Intelligent Company Researcher

About

This is the AI Agent powered by LLM model to research on the company on the different parameters such as About the company, Key place holders, recent news, location, website and business area.

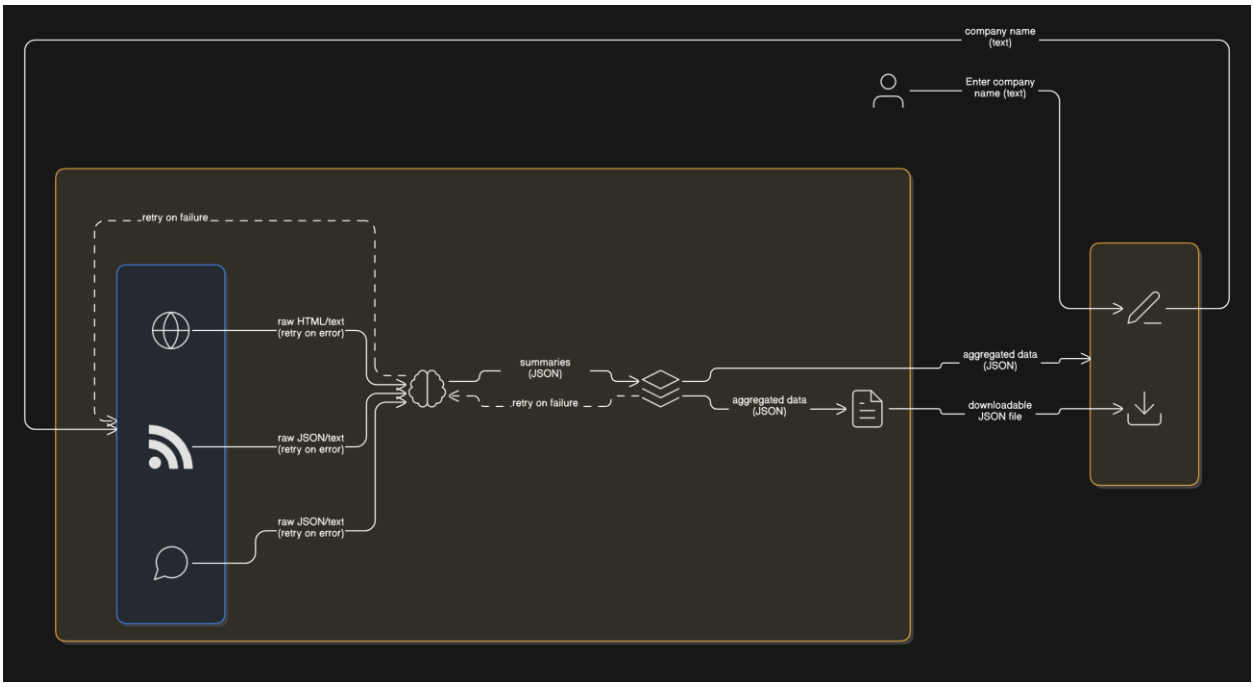
Architecture Overview

User Input → Company Research Agent

Company Research Agent:

Module	Function	Output
_get_wikipedia_summary()	Pulls basic summary about the company	Text from Wikipedia
_find_official_website()	Uses DuckDuckGo Instant API to resolve company URL	Official website
_generate_compact_summary()	Uses local LLM (via ollama) to summarize data into 1 paragraph	Natural language summary
_extract_additional_info()	Uses LLM to infer key people, products, and presence	Multiple fact snippets
_get_news_headlines()	Uses Google News RSS feed	List of recent headlines

Architecture Diagram



Technology Used

Component	Tool/Technology	Notes
LLM Summarization	Ollama using local models (gemma:2b)	Local lightweight LLM for generating concise company summaries
Search & Info APIs	DuckDuckGo API, Wikipedia REST API	For official site lookup and background company information
News	Google News RSS via feedparser	Used to fetch the latest headlines related to the company
Text Parsing	BeautifulSoup	Included for potential future web scraping needs
HTTP Requests	requests	Manages all API and website communication
Output Format	json module	Stores structured report as downloadable JSON

User Interface	CLI / Streamlit	CLI for local use, Streamlit for interactive web-based input & output

About the LLM Model Used

- Ollama gemma:2b
- Ollama phi

- The **ollama gemma:2b** model is used in this system to generate a compact, well-structured summary of the company in a single paragraph. It is a lightweight language model optimized for coherent and fluent natural language generation, making it ideal for summarization tasks where brevity and clarity are essential. Its smaller size ensures faster response times without significantly compromising the quality of text generation, which is particularly useful when generating a general overview of a company that includes its industry, origin, and global presence.

- The **ollama phi model** is integrated into the system to extract specific pieces of information such as key people, products and services, and company headquarters from longer textual data. It is well-suited for instruction-following tasks, where precise and focused responses are required. This model is particularly effective at breaking down unstructured information into clean, actionable outputs, ensuring that targeted company insights are delivered accurately and efficiently. Its ability to follow extraction instructions makes it a strong component for detail-oriented intelligence gathering.

Ollama Installation

```
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ curl -fsSL https://ollama.ai/install.sh | sh
>>> Installing ollama to /usr/local
[sudo] password for ankitlinux:
>>> Downloading Linux amd64 bundle
######################################################################## 100.0%
>>> Creating ollama user...
>>> Adding ollama user to render group...
>>> Adding ollama user to video group...
>>> Adding current user to ollama group...
>>> Creating ollama systemd service...
WARNING: systemd is not running
WARNING: see https://learn.microsoft.com/en-us/windows/wsl/systemd#how-to-enable-systemd to enable it
>>> The Ollama API is now available at 127.0.0.1:11434.
>>> Install complete. Run "ollama" from the command line.
>>> The Ollama API is now available at 127.0.0.1:11434.
>>> Install complete. Run "ollama" from the command line.
```

```
Use "ollama [command] --help" for more information about a command.
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama version
Error: unknown command "version" for "ollama"
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama pull mistral
Error: ollama server not responding - could not connect to ollama server, run 'ollama serve' to start it
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama serve
Couldn't find '/home/ankitlinux/.ollama/id_ed25519'. Generating new private key.
Your new public key is:

ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIJBUOGxWR5HH/wIbHiOD1MlkcWJ9txASG61QCN7RzbAg
```

```
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama
Usage:
  ollama [flags]
  ollama [command]

Available Commands:
  serve       Start ollama
  create      Create a model from a Modelfile
  show        Show information for a model
  run         Run a model
  stop        Stop a running model
  pull        Pull a model from a registry
  push        Push a model to a registry
  list        List models
  ps          List running models
  cp          Copy a model
  rm          Remove a model
  help        Help about any command

Flags:
  -h, --help      help for ollama
  -v, --version   Show version information

Use "ollama [command] --help" for more information about a command.
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama version
Error: unknown command "version" for "ollama"
ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama pull mistral
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ankitlinux@DESKTOP-K1I1BJH:/mnt/c$ ollama serve
Couldn't find '/home/ankitlinux/.ollama/id_ed25519'. Generating new private key.
```
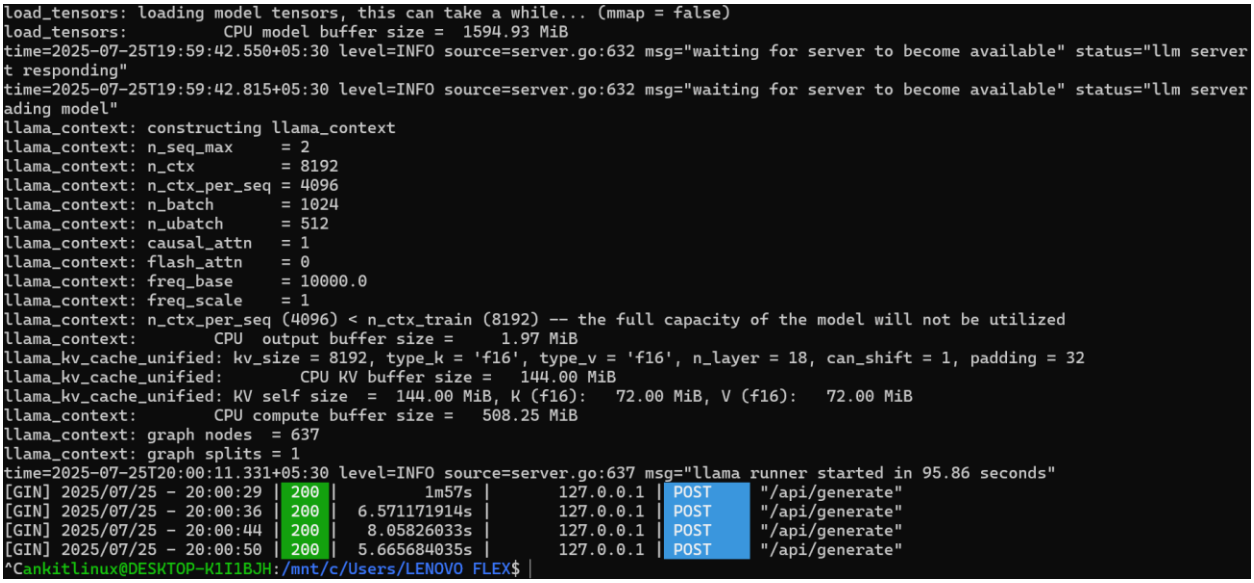

Sample JSON Output:

{
  "company_name": "google",
  "website": "https://www.google.com",
  "summary": "Sure, here's a summary of Google in 3 sentences:\n\nGoogle is an American multinational corporation and technology company that focuses on online advertising, search engine technology, cloud computing, computer software, and artificial intelligence. It is one of the world's most valuable brands and has been referred to as \"the most powerful company in the world\" by the BBC.",
  "key_people": "Sure, here is the list of key people of Google:\n\n* Larry Page\n* Sergey Brin",
  "products_services": "Sure, here's a summary of the main products and services offered by Google:\n\n- Online advertising\n- Search engine technology\n- Cloud computing\n- Computer software\n- Quantum computing\n- E-commerce\n- Consumer electronics\n- Artificial intelligence (AI)",
  "locations": "The context does not provide any information about the global presence or headquarters locations of Google, so I cannot answer this question from the provided context.",

  "recent_news": [
    "Try on styles with AI, jump on great prices and more - The Keyword",
    "Is AI Killing Google Search? It Might Be Doing the Opposite - WSJ - The Wall Street Journal",
    "Meta Clashes With Apple, Google Over Child Age Check Legislation - Bloomberg"
  ]
}

Ollama Server Response:



Demo Videos:

Streamlit:

https://drive.google.com/file/d/1oy1NyIS5zRX_dwBxSIpntZWF6jtma4OP/view?usp=sharing

CLI:

https://drive.google.com/file/d/1m91GkIz7j47cT_a48n7AJxV3FgwH89AS/view?usp=sharing