Azure Developer Community

Tamil Nadu

Join us

WhatsApp

Meetup

What we do?

Meetups

Network of Beginners,
Professionals &
Experts

Azure Cert Study Jam

Corporate / Startup
Talk

Prompting Frameworks

Agenda

Welcome Note

Why Prompt Frameworks

Literature

Next Steps

Target Audience:

Level: Intermediate

The session is intended for developers and beginners who are new to Prompt engineering.

Introduction

- Experience in Analytics, Reporting and data engineering

- Azure Dev Lead and Microsoft Certified - Azure and AI Engineer

- Enthusiastic learner and tech community contributor

Navaneethan Gopal
Data science Manager @ Ingram Micro

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Twitter - https://twitter.com/NavaneethhGopal

IN GRAM MICRO®

Challenges

When is the final and who are the teams?

The ICC Men's ODI CWC 2023 final has already taken place on November 19, 2023, at the Narendra Modi Stadium in Ahmedabad, India. The two teams that competed in the final were India and Australia.
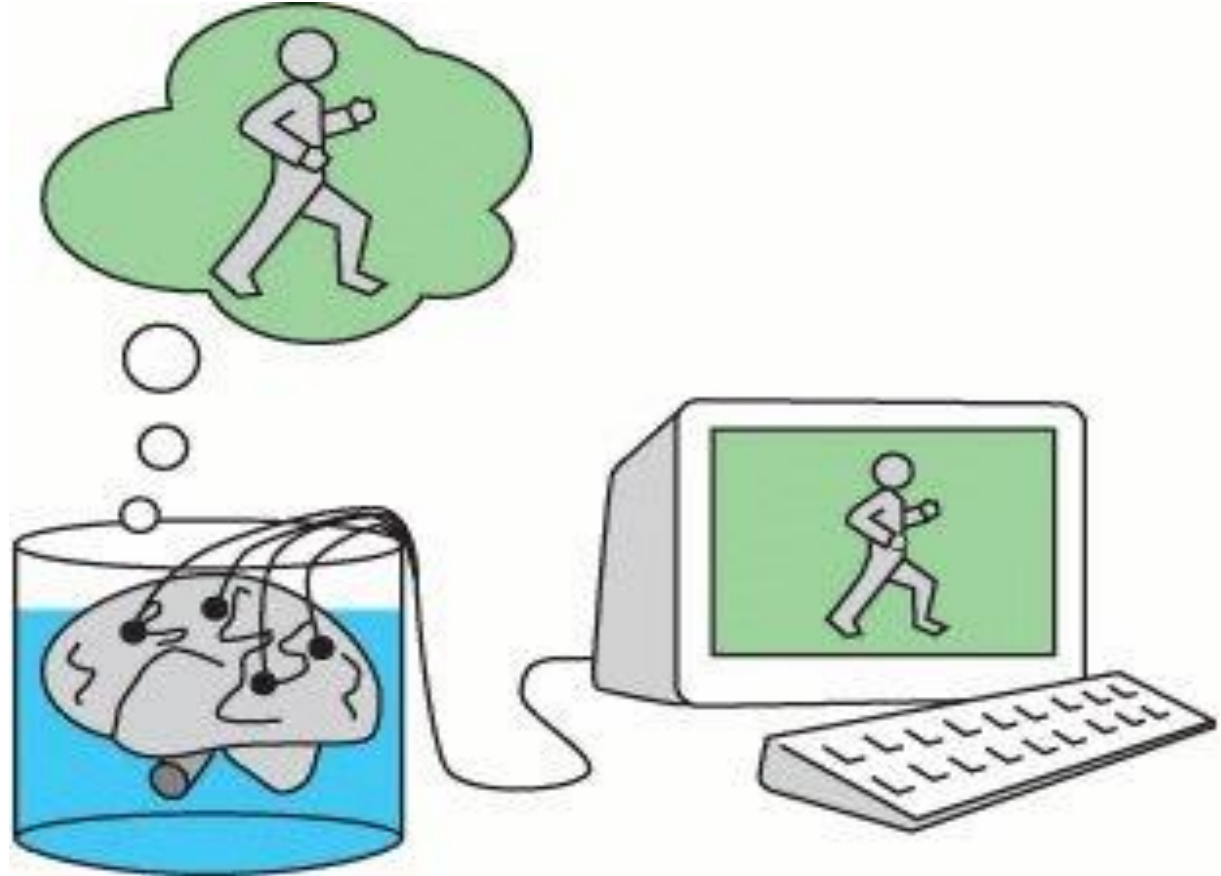
who won?

View other drafts

India won the final of the ICC Men's ODI CWC 2023 by 10 wickets, defeating Australia with a dominant performance. India chased down Australia's target of 215 runs in just 28.3 overs, with openers Rohit Sharma (101*) and KL Rahul (97*) scoring brilliant centuries. This victory marked India's fourth World Cup title, solidifying their position as one of the most successful teams in cricket history.
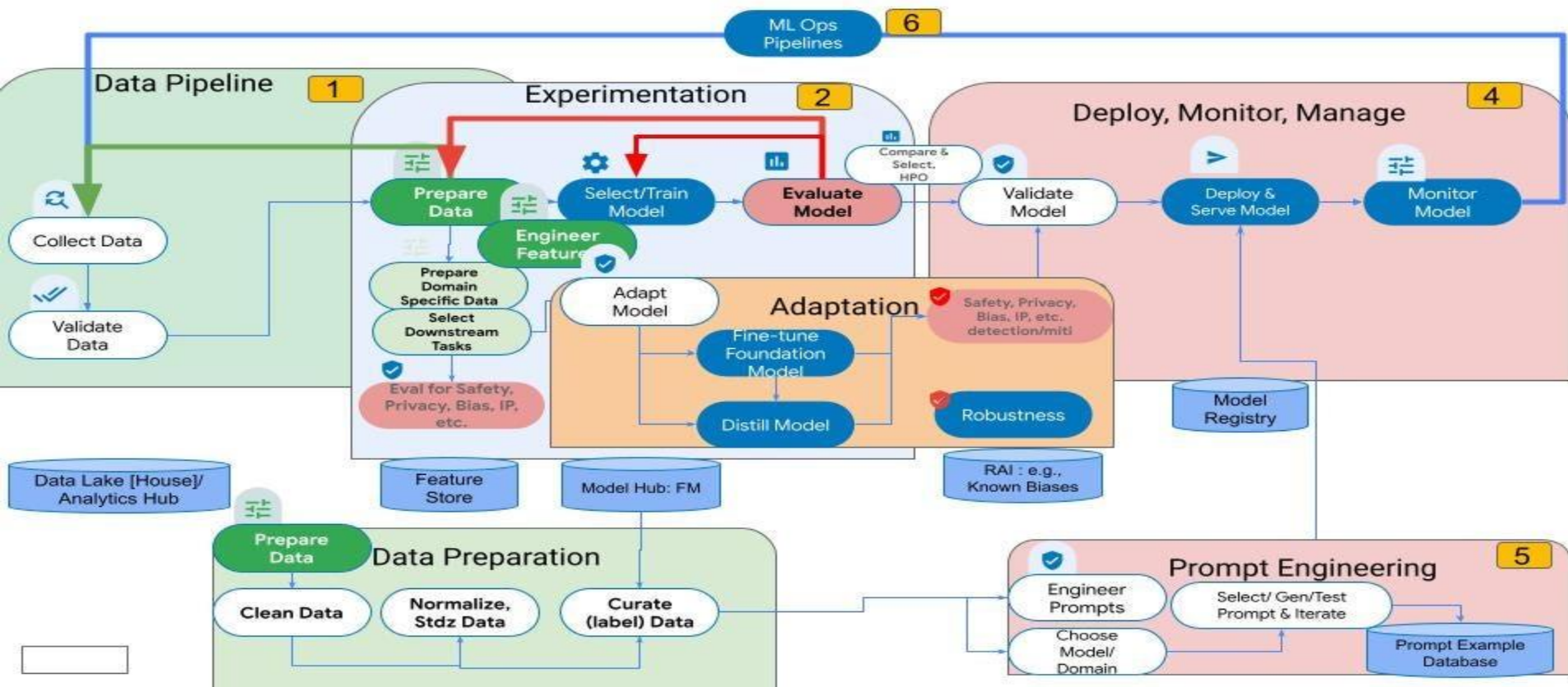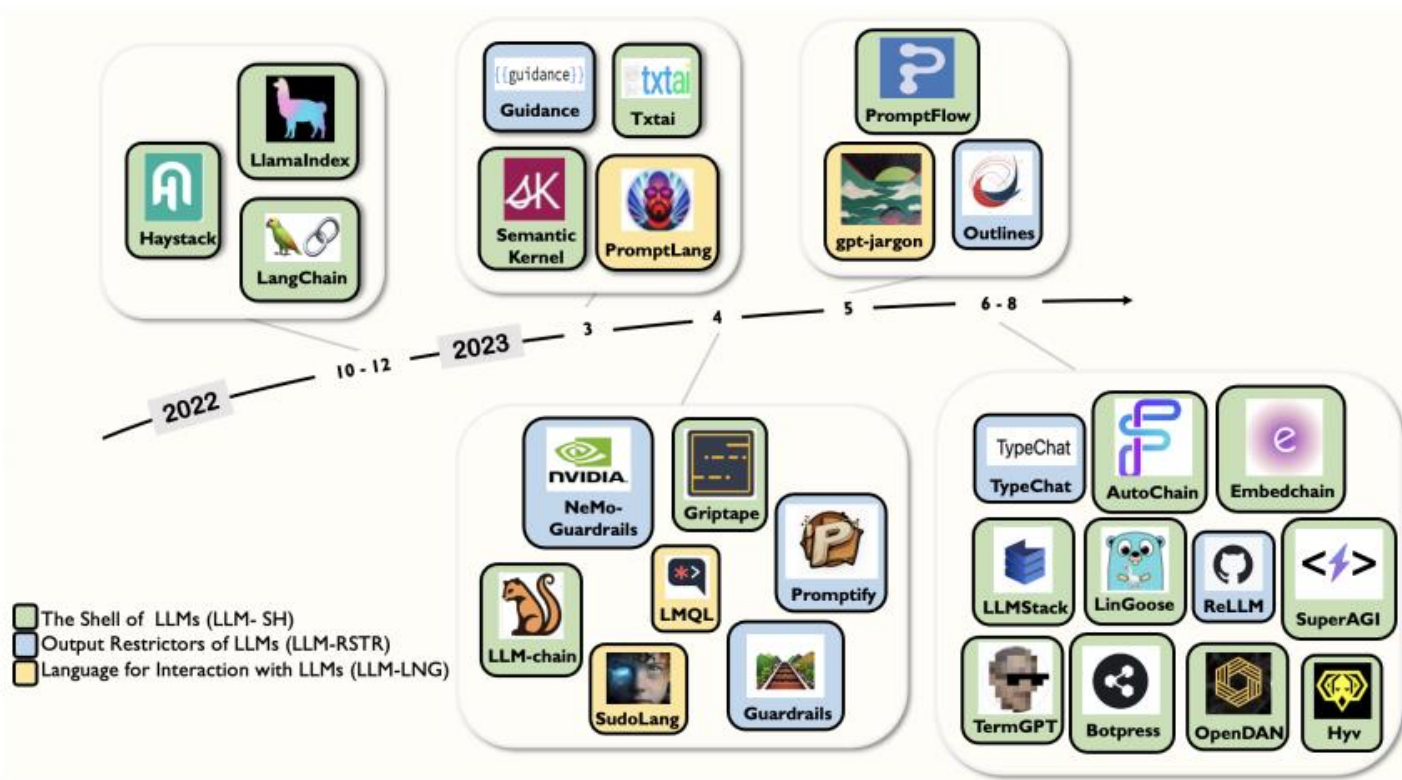
Brain in a vat

Overview

Source: https://dr-arsanjani.medium.com/the-generative-ai-life-cycle-fb2271a70349

Prompting Frameworks

Workflows

Source: https://arxiv.org/abs/2311.12785

Dynamic Prompting

Source: https://towardsdatascience.com/llmops-production-prompt-engineering-patterns-with-hamilton-5c3a20178ad2
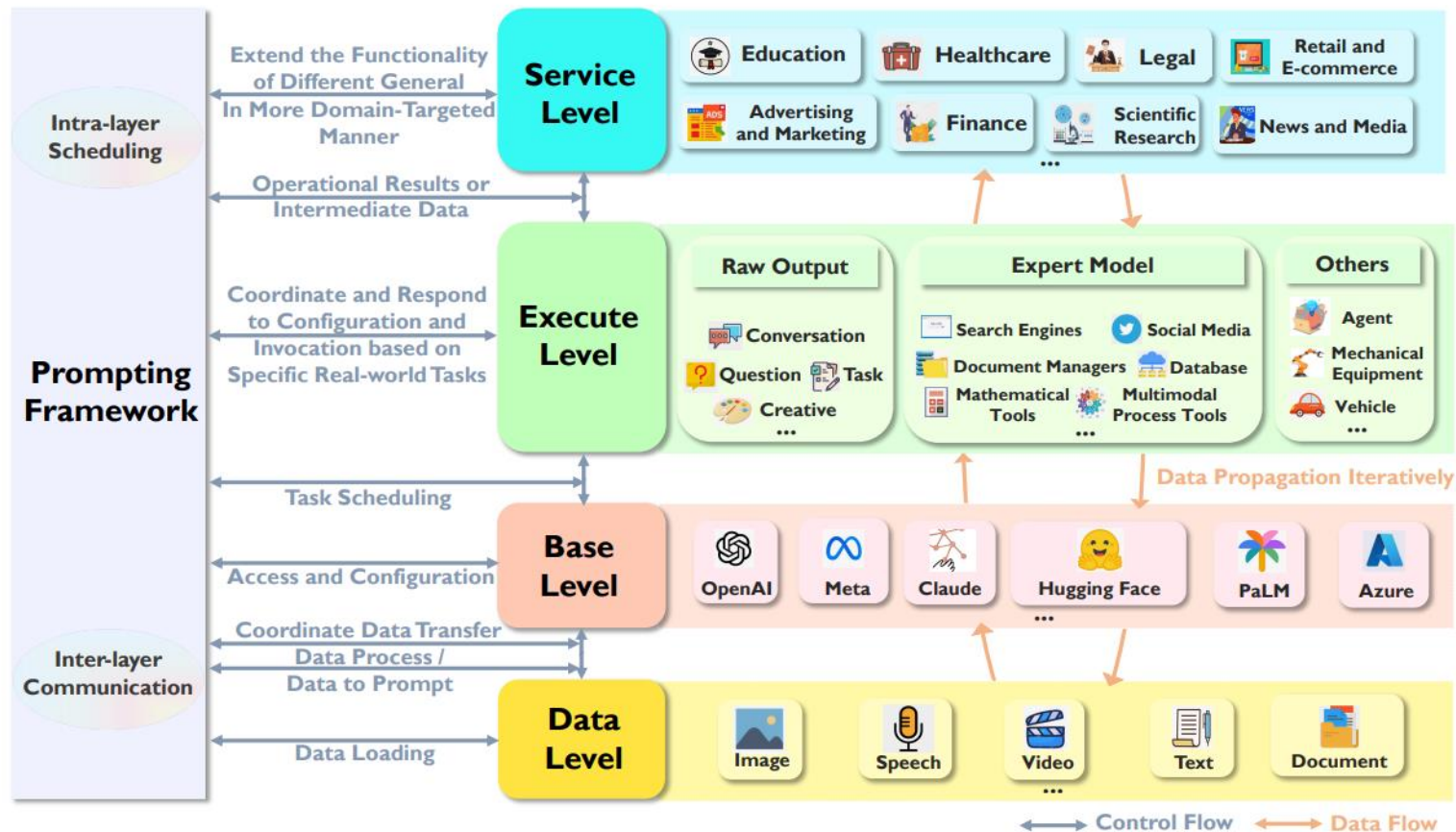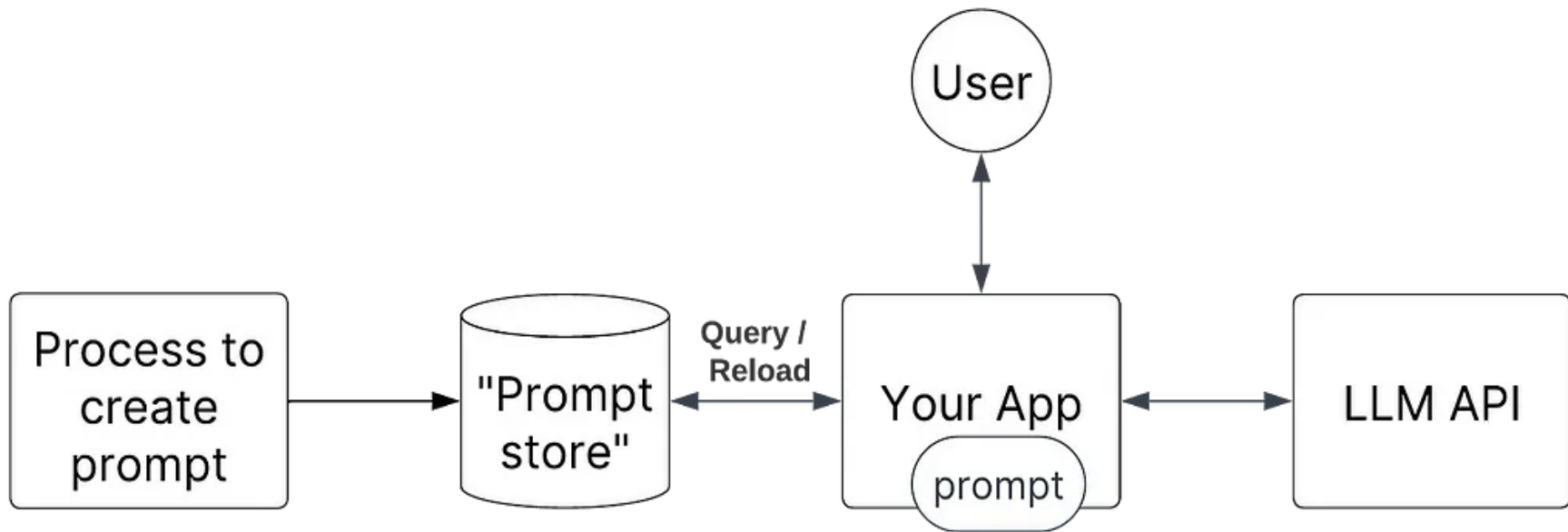
Dynamic Prompting sample Flow
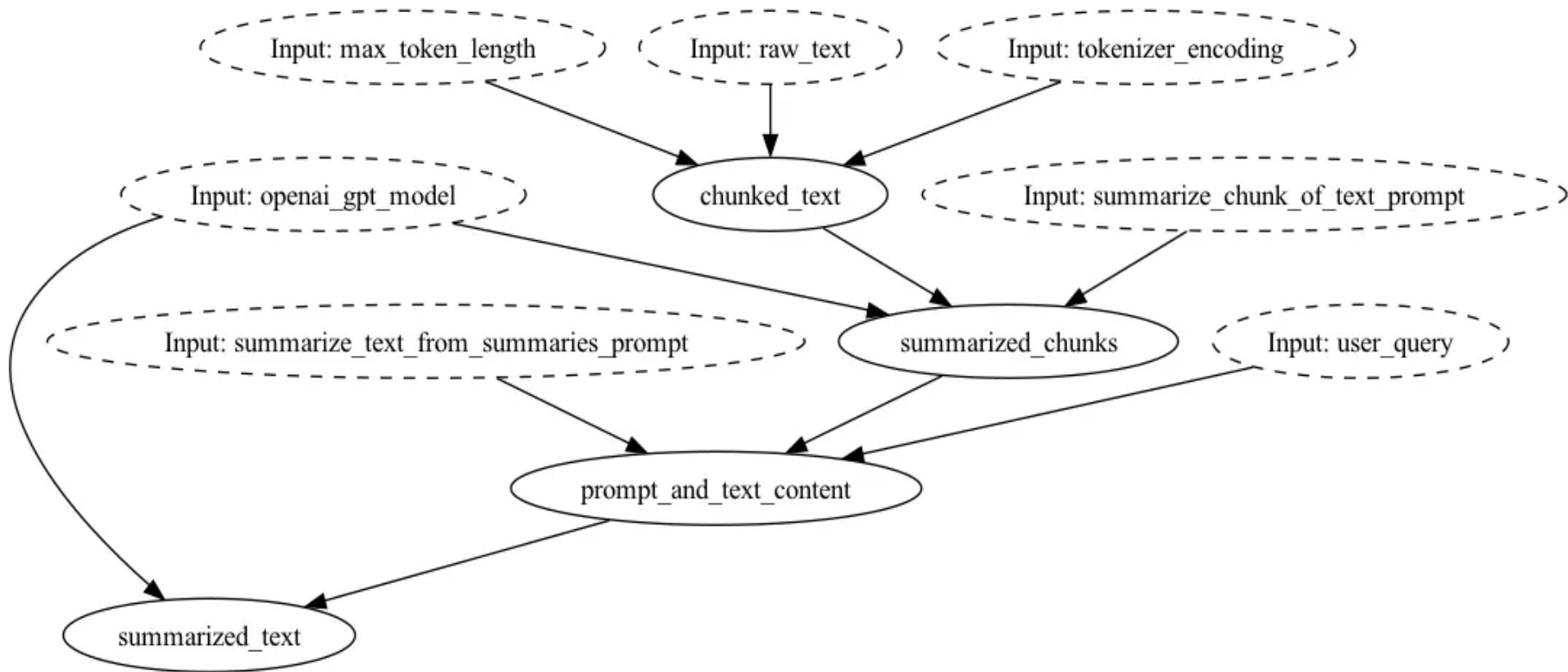
Source: https://towardsdatascience.com/llmops-production-prompt-engineering-patterns-with-hamilton-5c3a20178ad2

Prompting Frameworks for Large Language Models: A Survey

[Submitted on 21 Nov 2023]

Prompting Frameworks for Large Language Models: A Survey

Xiaoxia Liu, Jingyi Wang, Jun Sun, Xiaohan Yuan, Guoliang Dong, Peng Di, Wenhai Wang, Dongxia Wang

Since the launch of ChatGPT, a powerful AI Chatbot developed by OpenAI, large language models (LLMs) have made significant advancements in both academia and industry, bringing about a fundamental engineering paradigm shift in many areas. While LLMs are powerful, it is also crucial to best use their power where "prompt" plays a core role. However, the booming LLMs themselves, including excellent APIs like ChatGPT, have several inherent limitations: 1) temporal lag of training data, and 2) the lack of physical capabilities to perform external actions. Recently, we have observed the trend of utilizing prompt-based tools to better utilize the power of LLMs for downstream tasks, but a lack of systematic literature and standardized terminology, partly due to the rapid evolution of this field. Therefore, in this work, we survey related prompting tools and promote the concept of the "Prompting Framework" (PF), i.e. the framework for managing, simplifying, and facilitating interaction with large language models. We define the lifecycle of the PF as a hierarchical structure, from bottom to top, namely: Data Level, Base Level, Execute Level, and Service Level. We also systematically depict the overall landscape of the emerging PF field and discuss potential future research and challenges. To continuously track the developments in this area, we maintain a repository at this https URL, which can be a useful resource sharing platform for both academic and industry in this field.

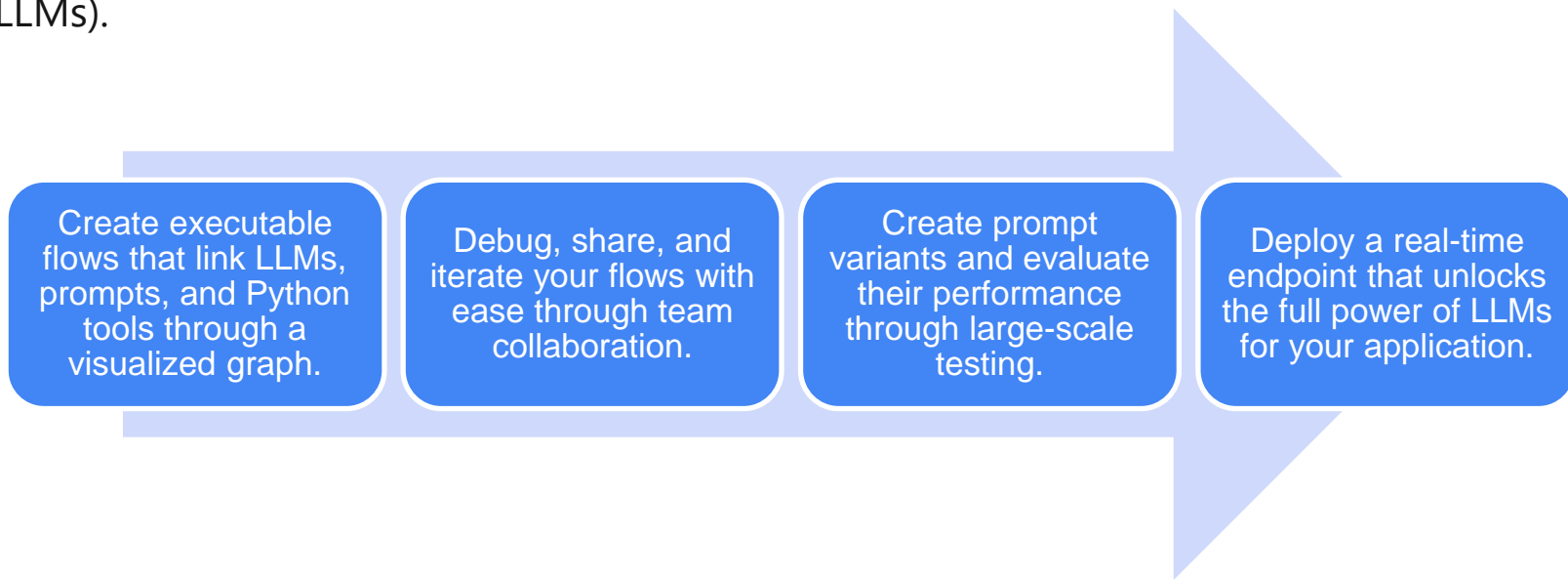*Source: https://arxiv.org/abs/2311.12785*

Harness the power of prompt engineering

- We need to frame our questions reasoning engine and not as a search engine

- Provide context, break the questions/inputs

- Use clear language, clear examples of Industry language

- Experiment more

- Role play scenarios

- Analogies

- Debate style questions

Source: https://www.linkedin.com/learning/generative-ai-the-evolution-of-thoughtful-online-search/thoughtful-search-strategies-and-approaches?resume=false&u=52905228
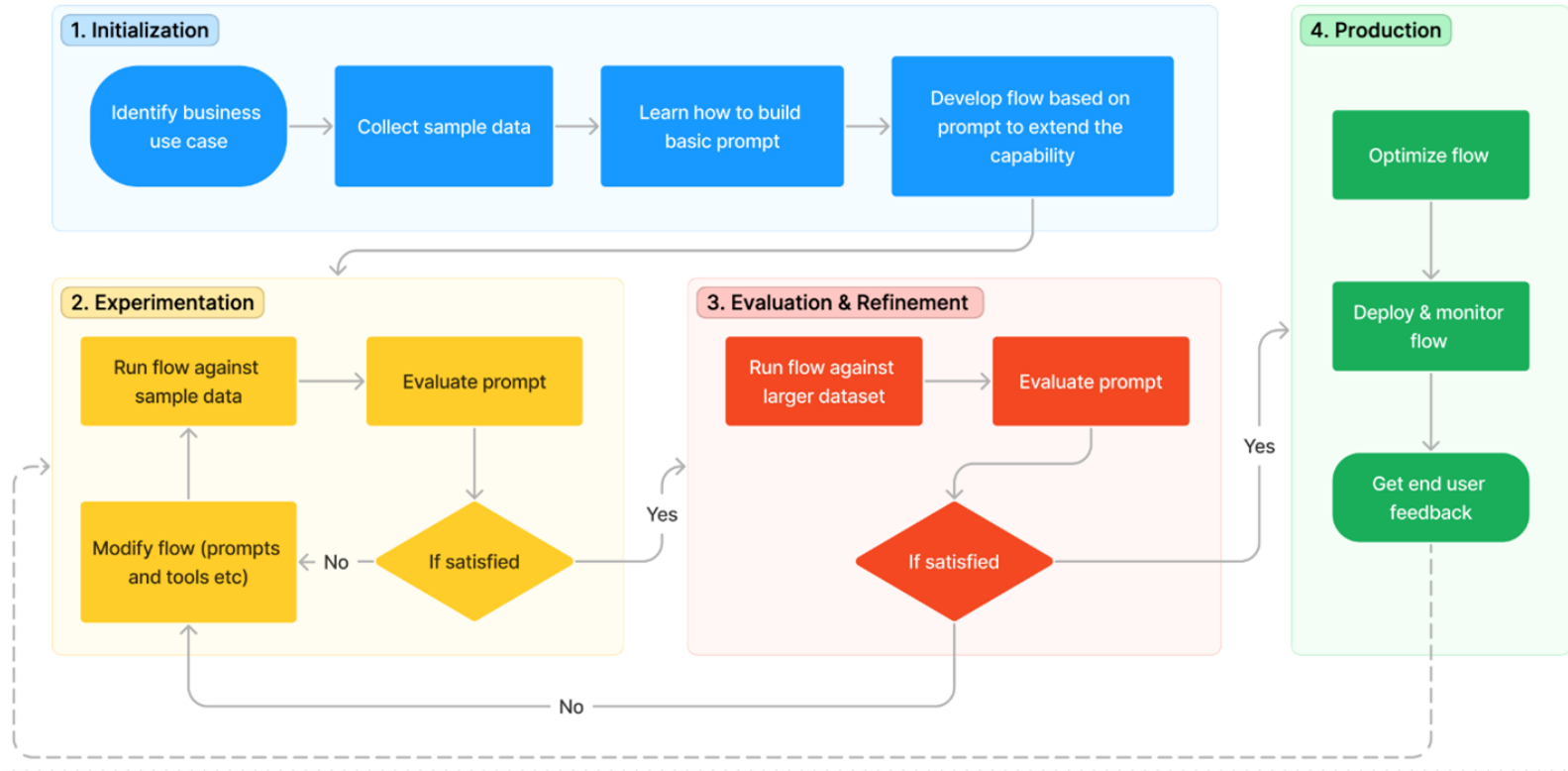
Prompt Flow setup

- Azure Machine Learning prompt flow is a development tool designed to streamline the entire development cycle of AI applications powered by Large Language Models (LLMs).

| Create executable flows that link LLMs, prompts, and Python tools through a visualized graph. | Debug, share, and iterate your flows with ease through team collaboration. | Create prompt variants and evaluate their performance through large-scale testing. | Deploy a real-time endpoint that unlocks the full power of LLMs for your application. |

LLM Application development lifecycle

Source: https://learn.microsoft.com/en-us/azure/machine-learning/prompt-flow/get-started-prompt-flow?view=azureml-api-2

Open for Q&A

Thank you!!

Learning Resources

- Azure free account: https://azure.microsoft.com/en-in/free/

- QuickStart : https://learn.microsoft.com/en-us/azure/machine-learning/prompt-flow/get-started-prompt-flow?view=azureml-api-2

- LinkedIn Learning : https://www.linkedin.com/learning/generative-ai-the-evolution-of-thoughtful-online-search/thoughtful-search-strategies-and-approaches?resume=false&u=52905228

- Coding files: https://github.com/MicrosoftDocs/azure-docs/tree/main/articles/machine-learning/prompt-flow

Source:

Speaker Wi-Fi Details