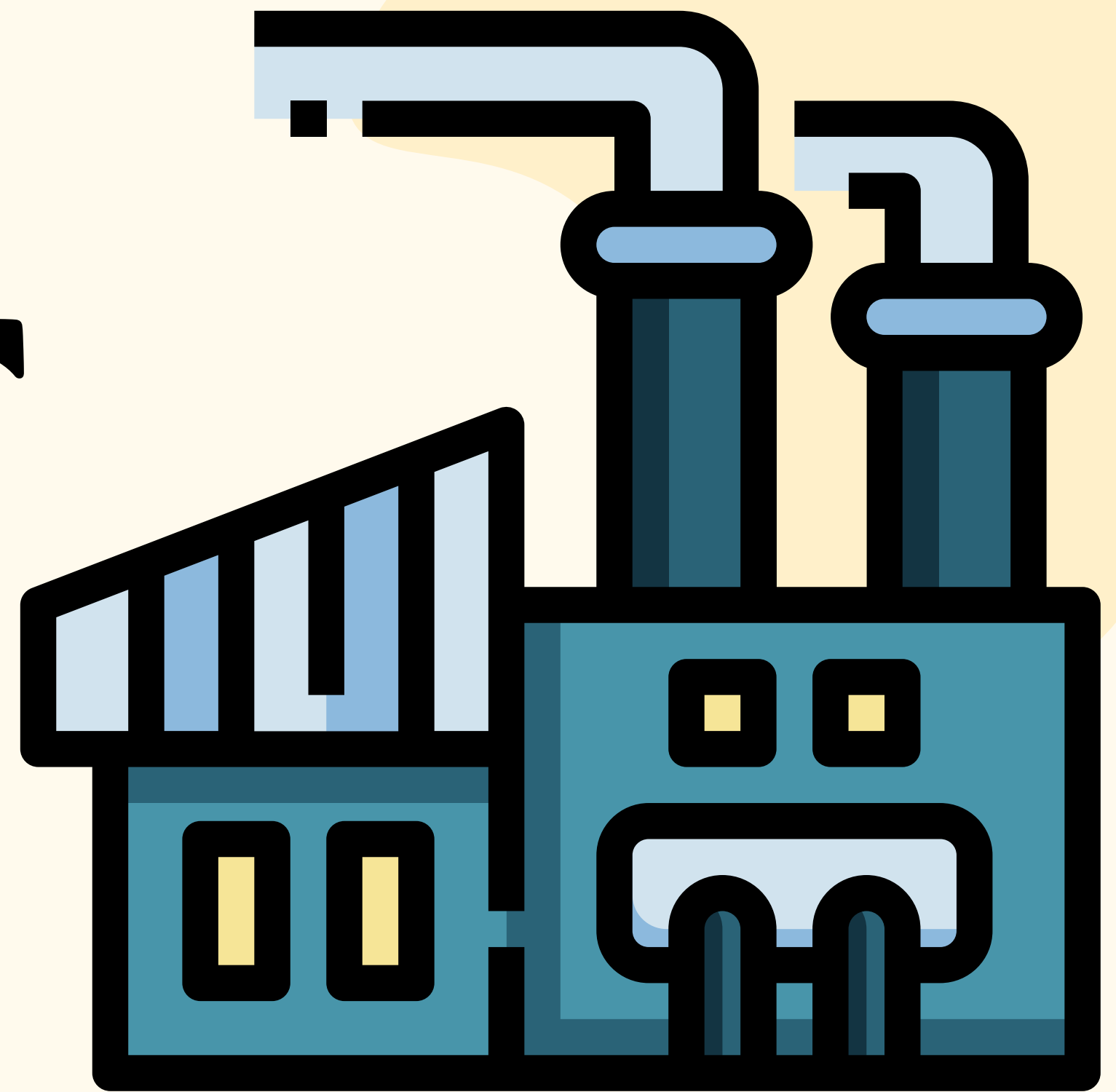
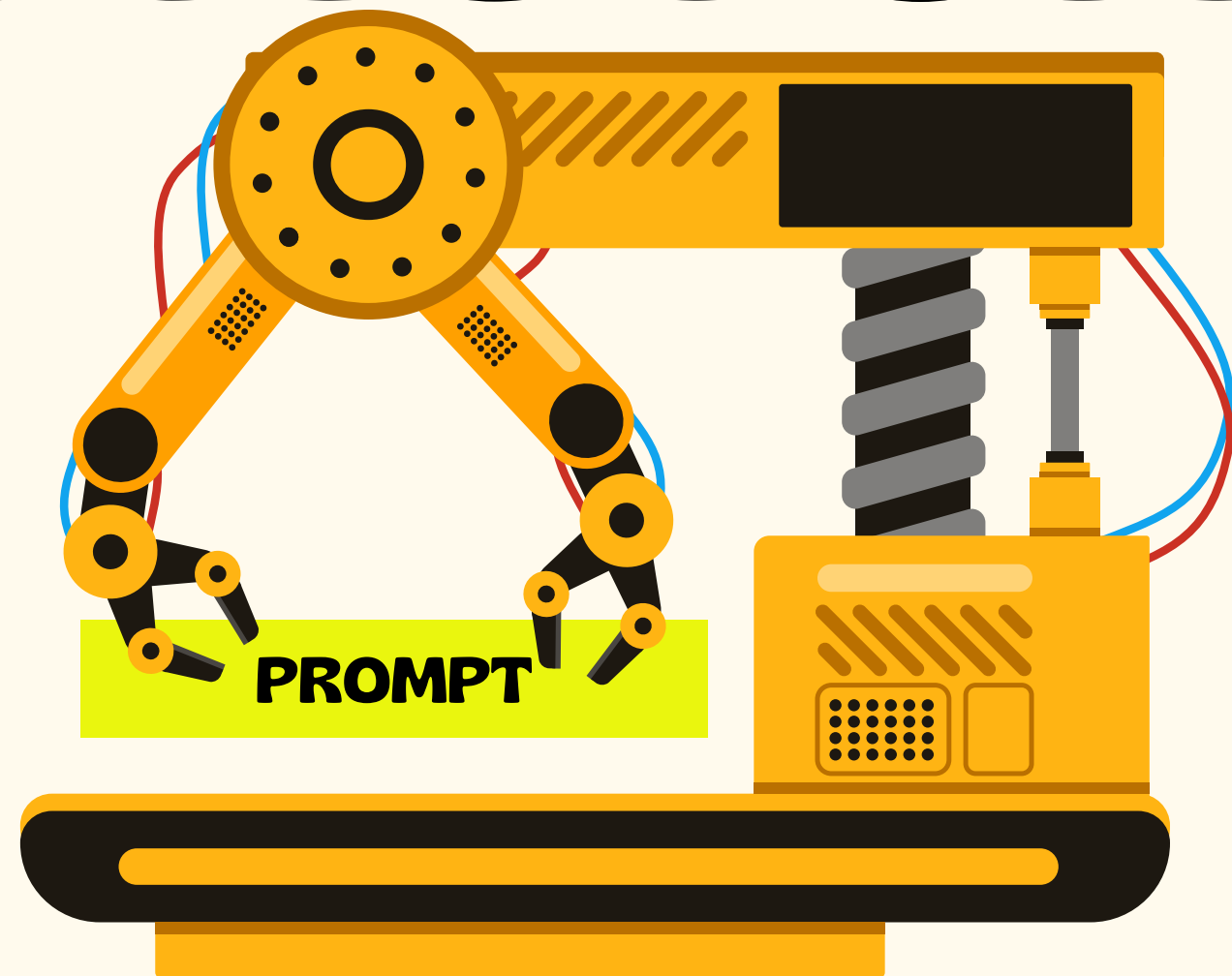


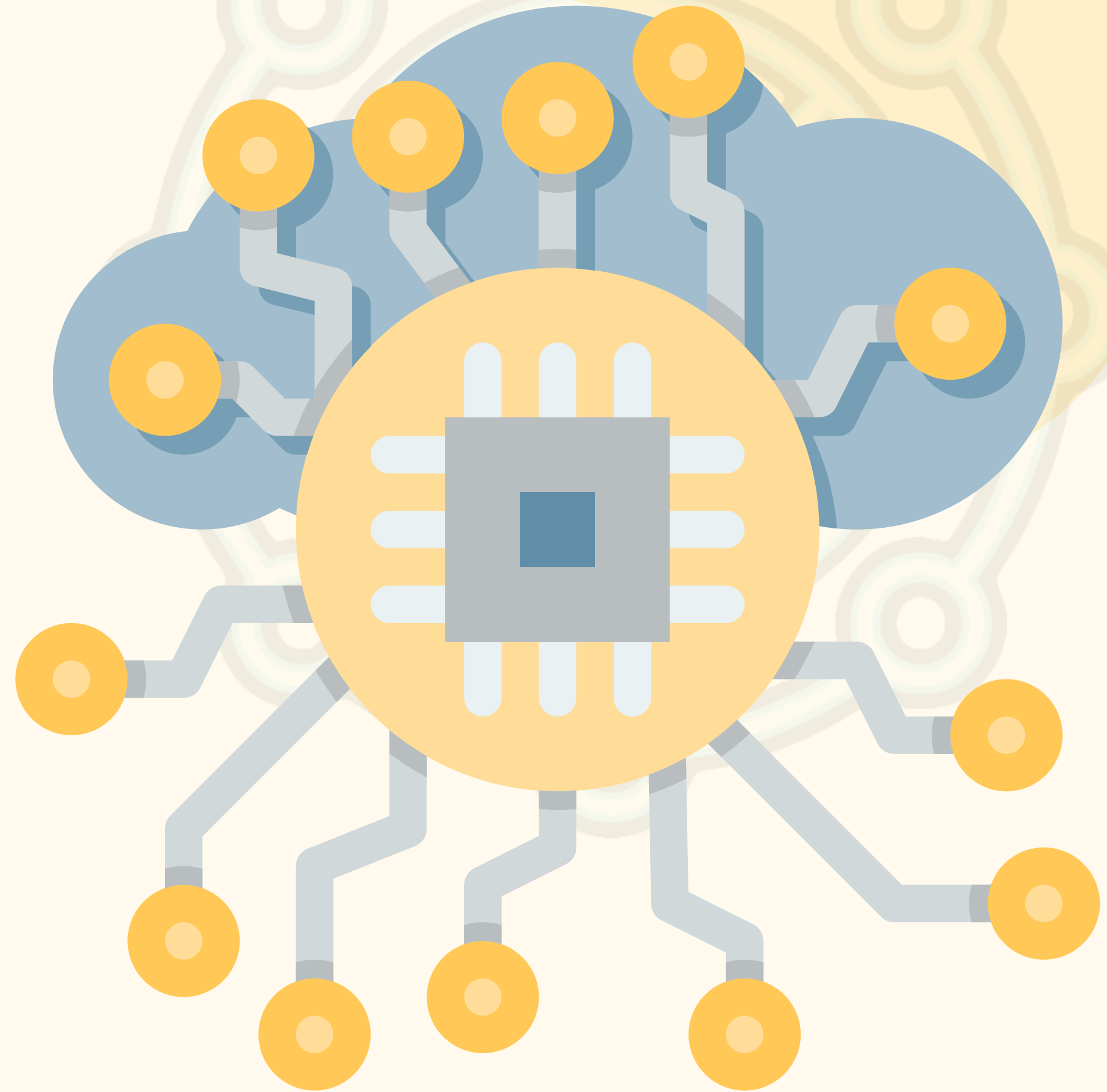
LANGCHAIN THE PROMPT FACTORY

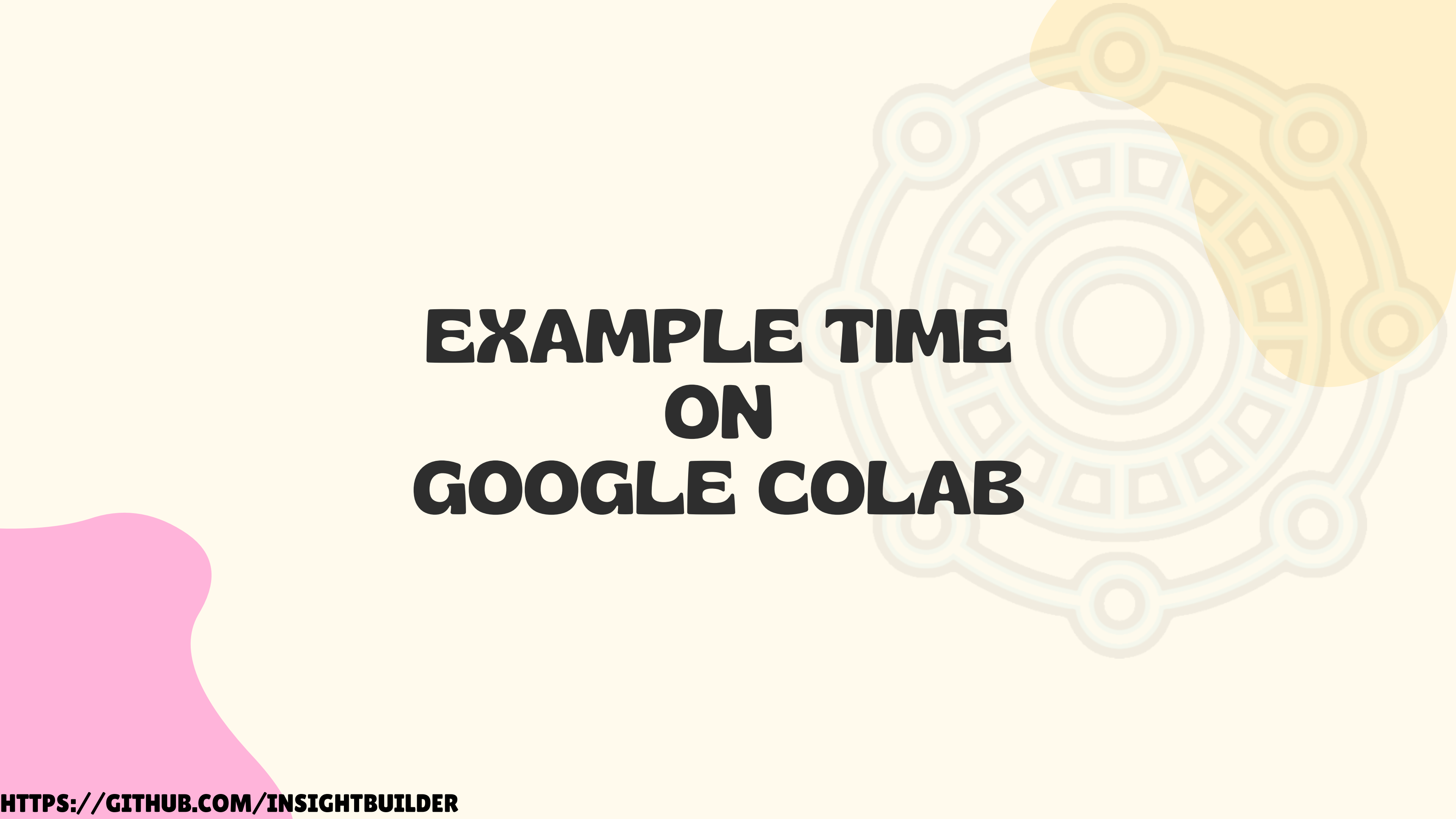


**MASS PRODUCE
PROMPTS & APPS**

ITS BIGGER THAN PROMPTS

**LANGCHAIN PYTHON
LIBRARY CONNECTS THE
OUR WORLD WITH LLM
WORLD.**





EXAMPLE TIME ON GOOGLE COLAB

HOW LANGCHAIN WORKS

LANGCHAIN PROVIDES THE PYTHON CLASSES AND FUNCTIONS
THAT INTERACT WITH

1. LANGUAGE MODELS FROM 28 PROVIDERS OR MORE
2. CONNECTS WITH SEARCH + WIKI + WOLFRAM + INTERNET
3. CREATES INTERFACE TO QUERY THE TEXT / FILE DATA
4. CONNECTS WITH VECTOR DATABASES TO STORE
5. CONNECTS WITH PYTHON + BASH + SQL ENVIRONMENT

PROMPTS

UTILITIES

CHAINS

AGENTS

**CREATING CHAINS ON WHICH
THE LLM WILL QUERY & REPLY**

PROMPT TRIGGERS CHAIN

INSTALL LANGCHAIN

PIP INSTALL LANGCHAIN[ALL]

**DATA LOADERS
& PARSERS**

**CACHING THE
MODEL**

**PROMPT WITH
OUTPUT PARSERS**

PROMPT TEMPLATE

MANUAL PROMPT

**UTILITIES
/ TOOLS**

AGENTS

**LANGUAGE
MODELS**

CHAINS

IT STARTS WITH LLM

PROMPTS

Custom Prompt Template: How to create and use a custom PromptTemplate

Custom Example Selector: How to create and use a custom ExampleSelector

Few Shot Prompt Templates: How to include examples in the prompt.

Example Selectors: How to use different types of example selectors.

Prompt Serialization, Few Shot Prompt Examples,

Output parsers Template:

LLMS

OpenAI, Cohere, AI21, **Huggingface** Hub, Azure OpenAI, Manifest,

Goose AI, Writer, **Banana**, Modal, StochasticAI,

Cerebrium, Petals, Forefront AI, PromptLayer, Anthropic, DeepInfra,

Self-Hosted Models (via **Runhouse**)

PRIMITIVES AND CHAINS

DOCUMENT LOADER

28 different document loaders that cover
Files, Directories, PDFs, Web Base, iFixit,
cloud drives, APIs, Emails, Word Documents,
AWS and GCP Directories, Youtube, and MS
Word and Powerpoint

UTILS

Python REPL

Bash

Requests Wrapper

Google Search

SerpAPI

Searx Search

VECTOR STORES

Chroma

AtlasDB

DeepLake

FAISS

Elastic Search

Milvus

Pinecone

Qdrant

Weaviate

**There are LLMChain,
SequentialChain &
Transformation
Chain classes too**

UTILS

Text Splitters

VectorStores

Embeddings

HyDE: Hypothetical
Document Embeddings,

CHAINS

load_summarize

load_qa

ChatVectorDB

load_qa_with_sources

GraphQA Chain

Mapreduce & Re - Rank

Refine

UTILITY CHAINS : GAME CHANGER

LMMATH

LINKS USED: PYTHON REPL, LLMCHAIN

PAL

LINKS USED: PYTHON REPL, LLMCHAIN

SQLDATABASE CHAIN

LINKS USED: SQLDATABASE, LLMCHAIN

API CHAIN

LINKS USED: LLMCHAIN, REQUESTS

LLMBASH

LINKS USED: BASHPROCESS, LLMCHAIN

LLMCHECKER

LINKS USED: LLMCHAIN

LLMREQUESTS

LINKS USED: REQUESTS, LLMCHAIN

MODERATION

LINKS USED: LLMCHAIN, MODERATIONCHAIN

AGENTS : DECISION MAKERS

AGENTS

MRKL & MRKL CHAT

TOOLS USED: SEARCH, SQLDATABASECHAIN,
LLMMATHCHAIN

AGENT USED: ZERO-SHOT-REACT-DESCRIPTION

SELF-ASK-WITH-SEARCH

TOOLS USED: SEARCH

AGENT USED: SELF-ASK-WITH-SEARCH

REACT

TOOLS USED: WIKIPEDIA DOCSTORE

AGENT USED: REACT-DOCSTORE

AGENT TOOLKITS

- SQLDATABASE AGENT: SQL DB
- JSON AGENT: JSON
- OPENAPI AGENT: OPENAPI ENDPOINT
- VECTORSTORE AGENT: VECTORSTORES
- PYTHON AGENT: EXECUTE PYTHON CODE
- PANDAS DATAFRAME AGENT: QA WITH PANDAS
- CSV AGENT: CSV FILE.

LLM : WITH MEMORY

BUFFER: JUST KEEPS PREVIOUS MESSAGES IN A BUFFER.

BUFFER WINDOW: KEEPS PREVIOUS MESSAGES IN A BUFFER BUT ONLY USES THE PREVIOUS K OF THEM.

SUMMARY: A TYPE OF MEMORY THAT SUMMARIZES PREVIOUS MESSAGES.

SUMMARY BUFFER: KEEPS A BUFFER OF MESSAGES UP TO A POINT, AND THEN SUMMARIZES THEM.

ENTITY MEMORY: A TYPE OF MEMORY THAT ORGANIZES INFORMATION BY ENTITY.

KNOWLEDGE GRAPH MEMORY: A TYPE OF MEMORY THAT EXTRACTS KNOWLEDGE GRAPH

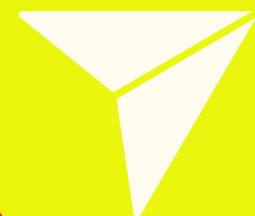
THANKS FOR WATCHING

PRACTICE

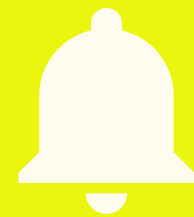
PRACTICE



LIKE



SHARE



SUBSCRIBE

PRACTICE

PRACTICE