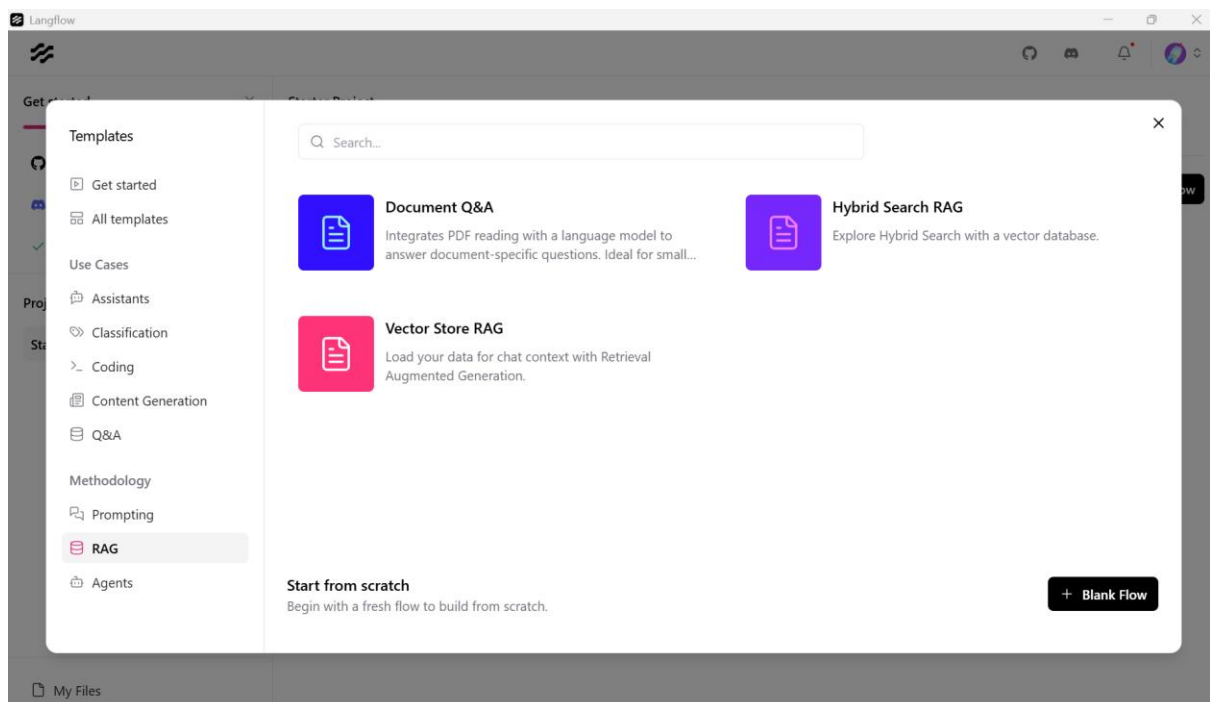
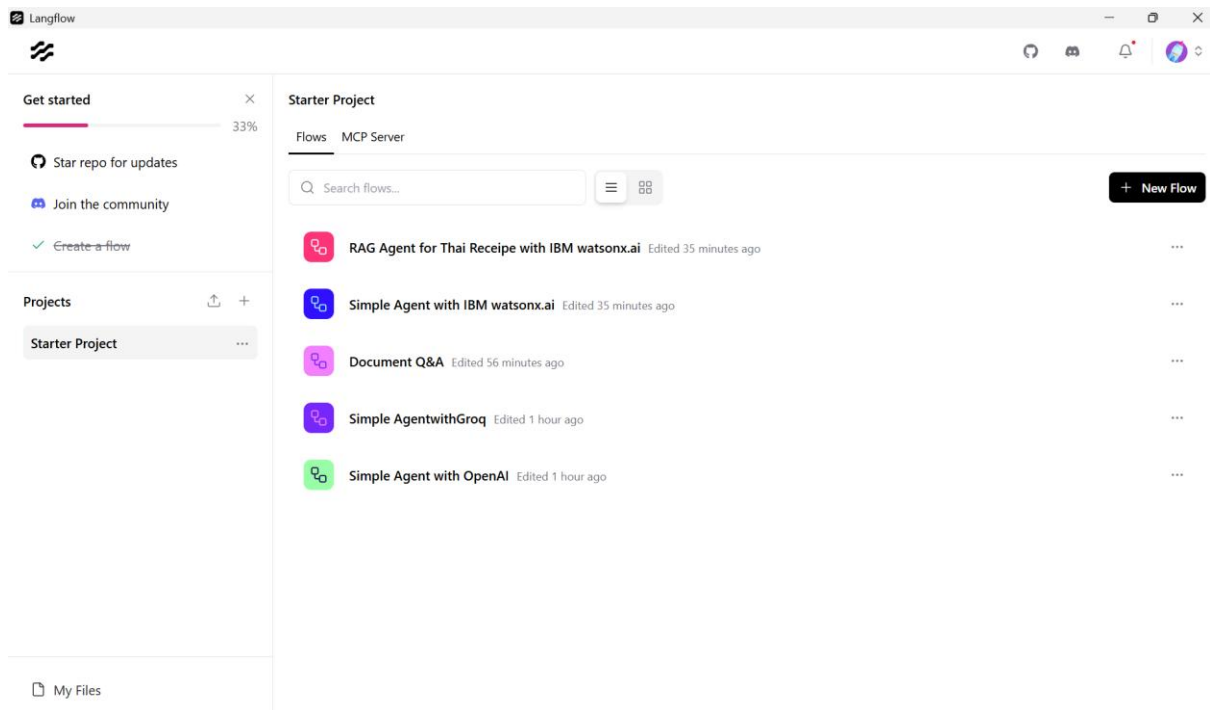


Handson2- Create RAG Agent using IBM watsonx.ai with IBM Granite model – granite-3-2-8b-instruct model

Step1 – Use template **Document Q&A** by clicking on

New Flow – RAG – Document Q&A



Step2- Download Thai recipe pdf from link <https://drive.google.com/file/d/1lk8sAX-hoqdQAHOfuXpMJvem-R8PPz53/view?usp=sharing>

Step3 – from left side , search and Add agent component named ‘**IBM watsonx.ai**’

Step4- connect chat input to ‘**IBM watsonx.ai**’ and Chat out from ‘**IBM watsonx.ai**’

Step5 – From IBM Cloud platform create the watsonx API Endpoint , watsonx projectID , API Key

Step6- In the langflow platform , Add watsonx API Endpoint , watsonx projectID , API Key and Model name **as ibm/ granite-3-2-8b-instruct** into the Agent component ‘**IBM watsonx.ai**’

IBM watsonx.ai Agent for Langflow -

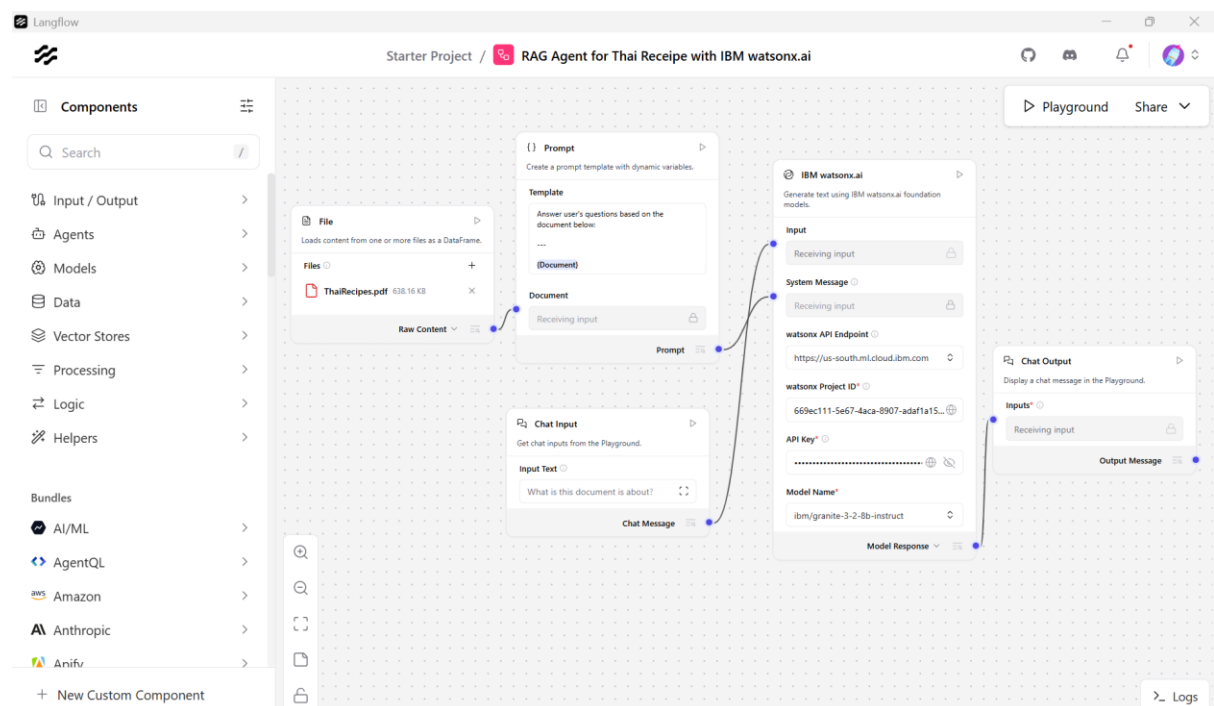
Watsonx End Point = <https://us-south.ml.cloud.ibm.com>

Watsonx Project ID= Your PorjectID

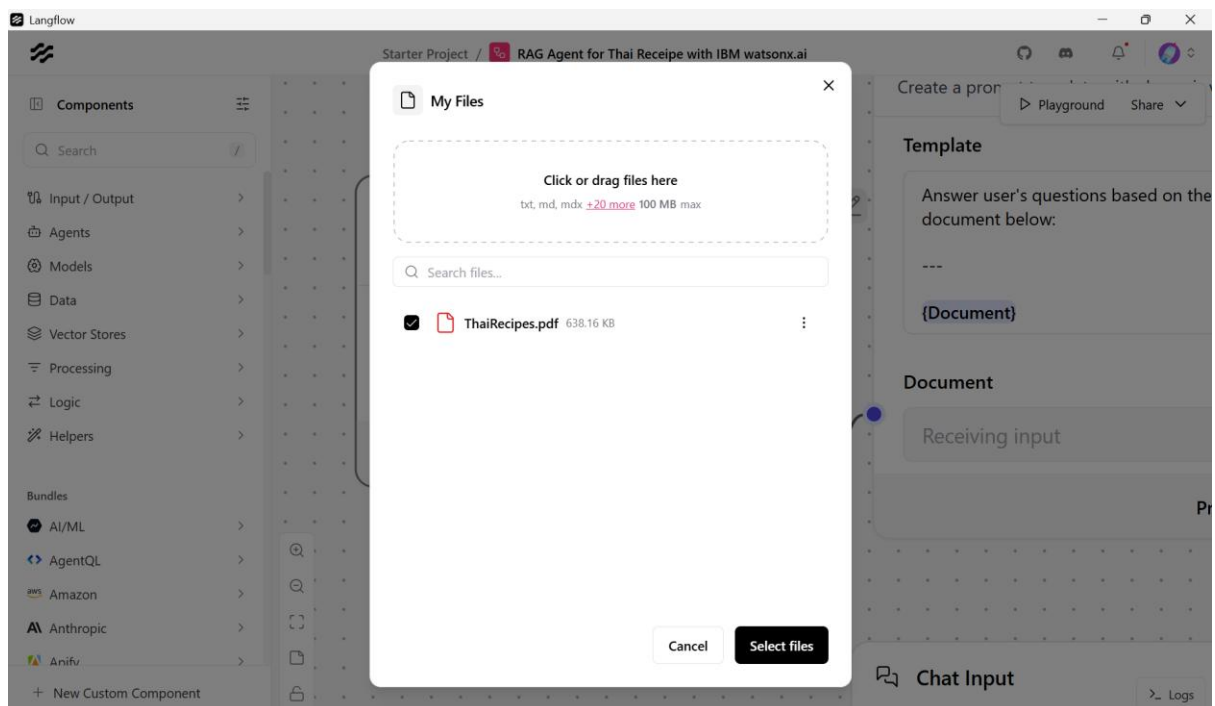
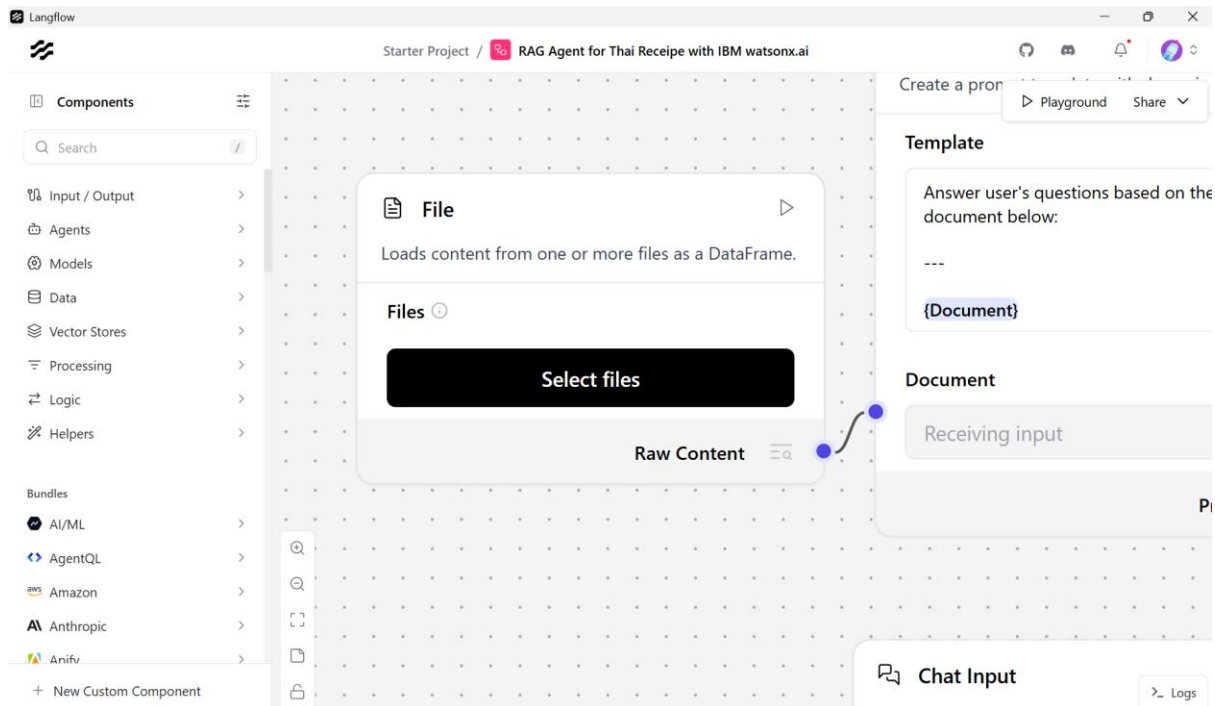
API Key= Your API Key

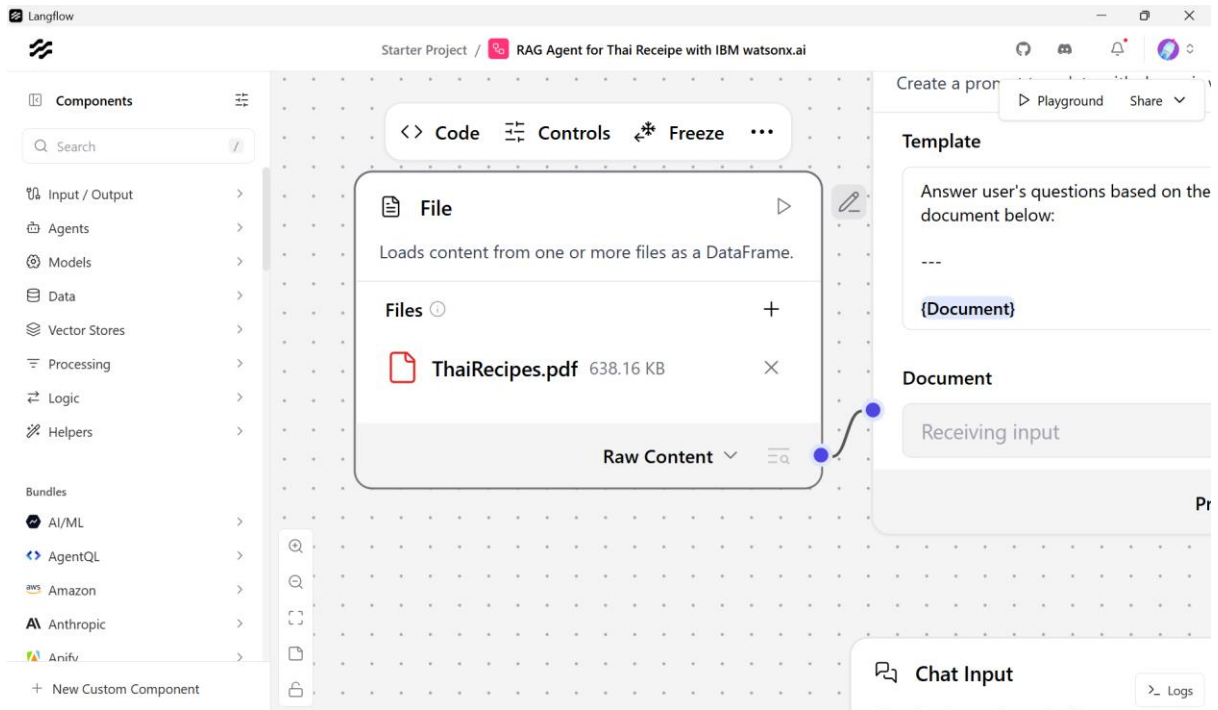
Modle Name- ibm/granite-3-2-8b-instruct

Create the flow as shown in diagram

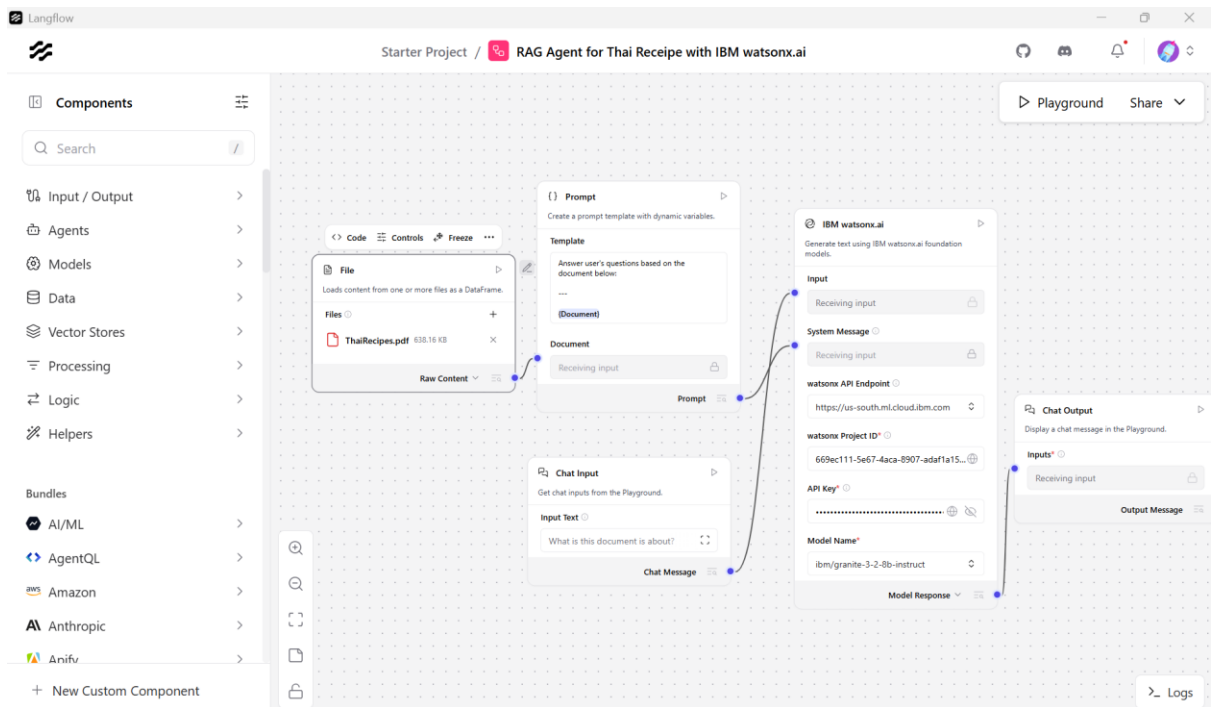


Step7 – In the File component , Click on Select Files and Upload your file . in this example upload ThaiRecipes.pdf which is downloaded in Step2





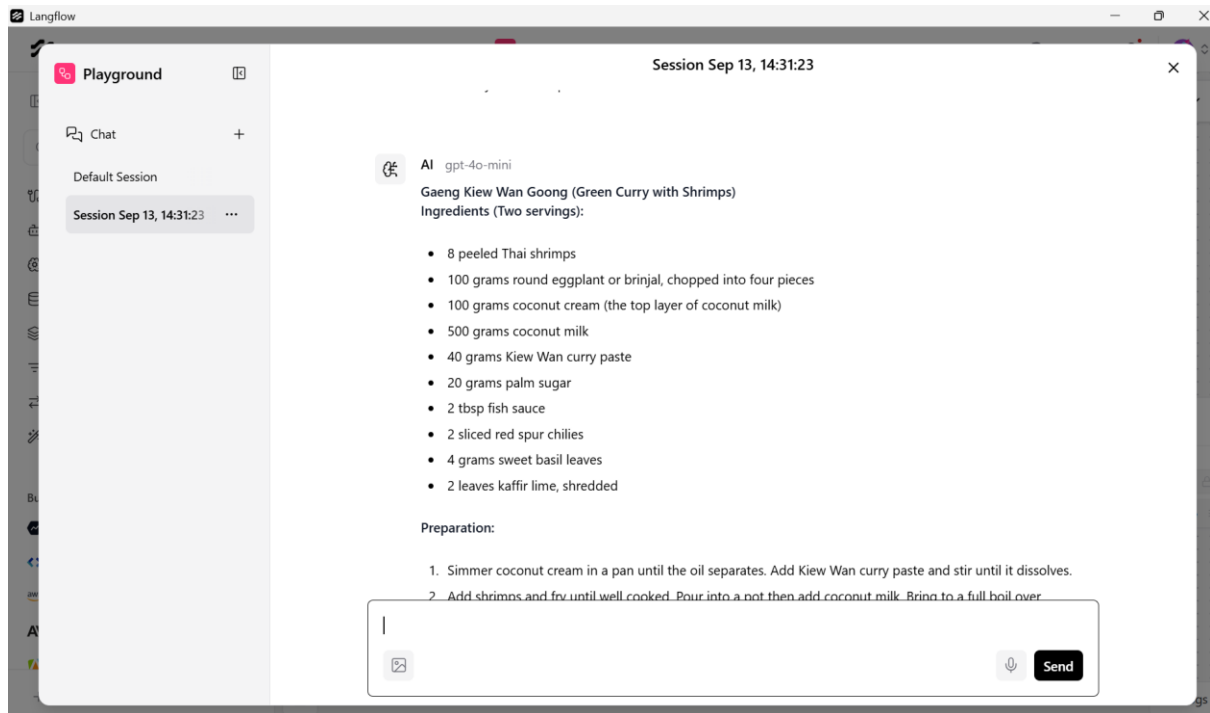
Now your flow will look like this



Step8 – Test your application

Click on Playground and write prompt

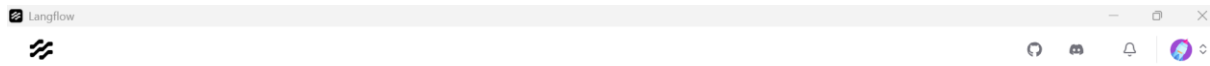
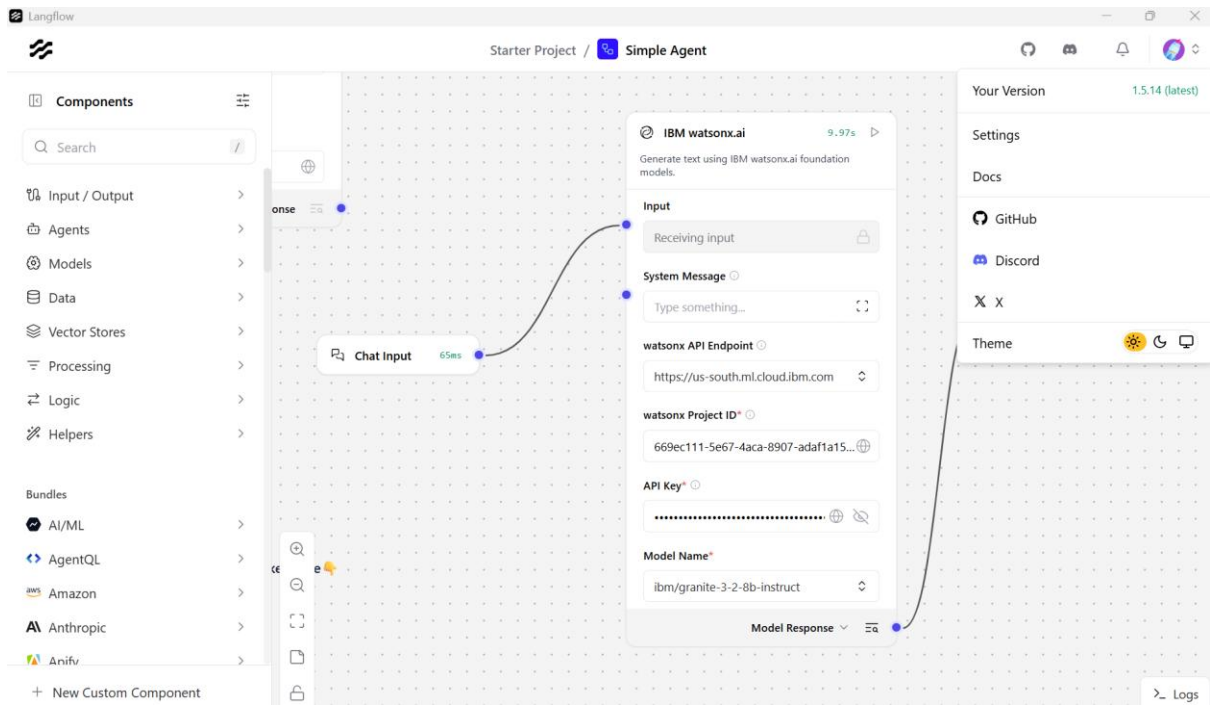
“ Tell the thai receipe for Green Curry with Shrimps “



Congratulations you have created **RAG Agent using IBM watsonx.ai with IBM Granite model – granite-3-2-8b-instuct model**

Step9– Deploy your model

- a) Create Langflow API Key - Click on Profile icon – Settings - **Langflow API Keys** -Add New – Give name “AutonomousAgent” – Generate API Key – Save your Langflow API Key in Notepad file (we need it for deployment coding) - Done



< Settings

Manage the general settings for Langflow.

General

MCP Servers

Langflow API Keys

Global Variables

Shortcuts



Messages

Langflow API Keys

Your secret Langflow API keys are listed below. Do not share your API key with others, or expose it in the browser or other client-side code.

+ Add New

| <input type="checkbox"/> | Name | Key | Created | Last Used | Total Uses |
|--------------------------|------|---------------|---------------------|-----------|------------|
| <input type="checkbox"/> | thai | sk-vmPD_***** | 2025-09-13 14:12:14 | Never | 0 |



1 to 1 of 1

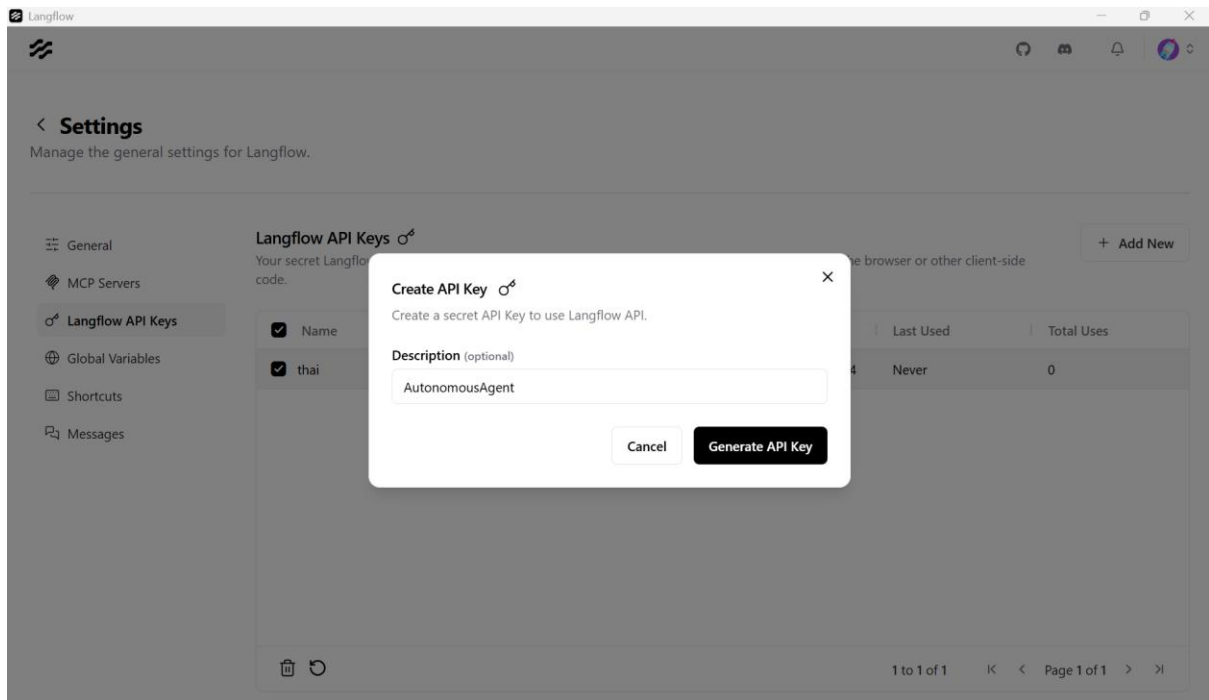
K

<

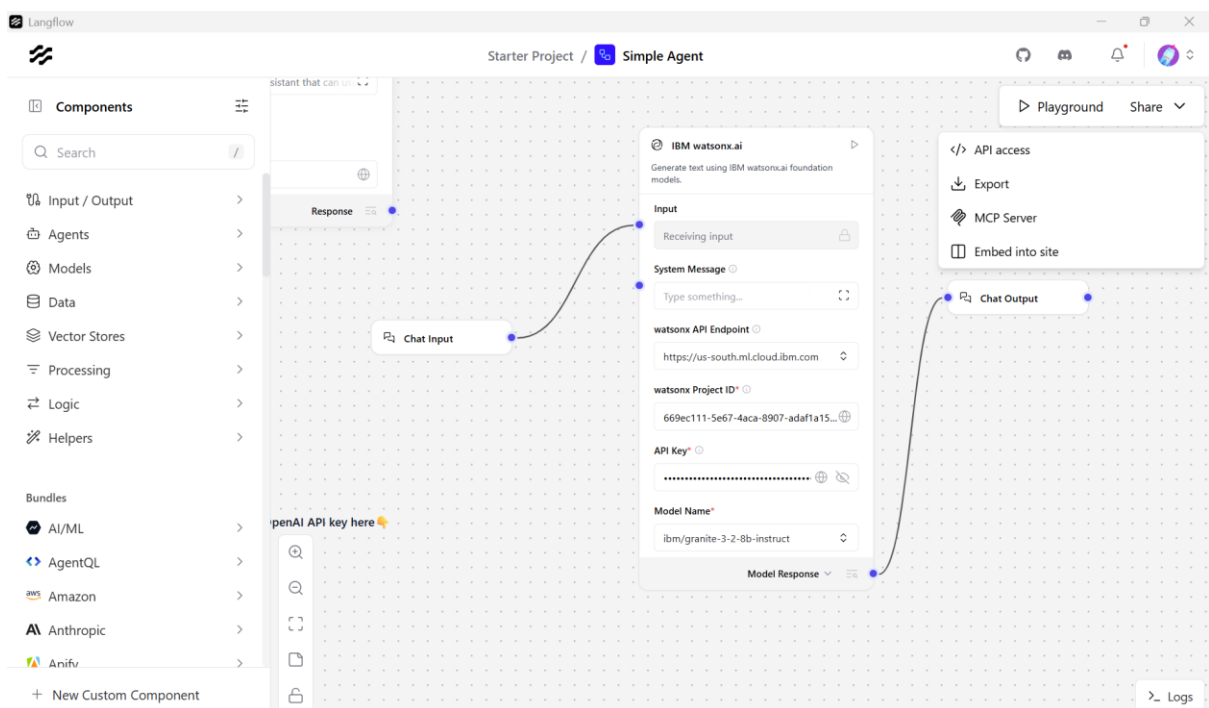
Page 1 of 1

>

X



b) Click on Share – API Access



It will show the code in different languages like Python , JavaScript , cURL.

For ex- Copy and run your the Python code as per your convience

Langflow

Starter Project / Simple Agent

Components

Search

Input / Output

Agents

Models

Data

Vector Stores

Processing

Logic

Helpers

Bundles

AI/ML

AgentQL

Amazon

Anthropic

Anifv

New Custom Component

Assistant that can...

IBM watsonx.ai

Generate text using IBM watsonx.ai foundation

Playground

Share

</> API access

Input Schema (0)

X

API access requires an API key. You can [create an API key](#) in settings.

Python

JavaScript

cURL

```
1 import requests
2 import os
3
4 # API Configuration
5 try:
6     api_key = os.environ["LANGFLOW_API_KEY"]
7 except KeyError:
8     raise ValueError("LANGFLOW_API_KEY environment variable not found. Please set your API key in t
9
10 url = "http://localhost:7860/api/v1/run/98a1a81b-80b4-4d51-adc9-b72756e3983b" # The complete API e
11
12 # Request payload configuration
13 payload = {
14     "output_type": "chat",
```

Chat Output

Logs