

Table 2
Topic names and corresponding keywords for nine OpenAI API categories.

OpenAI API Category	Topic Name	Keywords
Chat API	A1: API Core Operation Errors	typeerror, function, sdk, chatcomplet, react, js, stream, unabl
	A2: Model Migration	current, messag, llm, modul, attributeerror, fail, valid, paramet
	A3: Context Management	model, prompt, code, langchain, question, process, davinci, support
	A4: Streaming and Asynchronous Processing	stream, request, respons, javascript, timeout, fastapi, async, convers
	A5: Security and Authorization	endpoint, deploy, document, variabl, context, messag, custom, access
	A6: Performance Optimization	respons, node, memory, input, fix, json, langchain, pars
	A7: Multimodal Processing	file, data, extract, web, html, load, applic, resourc
	A8: Framework and Toolchain Integration	queri, next, generat, post, url, invalid, complet, open
	A9: Custom Functionality	implement, app, content, return, connect, problem, async, local
Embeddings API	B1: Vector Database Integration and Maintenance	langchain, document, data, faiss, chromadb, db, vector, memori
	B2: API Request Failures and Rate Limitation	pinecon, file, respons, token, openaiembed, vectorstor, csv, limit
	B3: Attribute and Query Errors	queri, attribut, return, similar, emb, generat, score, calcul
	B4: Retrieval-Augmented Generation	rag, index, llm, prompt, vector, chunk, metadata, llamaindex
	B5: Embedding Model Configuration	embed, search, azur, gpt, semant, dimensi, context, cousin
	B6: Data Management and Storage	text, chroma, model, pdf, load, chromadb, exist, issue
	B7: Search Performance and Optimization	vector, search, data, python, function, modul, issue, queri
Audio API	C1: Model Errors and File Loading	whisper, audio, file, transcrib, attributeerror, numpi, requir, system
	C2: Format Conversion and Stream Processing	format, ffmpeg, convert, wav, stream, respons, modul, call
	C3: Cross-Platform Deployment	instal, react, nativ, gpu, app, languag, code, transcript
	C4: API Request Parameter Errors	request, timestamp, js, nodej, type, object, load, integr
	C5: Performance Optimization and Cost Management	token, cuda, directori, process, version, asr, invalid, generate
	C6: Large-scale File Processing	audio, transcrib, chunk, video, filenotfounderror, import, run, client

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Table 2

Topic names and corresponding keywords for nine OpenAI API categories (continued)

OpenAI API Category	Topic Name	Keywords
Assistants API	D1: Core Functions and Fundamental Configuration	agent, model, function, code, format, document, file, assist
	D2: Context Maintenance and Enhancement	convers, custom, chat, question, input, respons, user, system
	D3: Tool Integration and Model Extension	llm, tool, integr, json, upload, rag, langchain, output
	D4: Real-time Response and Stream Processing	stream, respons, websocket, handl, run, react, chatbot, assist
	D5: Threads and Automation Processing	thread, messag, process, run, chain, retriev, data, file
	D6: Function Calling	function, call, paramet, argument, schema, type, python, prompt
Fine-tuning API	E1: Basic Error Handling	error, expect, found, face, batch, size, generat, openai
	E2: Customization via Model Fine-tuning	llama, data, transform, prompt, differ, finetun, complet, result
	E3: Dataset Construction and Output Control	custom, dataset, input, classif, task, peft, answer, return
	E4: API Basic Usage	use, file, format, gpu, creat, turbo, type, api
	E5: Model Management and Resource Optimization	python, upload, token, code, loss, output, base, api
Image Generation API	F1: Image Input Formats and API Configuration	imag, api, rgba, upload, configur, request, js, error
	F2: API Usage Limits and Cross-Environment Invocation Conflicts	generat, error, limit, firebas, call, fail, variat, use
	F3: Generated Image Processing and Version Updates	dall, url, download, nodej, python, creat, librari, implement
GPT Actions API	H1: Custom Action and Multi-Operation Management	action, custom, function, agent, integr, langchain, tool, llm
	H2: External Data Connectivity and File Processing	data, file, access, schema, server, googl, send, configur
Others	I1: General Technical Barriers	error, rate, key, azur, token, api, openai, proxi
	I2: OpenAI API Edge Cases	content, request, model, url, post, limit, ssl, file