Model Context Protocol (MCP)
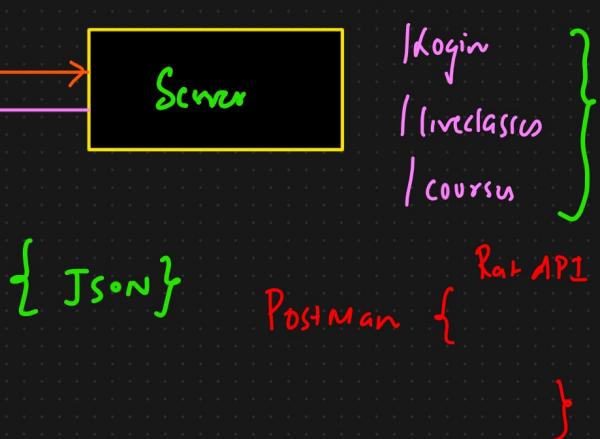
Idea behind Protocols

/get /post
/put

https://krishnaik.in/

{swagger}
FAST API

Client → https:// → **Server**
Client ← Response ← Server

/login
/liveclasses }
/courses

/

{JSON} ⇒ Rest API

{JSON}

Rest API

Postman {
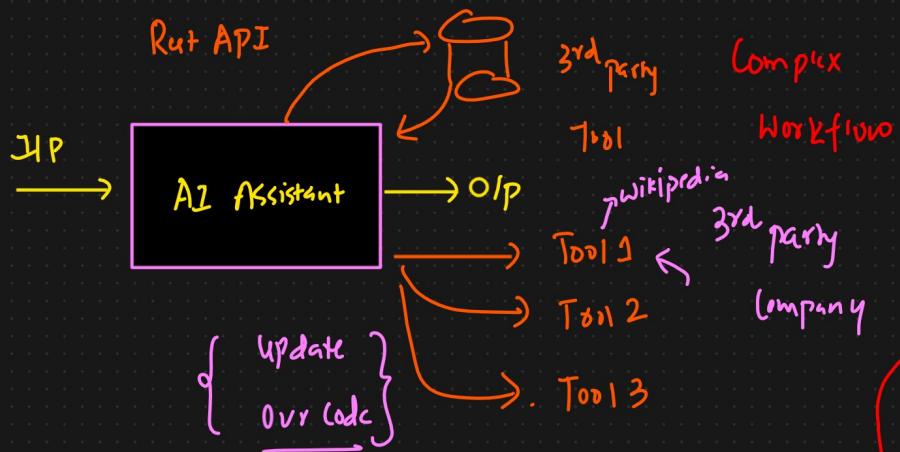
Rest API

}

Generative AI And Agentic AI Application
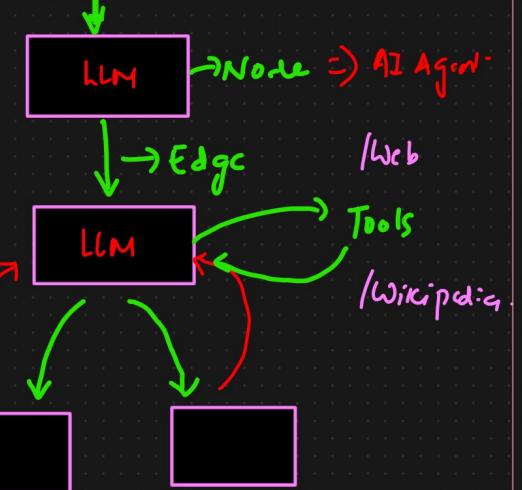
Generative AI

LangGraph
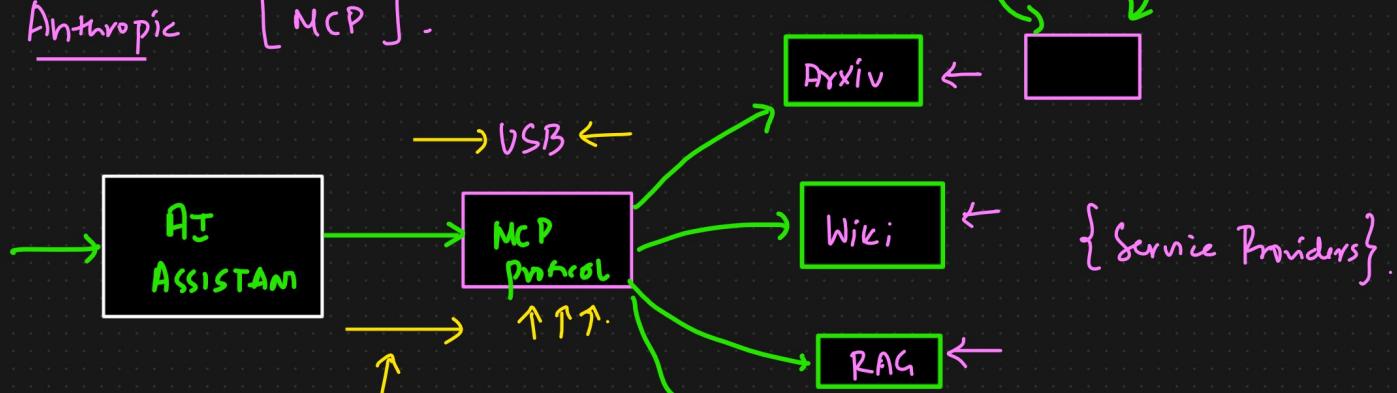
Agentic AI {Stateful AI Agents}

Rest API → 🛢 → 3rd party   Complex
                   Tool   Workflow

I/P → **AI Assistant** → O/p

LLM → Node ⇒ AI Agent

→ Tool 1 ← ⌐wikipedia 3rd party
→ Tool 2   company
→ Tool 3

→ Edge   /Web

LLM → Tools
     /Wikipedia

{ Update / Our Code }

Anthropic [MCP].

Arxiv ←

→ USB ←

AI ASSISTANT → **MCP Protocol** → Wiki ←

{ Service Providers }

↑↑↑

→ RAG ←

↑

Cliunt find

TAVILY ←
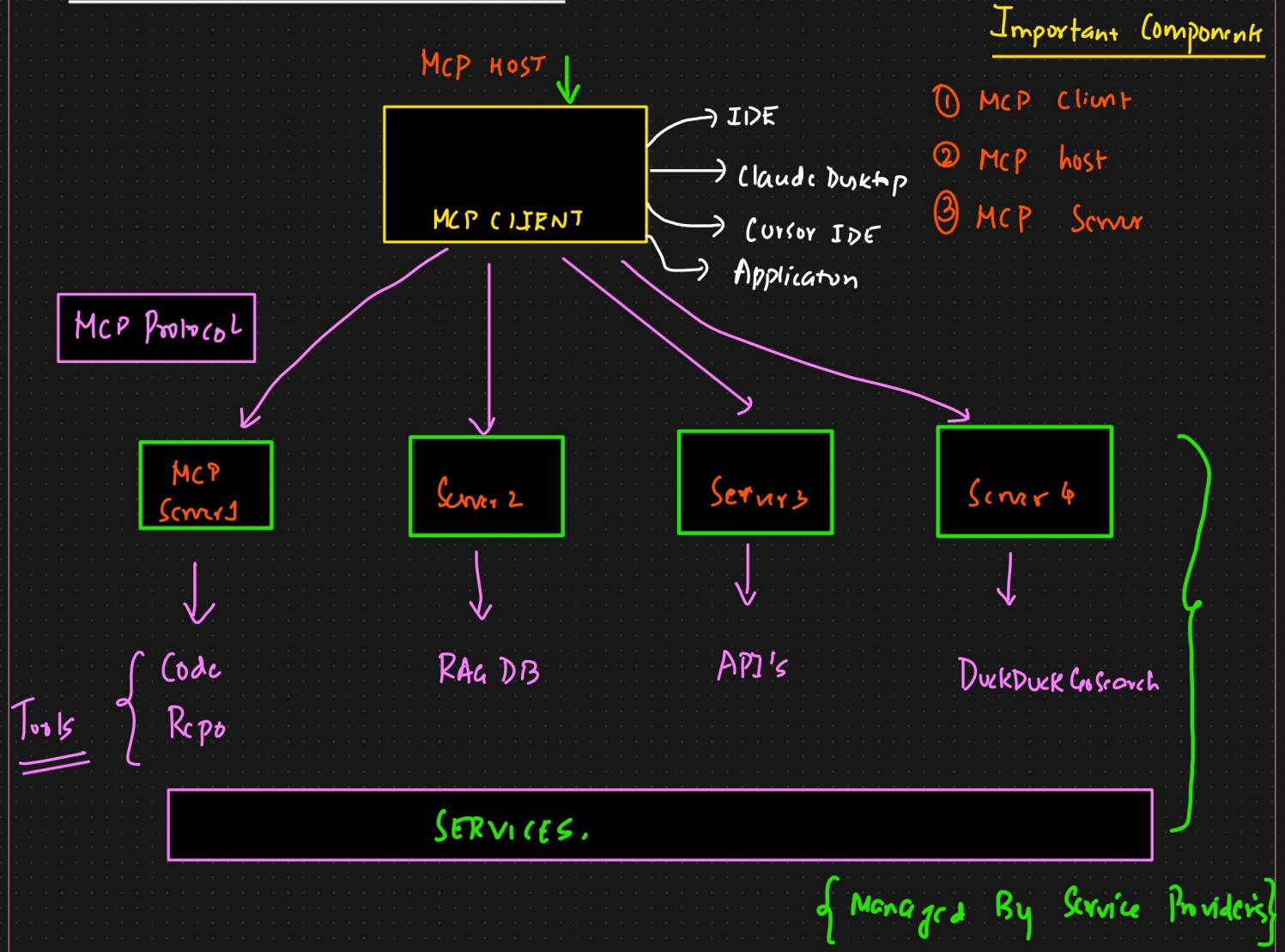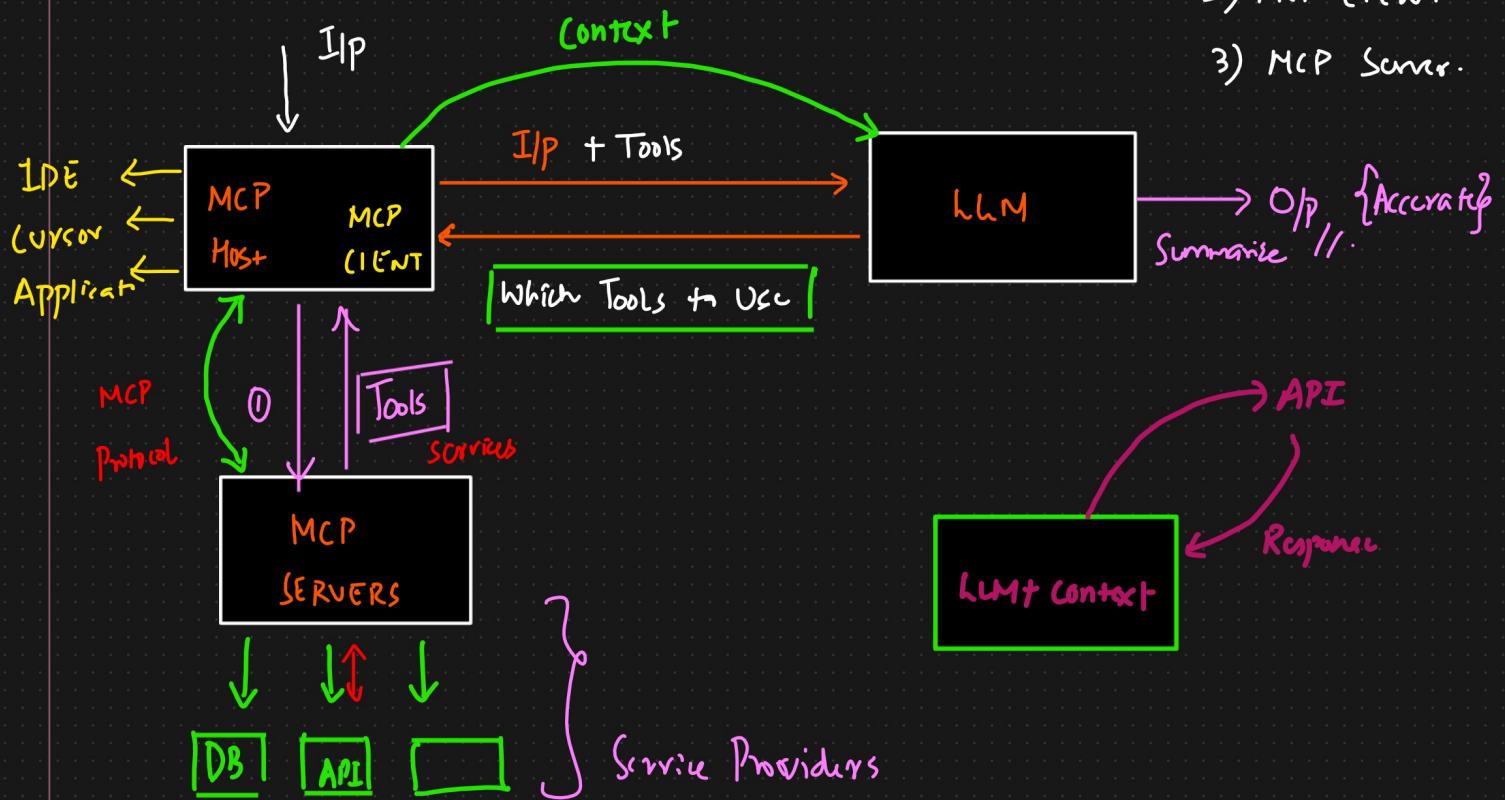
Important Components In MCP

MCP HOST ↓

MCP CLIENT

→ IDE
→ Claude Desktop
→ Cursor IDE
→ Application

MCP Protocol

| MCP Server1 | Server 2 | Server3 | Server 4 |

Tools { Code Repo

↓ Code Repo

↓ RAG DB

↓ API's

↓ DuckDuckGoSearch

SERVICES.

{ Managed By Service Providers}

Communication Between the Components

1) MCP Host
2) MCP CIENT
3) MCP Server.

I/p

Context

IDE ←
Cursor ←
Applicat ←

| MCP Host | MCP CIENT |

I/p + Tools

LLM → O/p {Accurate}
Summarise //.

Which Tools to Use

MCP Protocol

① Tools

services

| MCP SERVERS |

→ API

| LLM Context |

← Response

DB | API | [ ] } Service Providers

IDE's

1) Cursor IDE   {Vibe Coding}
2) V.S Code   {Visual Studio Code}

Claude Desktop ← Host
↓
MCP Servers