

Generative AI **vs** AI Agents **vs** Agentic AI

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Traditional AI

Systems which have the capability to learn from data and make decisions or **predictions based on that data.**

Pre-programmed algorithms and rules

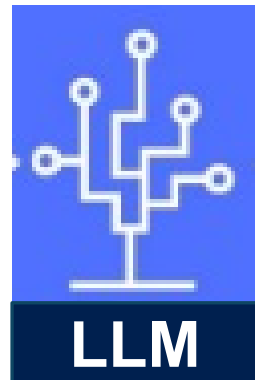
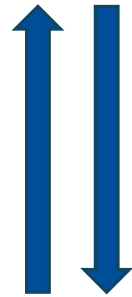
Designed with a specific set of tasks to target

Focused on analyzing sets of data and making predictions based on analysis

Limited learning capabilities (dependent on data sets input by a human creator)

Generative AI

Generative AI is a type of artificial intelligence that can create new content and ideas, such as **text**, **images**, **videos**, **audio**, and even **computer code**.



Generative AI with LLM

Write a poem about a night with full moon and stars with clear sky.

Whispers Beneath the Moonlight

Beneath a sky so vast and deep,
Where silence rocks the world to sleep,
A silver moon in fullness glows,
Its quiet magic softly flows.

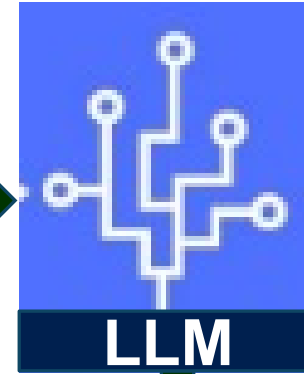
Generate an image of kuala playing piano

LLM-Answers questions
based upon large data it is
trained on.



LLM/GPT model - limitations

Please book me a lowest price return ticket for from toronto to new york departing on August 20 returning on August 25. Also book hotel for 5 days stays. Please send itineraries to my email.



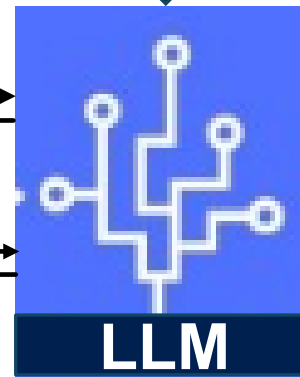
I can't directly book your flights or hotels or email itineraries—but I can help you find the best options and guide you through the booking process. Here's what I found for your requested dates:

✈ Flights: Toronto → New York (Aug 20–25)

- Expedia/Kayak/Orbitz show round-trip fares around **\$136–\$144 USD**, with cheapest airlines like Flair Airlines and Porter offering tickets from **~\$136–\$144** kayak.com +3.
- **Google Flights** notes lowest one-way fares are about **\$87–\$96**, with round-trip deals from Flair at approximately **\$118–\$141**.
- **Cheapest days** to fly are **Thursdays**, and August is among the more expensive months, but booking now (~6 weeks ahead) aligns with the optimal window kayak.com.

AI Agent

Please book me a lowest price return ticket for from toronto to new york departing on August 20 returning on August 25. Also book hotel for 5 days stays. Please send itineraries to my email.



Knowledge & Storage

Search, Database, File storage ..etc

1. Search cheapest flight
2. Book flight
3. Send itinerary in email

Agent Performs Actions

AI Agent

An AI agent refers to a system or program that is capable of autonomously performing tasks on behalf of a user or another system by designing its workflow and utilizing available tools

Benefits:

- Agent performs complex tasks.
- Agent plans task based upon user input.

Agentic AI

Flight Booking AI Agent



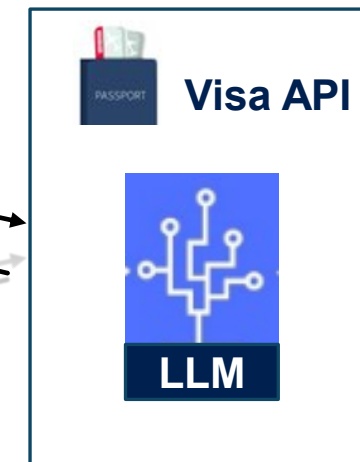
1. Search cheapest flight
2. Book flight
3. Send itinerary in email

Passport Processing AI Agent



1. Checks passport validity
2. If expired then
3. Submit passport renewal application

Visa Processing AI Agent



1. Checks visa validity
2. If expired then
3. Submit visa application

Agentic AI

Agentic AI is a multi-agent AI system

that can accomplish a specific goal with limited supervision

It consists of AI agents—machine learning models

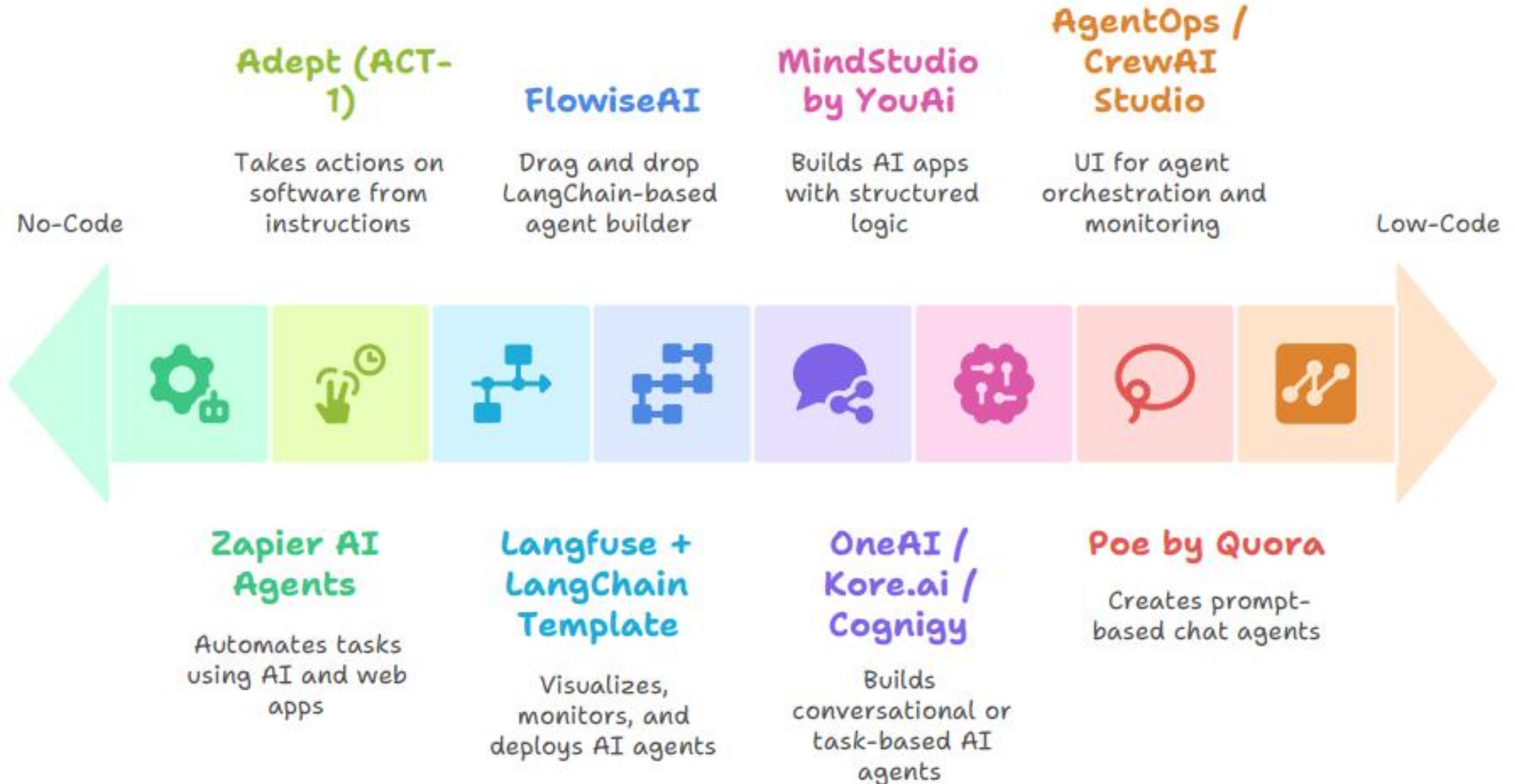
that mimic human decision-making to solve problems in real time

each agent performs a specific subtask required to reach the goal

Comparison

System	Capability	Tools utilization	Autonomous decisions
Generative AI (LLM)	Responds based upon pretrained knowledge	No tools utilization	No decision making
AI Agent	Decides and completes task based upon input	Uses tools/APIs to complete task	Makes decision to complete task
Agentic AI	Completes multistep goals with planning and coordination	Uses multiple tools or other Agents	Plans decides and adapt/changes as needed over time

AI Agent builders from no-code to low-code



Precautions

During development of any AI Applications or AI Agents Guidelines and precautions should be considered to avoid unsafe use of AI.

In addition, please make sure you follow “Responsible AI” guidelines