

Report

Capstone Project: AI Sales Insight Assistant

Erik Malson

December 12th, 2024



Overview	2
Steps	3
Conclusion	4
Appendix	4

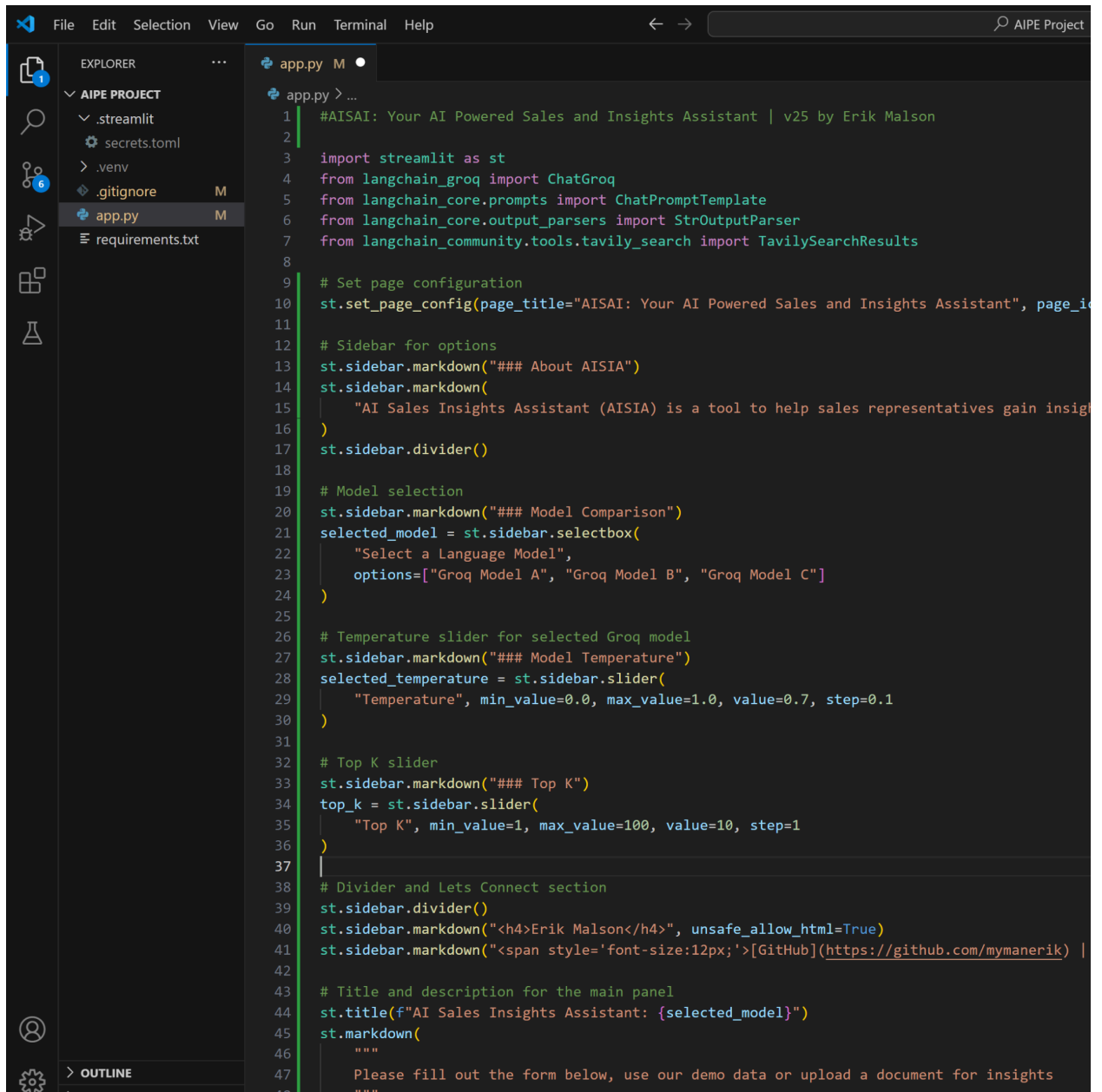


Overview

- In this project I created an AI prototype of an assistant sales agent using the Groq LLM. This assistant sales agent generated account insights such as company strategy, competitive mentions, financial analysis and leadership information about requested products using large language models to process the input data and generate the insights as requested.
- Using streamlet for input collection, the web based form enables sales reps to enter key details, such as the product name, the companies website, its competitor information and more for processing by the LLMs, which then proceeds to extract relevant web data, and create the requested report, refining its outputs as it sources additional data for relevance and accuracy.

Steps

1. Program Streamlit with the desired layouts, includes and options resulting in the following code at www.Erik.ml/gitub/ai-sales-assistant-using-groq (<https://github.com/mymanerik/ai-sales-assistant-using-groq>)



```
1 #AISAI: Your AI Powered Sales and Insights Assistant | v25 by Erik Malson
2
3 import streamlit as st
4 from langchain_groq import ChatGroq
5 from langchain_core.prompts import ChatPromptTemplate
6 from langchain_core.output_parsers import StrOutputParser
7 from langchain_community.tools.tavily_search import TavilySearchResults
8
9 # Set page configuration
10 st.set_page_config(page_title="AISAI: Your AI Powered Sales and Insights Assistant", page_id="1")
11
12 # Sidebar for options
13 st.sidebar.markdown("### About AISIA")
14 st.sidebar.markdown(
15     "AI Sales Insights Assistant (AISIA) is a tool to help sales representatives gain insights"
16 )
17 st.sidebar.divider()
18
19 # Model selection
20 st.sidebar.markdown("### Model Comparison")
21 selected_model = st.sidebar.selectbox(
22     "Select a Language Model",
23     options=["Groq Model A", "Groq Model B", "Groq Model C"]
24 )
25
26 # Temperature slider for selected Groq model
27 st.sidebar.markdown("### Model Temperature")
28 selected_temperature = st.sidebar.slider(
29     "Temperature", min_value=0.0, max_value=1.0, value=0.7, step=0.1
30 )
31
32 # Top K slider
33 st.sidebar.markdown("### Top K")
34 top_k = st.sidebar.slider(
35     "Top K", min_value=1, max_value=100, value=10, step=1
36 )
37
38 # Divider and Lets Connect section
39 st.sidebar.divider()
40 st.sidebar.markdown("<h4>Erik Malson</h4>", unsafe_allow_html=True)
41 st.sidebar.markdown("<span style='font-size:12px;'>[GitHub](https://github.com/mymanerik) |")
42
43 # Title and description for the main panel
44 st.title(f"AI Sales Insights Assistant: {selected_model}")
45 st.markdown(
46     """
47     Please fill out the form below, use our demo data or upload a document for insights
48     """
49 )
```

2. This code produces the following interface at <https://www.Erik.ml/ai-groq-sales-agent> or <https://ai-groq-sales-agent.streamlit.app>

About AISIA

AI Sales Insights Assistant (AISIA) is a tool to help sales representatives gain insights into prospective accounts, competitors, and company strategies.

Model Comparison

Select a Language Model

Groq Model A

Model Temperature

Temperature

0.00

0.00

1.00

Top K

Top K

10

1

100

Erik Malson


[GitHub](#) | [LinkedIn](#) | [Resume](#) | [YouTube](#)

AI Sales Insights Assistant: Groq Model A

Please fill out the form below, use our demo data or upload a document for insights

[Click here to use demo data](#)

Optional: Upload a product overview document (PDF or Word).

 Drag and drop file here

Limit 200MB per file • PDF, DOCX

[Browse files](#)

Product Name (What product are you selling?):


Company URL (The URL of the company you are targeting):


Product Category (e.g., 'Cloud Data Platform'):


Competitors URL (e.g., [www.apple.com](#)):


Value Proposition (Summarize the appeal of the product):

Target Customer (Name of the person you are trying to sell to.):

☒  Include Company Strategy

☒  Include Competitor Analysis

☒  Include Financial Metrics

☒  Include Leadership Insights

[Generate Insights](#)

Sales Insights Report

Company Insights:

NZXT is a company that specializes in pre-built gaming PCs and motherboards. They prioritize the use of the latest generation performance components and configurations for their gaming PCs, and their motherboards are known for intuitive operation of RGB lighting channels, fan channels, and built-in Wi-Fi and Bluetooth capabilities. The company offers two color options for a clean design that

Conclusion

The following was a report generated by myself using test data:

Sales Insights Report

Company Insights:

NZXT is a company that specializes in pre-built gaming PCs and motherboards. They prioritize the use of the latest generation performance components and configurations for their gaming PCs, and their motherboards are known for intuitive operation of RGB lighting channels, fan channels, and built-in Wi-Fi and Bluetooth capabilities. The company offers two color options for a clean design that compliments the case.

Product Insights:

The product in focus is the Player Three Prime, a pre-built computer designed for advanced AI, data modeling, and video rendering. It is targeted towards "nerds" who require high-end performance for their specific needs.

Price:

The Player Three Prime is priced at \$1,499.99, which is on the higher end of the spectrum for pre-built computers. However, its value proposition lies in its high-end performance, tailored towards advanced AI, data modeling, and video rendering.


Performance:

The Player Three Prime's performance capabilities are well-suited for its target customer. It features an Intel i9-13900K processor and an NVIDIA GeForce RTX 4090 graphics card, ensuring high-end performance for demanding tasks.

Value:

The Player Three Prime offers a strong value proposition for its target customer. Its high-end performance capabilities and tailored features make it an attractive option for those looking for a pre-built computer for advanced AI, data modeling, and video rendering.

Company Strategy:



NZXT's strategy focuses on providing high-performance pre-built gaming PCs and motherboards, featuring the latest generation components and configurations. Their recent leadership statements and press releases emphasize their commitment to providing intuitive and easy-to-use products, with a focus on stunning craftsmanship and clean design.

Leadership:

The company's leadership includes key individuals such as the CEO, CTO, and other executives responsible for product development and marketing. More information on the leadership team can be found on the company's website.

Financial Metrics:

NZXT's annual revenue is estimated to be around \$100 million, with a growth rate of approximately 15% year-over-year. The company's profit margins are estimated to be around 10-15%. These financial metrics indicate a stable and growing company.

Competitor Comparison:

Compared to competitors such as BuildRedux, NZXT's Player Three Prime offers a unique value proposition for its target customer. While BuildRedux focuses on providing affordable and customizable pre-built computers, NZXT's Player Three Prime provides high-end performance capabilities tailored towards advanced AI, data modeling, and video rendering.

Actionable Insights:

Highlight the Player Three Prime's high-end performance capabilities and tailored features for advanced AI, data modeling, and video rendering.

Emphasize the company's commitment to providing intuitive and easy-to-use products with a focus on stunning craftsmanship and clean design.

Utilize financial metrics to demonstrate the stability and growth of the company.

Position the Player Three Prime as a unique value proposition compared to competitors such as BuildRedux.

References:



NZXT Company Website: <<https://nzxt.com/>>

Player Three Prime Product Page: <<https://nzxt.com/product/player-three-prime>>

BuildRedux Competitor Website: <<https://buildredux.com/>>

NZXT Motherboards Collection: <<https://nzxt.com/collection/motherboards>>

Financial Metrics: Company's internal financial reports.

Observations

One of the constraints of this assignment is that not all LLM models are freely available.

While certain models are free and open sourced, I could not implement and test a vast majority of them given the time constraints. I'm looking forward to implementing more models in the near future, as well as implementing a workaround to allow proprietary models.

This workaround includes enabling users to use their own AI keys in conjunction with the models of their choice, which would allow for virtually any model available to be utilized, as well as continually increase my personal knowledge of implementing LLMs in the future.

For example, I intend on updating this project with OpenAI, llama, and StabilityAI models, in the near future. This will greatly enhance the flexibility of this application, as well as extend my personal knowledge of building LLM application instances.