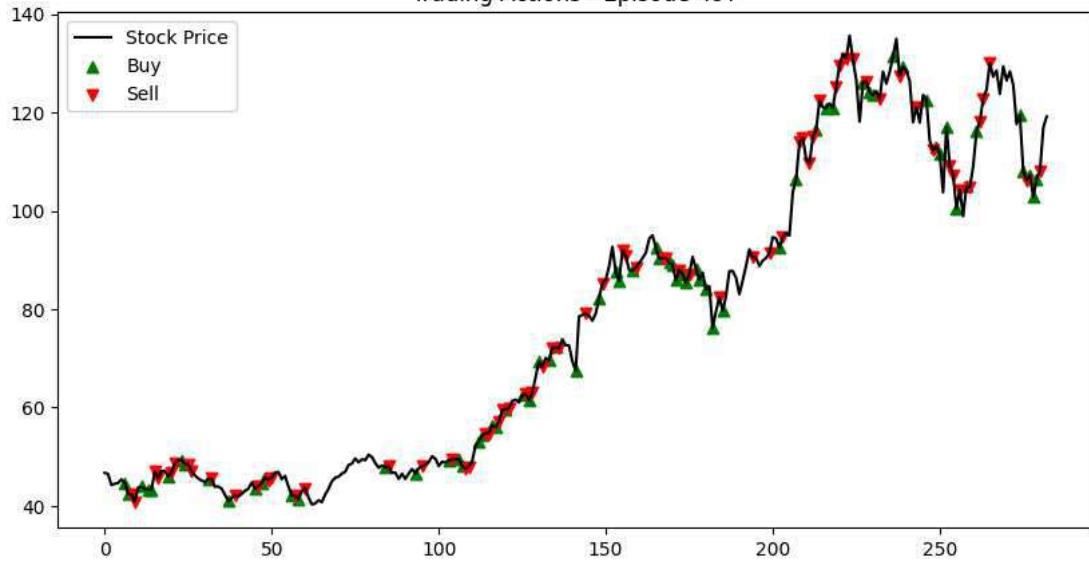




Running Episode 497/500

Episode 497 Metrics: {'Total Profit': '\$233.52', 'Win Rate': '68.18%', 'Profit Factor': '3.35', 'Sharpe Ratio': '0.34', 'Max Drawdown': ''}

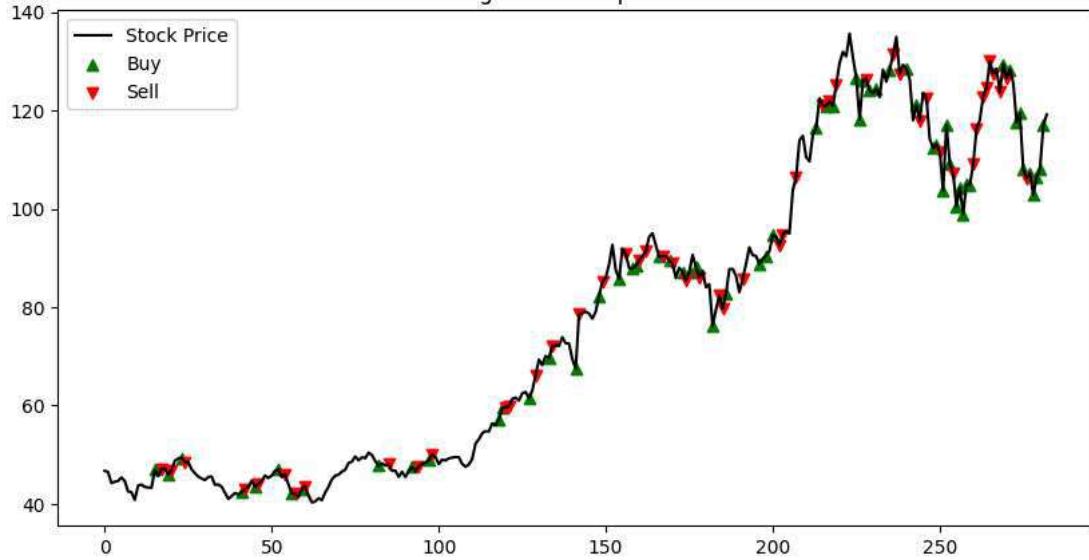
Trading Actions - Episode 497



Running Episode 498/500

Episode 498 Metrics: {'Total Profit': '\$138.97', 'Win Rate': '73.47%', 'Profit Factor': '3.02', 'Sharpe Ratio': '0.35', 'Max Drawdown': ''}

Trading Actions - Episode 498

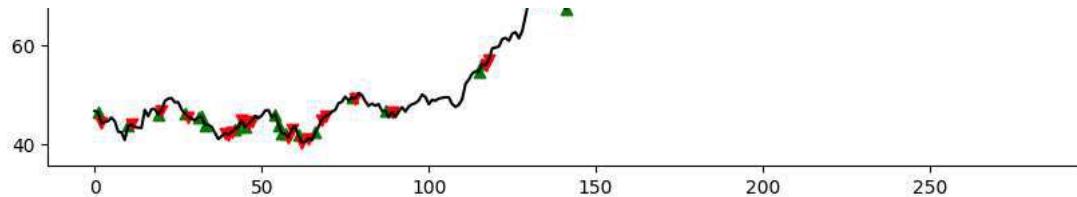


Running Episode 499/500

Episode 499 Metrics: {'Total Profit': '\$201.27', 'Win Rate': '57.89%', 'Profit Factor': '2.92', 'Sharpe Ratio': '0.32', 'Max Drawdown': ''}

Trading Actions - Episode 499

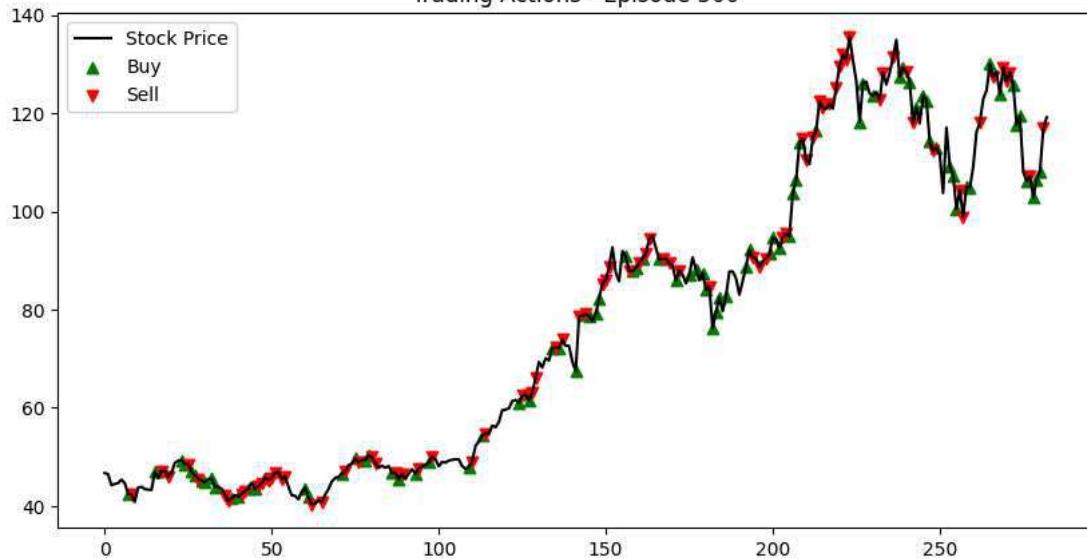




Running Episode 500/500

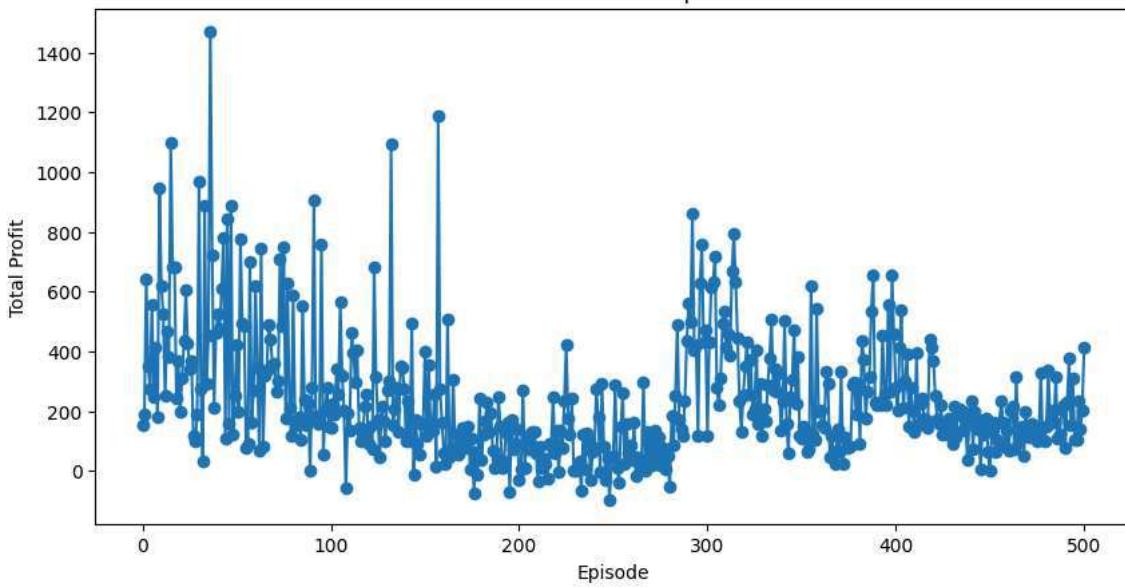
Episode 500 Metrics: {'Total Profit': '\$414.69', 'Win Rate': '70.13%', 'Profit Factor': '4.76', 'Sharpe Ratio': '0.46', 'Max Drawdown':

Trading Actions - Episode 500



WARNING:absl:You are saving your model as an HDF5 file via `model.save()` or `keras.saving.save_model(model)`. This file format is con

Profit Trend Across Episodes



```
test_agent = Agent(window_size, is_eval=True, model_name="best_model.h5")
test_state = getState(X_test, 0, window_size + 1)
test_total_profit = 0
test_agent.inventory = []
test_states_buy, test_states_sell = [], []
test_trade_log = []

for t in range(len(X_test) - 1):
    test_action = test_agent.act(test_state)
    print(f"Test Action: {test_action}")
    print(f"Test State: {test_state}")
    test_next_state = getState(X_test, t + 1, window_size + 1)
    test_reward = 0

    if test_action == 1:
        test_agent.inventory.append(X_test[t])
        test_states_buy.append(t)
    elif test_action == 2 and test_agent.inventory:
        bought_price = test_agent.inventory.pop(0)
        test_reward = X_test[t] - bought_price
        test_total_profit += test_reward
        test_trade_log.append(test_reward)
        test_states_sell.append(t)

    test_state = test_next_state

test_metrics = calculate_metrics(test_trade_log)
print(f"Test Metrics: {test_metrics}")
plot_trading_actions(X_test, test_states_buy, test_states_sell, "Test")
```

```
WARNING:absl:Compiled the loaded model, but the compiled metrics have yet to be built. `model.compile_metrics` will be empty until you
Model Loaded Successfully
Test Action: 2
Test State: [0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.08948006]
Test Action: 1
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.08948006 0.23325894]
Test Action: 0
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.5      0.5      0.5
 0.08948006 0.23325894 0.0979688 ]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.5      0.5      0.08948006
 0.23325894 0.0979688 0.98901306]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.5      0.08948006 0.23325894
 0.0979688 0.98901306 0.13354172]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.5      0.08948006 0.23325894 0.0979688
 0.98901306 0.13354172 0.56463629]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.5      0.08948006 0.23325894 0.0979688 0.98901306
 0.13354172 0.56463629 0.99014624]
Test Action: 0
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.5      0.08948006 0.23325894 0.0979688 0.98901306 0.13354172
 0.56463629 0.99014624 0.93339196]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.5
 0.08948006 0.23325894 0.0979688 0.98901306 0.13354172 0.56463629
 0.99014624 0.93339196 0.62948311]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.08948006
 0.23325894 0.0979688 0.98901306 0.13354172 0.56463629 0.99014624
 0.93339196 0.62948311 0.06660804]
Test Action: 2
Test State: [0.5      0.5      0.5      0.5      0.5      0.08948006 0.23325894
 0.0979688 0.98901306 0.13354172 0.56463629 0.99014624 0.93339196
 0.62948311 0.06660804 0.50999867]
Test Action: 2
Test State: [0.5      0.5      0.5      0.08948006 0.23325894 0.0979688
 0.98901306 0.13354172 0.56463629 0.99014624 0.93339196 0.62948311
 0.06660804 0.50999867 0.01165842]
Test Action: 2
Test State: [0.5      0.5      0.08948006 0.23325894 0.0979688 0.98901306
 0.13354172 0.56463629 0.99014624 0.93339196 0.62948311 0.06660804
 0.50999867 0.01165842 0.8641271 ]
Test Action: 1
Test State: [0.5      0.08948006 0.23325894 0.0979688 0.98901306 0.13354172
 0.56463629 0.99014624 0.93339196 0.62948311 0.06660804 0.50999867
 0.01165842 0.8641271 0.98201379]
Test Action: 2
Test State: [0.08948006 0.23325894 0.0979688 0.98901306 0.13354172 0.56463629
 0.99014624 0.93339196 0.62948311 0.06660804 0.50999867 0.01165842
 0.8641271 0.98201379 0.88795296]
Test Action: 2
Test State: [0.23325894 0.0979688 0.98901306 0.13354172 0.56463629 0.99014624
 0.93339196 0.62948311 0.06660804 0.50999867 0.01165842 0.8641271
 0.98201379 0.88795296 0.94267582]
Test Action: 2
Test State: [0.0979688 0.98901306 0.13354172 0.56463629 0.99014624 0.93339196
 0.62948311 0.06660804 0.50999867 0.01165842 0.8641271 0.98201379
 0.88795296 0.94267582 0.99434756]
Test Action: 2
Test State: [0.98901306 0.13354172 0.56463629 0.99014624 0.93339196 0.62948311
 0.06660804 0.50999867 0.01165842 0.8641271 0.98201379 0.88795296
 0.94267582 0.99434756 0.44028635]
Test Action: 2
Test State: [0.13354172 0.56463629 0.99014624 0.93339196 0.62948311 0.06660804
 0.50999867 0.01165842 0.8641271 0.98201379 0.88795296 0.94267582
 0.99434756 0.44028635 0.89659955]
Test Action: 2
Test State: [0.56463629 0.99014624 0.93339196 0.62948311 0.06660804 0.50999867
 0.01165842 0.8641271 0.98201379 0.88795296 0.94267582 0.99434756
 0.44028635 0.89659955 0.49750002]
```

```
Test Action: 2
Test State: [0.99014624 0.93339196 0.62948311 0.06660804 0.50999867 0.01165842
0.8641271 0.98201379 0.88795296 0.94267582 0.99434756 0.44028635
0.89659955 0.49750002 0.96338517]
Test Action: 2
Test State: [0.93339196 0.62948311 0.06660804 0.50999867 0.01165842 0.8641271
0.98201379 0.88795296 0.94267582 0.99434756 0.44028635 0.89659955
0.49750002 0.96338517 0.00154683]
Test Action: 2
Test State: [0.62948311 0.06660804 0.50999867 0.01165842 0.8641271 0.98201379
0.88795296 0.94267582 0.99434756 0.44028635 0.89659955 0.49750002
0.96338517 0.00154683 0.98401515]
Test Action: 1
Test State: [0.06660804 0.50999867 0.01165842 0.8641271 0.98201379 0.88795296
0.94267582 0.99434756 0.44028635 0.89659955 0.49750002 0.96338517
0.00154683 0.98401515 0.77029895]
Test Action: 2
Test State: [0.50999867 0.01165842 0.8641271 0.98201379 0.88795296 0.94267582
0.99434756 0.44028635 0.89659955 0.49750002 0.96338517 0.00154683
0.98401515 0.77029895 0.74459692]
Test Action: 2
Test State: [0.01165842 0.8641271 0.98201379 0.88795296 0.94267582 0.99434756
0.44028635 0.89659955 0.49750002 0.96338517 0.00154683 0.98401515
0.77029895 0.74459692 0.99669827]
Test Action: 2
Test State: [0.8641271 0.98201379 0.88795296 0.94267582 0.99434756 0.44028635
0.89659955 0.49750002 0.96338517 0.00154683 0.98401515 0.77029895
0.74459692 0.99669827 0.47003595]
Test Action: 2
Test State: [0.98201379 0.88795296 0.94267582 0.99434756 0.44028635 0.89659955
0.49750002 0.96338517 0.00154683 0.98401515 0.77029895 0.74459692
0.99669827 0.47003595 0.01746392]
Test Action: 2
Test State: [0.88795296 0.94267582 0.99434756 0.44028635 0.89659955 0.49750002
0.96338517 0.00154683 0.98401515 0.77029895 0.74459692 0.99669827
0.47003595 0.01746392 0.70056714]
Test Action: 2
Test State: [0.94267582 0.99434756 0.44028635 0.89659955 0.49750002 0.96338517
0.00154683 0.98401515 0.77029895 0.74459692 0.99669827
0.01746392 0.70056714 0.7558389 ]
Test Action: 2
Test State: [0.99434756 0.44028635 0.89659955 0.49750002 0.96338517 0.00154683
0.98401515 0.77029895 0.74459692 0.99669827 0.47003595 0.01746392
0.70056714 0.7558389 0.2650274 ]
Test Action: 1
Test State: [0.44028635 0.89659955 0.49750002 0.96338517 0.00154683 0.98401515
0.77029895 0.74459692 0.99669827 0.47003595 0.01746392 0.70056714
0.7558389 0.2650274 0.67480527]
Test Action: 1
Test State: [0.89659955 0.49750002 0.96338517 0.00154683 0.98401515 0.77029895
0.74459692 0.99669827 0.47003595 0.01746392 0.70056714 0.7558389
0.2650274 0.67480527 0.12842017]
Test Action: 1
Test State: [0.49750002 0.96338517 0.00154683 0.98401515 0.77029895 0.74459692
0.99669827 0.47003595 0.01746392 0.70056714 0.7558389
0.67480527 0.12842017 0.00139286]
Test Action: 2
Test State: [0.96338517 0.00154683 0.98401515 0.77029895 0.74459692 0.99669827
0.47003595 0.01746392 0.70056714 0.7558389 0.2650274 0.67480527
0.12842017 0.00139286 0.93339196]
Test Action: 1
Test State: [0.00154683 0.98401515 0.77029895 0.74459692 0.99669827 0.47003595
0.01746392 0.70056714 0.7558389 0.2650274 0.67480527 0.12842017
0.00139286 0.93339196 0.65701046]
Test Action: 2
Test State: [0.98401515 0.77029895 0.74459692 0.99669827 0.47003595 0.01746392
0.70056714 0.7558389 0.2650274 0.67480527 0.12842017 0.00139286
0.93339196 0.65701046 0.9793667 ]
Test Action: 2
Test State: [0.77029895 0.74459692 0.99669827 0.47003595 0.01746392 0.70056714
0.7558389 0.2650274 0.67480527 0.12842017 0.00139286 0.93339196
0.65701046 0.9793667 0.99666519]
Test Action: 2
Test State: [0.74459692 0.99669827 0.47003595 0.01746392 0.70056714 0.7558389
0.2650274 0.67480527 0.12842017 0.00139286 0.93339196 0.65701046
0.99666519 0.96338517 0.22270014]
Test Action: 2
Test State: [0.47003595 0.01746392 0.70056714 0.7558389 0.2650274 0.67480527
0.12842017 0.00139286 0.93339196 0.65701046 0.9793667
0.96338517 0.22270014 0.08548914]
Test Action: 2
```

```
Test State: [0.01746392 0.70056714 0.7558389 0.2650274 0.67480527 0.12842017  
0.00139286 0.93339196 0.65701046 0.9793667 0.99666519 0.96338517  
0.22270014 0.08548914 0.95391117]  
Test Action: 0  
Test State: [0.70056714 0.7558389 0.2650274 0.67480527 0.12842017 0.00139286  
0.93339196 0.65701046 0.9793667 0.99666519 0.96338517 0.22270014  
0.08548914 0.95391117 0.11711899]  
Test Action: 2  
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