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## 1) OPEN AI MODELS (Free plan)

Goals : **Core LLM (Open Source)**

### Requirements:

- Scalable
- Actively maintained
- Very low probability of abrupt deprecation
- Strong instruction-following
- Multilingual capability
- Long-term (2+ year) reliability

#### 1) LLAMA ([docs](#))

Models we can use : Llama 3.3 (70B , 8B)

Depcapriation : No date mentioned (So not anytime soon)

Tokens :128K

Data type : Only text

Multilingual Support: Yes (100+)

#### 2) Qwen3-Coder 30B A3B Instruct ([docs](#))

Models we can use : Llama 3.3 (70B , 8B)

Depcapriation : No date mentioned (So not anytime soon)

Release Date : August 2025

Tokens :262,144 tokens

Data type : Sparse Mixture-of-Experts code-generation / instruct model from Qwen3 series  
— optimized for large context, repository-scale code understanding and complex code tasks.Strong code-generation, tool-calling, agent-style

Multilingual Support: Yes a little lesser than other models

#### 3) Mistral-7B-Instruct-v0.3 ([docs](#))

Depcapriation : No date mentioned (So not anytime soon)

Release Date : July 2024

Tokens :32.8K tokens

Data type : Highly efficient 7B model known for strong performance and instruction following

Multilingual Support: No

4) gpt-oss-120b([docs](#))

Depcapriation : No date mentioned and it the latest model as of now (So not anytime soon)

Release Date : 2024

Tokens : 31.1k tokens

Data type :OpenAI's largest open-weight reasoning model designed for powerful reasoning, agentic tasks, and versatile developer use cases.

Multilingual Support: Yes but quality is maybe not confirmly very good

5) DeepSeek R1 Distill LLaMA 70B([docs](#))

Depcapriation : No date mentioned (So not anytime soon)

Release Date : January 2025

Tokens : 64k tokens

Data type :DeepSeek R1 Distill LLaMA 70B is a distilled, efficient version of DeepSeek's R1 reasoning model. It provides strong chain-of-thought reasoning, advanced problem solving, and high-quality text generation with significantly reduced GPU memory requirements

Multilingual Support: Maybe No cause it is for chain-of-thoughts, mathematics , logics

6) DeepSeek R1 ([docs](#))

Depcapriation : No date mentioned , released this year only (So not anytime soon)

Release Date : January 2025

Tokens : 128K tokens ( 32K–64K usable actually through hugging face)

Data type :DeepSeek R1 excels at **advanced reasoning**, especially in math, logic, and multi-step problem solving.

It also performs well in coding, general chat, and tool-enabled tasks, but reasoning is its main strength.

Multilingual Support: **Yes**

Strength Levels:

**Strong:** English, Chinese

**Good:** Hindi, Japanese, Korean, French, Spanish, German

**Moderate:** Other European & Indian languages

**Weak:** Very low-resource languages

It works best in English + Chinese.

## Vector Embeddings

### Model / Framework

### What it offers / Why good

#### LaBSE

Provides language-agnostic sentence embeddings across 100+ languages; open-source under Apache 2.0. Good for cross-lingual retrieval / embedding.

#### Sentence Transformers (plus multilingual models)

A widely used framework; many pre-trained models (multilingual) available under permissive license, giving you dense sentence embeddings out-of-box.

#### GTE Multilingual Base

A newer model supporting 50+ languages, explicitly designed for multilingual sentence embeddings / dense retrieval, released under Apache-2.

#### (Alternative) LASER

Older but proven multilingual sentence-embedding toolkit; supports dozens of languages with a unified embedding space.

## Vector Databases

- 1) Qdrant : embedding PDFs, storing chunks, needing metadata + semantic search, building a retrieval/query + re-embedding pipeline. Qdrant is often the “go-to” for mid-sized vector stores with metadata + good performance.
- 2) ChromaDB : Early-stage/new projects, prototyping RAG pipelines, moderate-sized document collections (e.g. a few thousand to maybe 100k chunks), or when you just want something simple and easy to integrate with Python.
- 3) Milvus : If we need scaling up to very large document stores (millions of documents / embeddings), need high throughput and low latency for many concurrent users/queries — e.g. enterprise knowledge bases, large-scale retrieval + RAG systems, multimodal data stores, etc.

#### 4) Pinecone

- **Type:** Fully managed vector database
- **Free Tier:** Yes, ~1M vectors free + 512 dimension per vector (as of 2025)
- **Scalable:** Serverless & fully managed
- **Multilingual/embedding model support:** Works with *any embedding model* (you push vectors yourself)
- **License / API:** API access, cloud-hosted, no local hosting needed
- **Limitations:** Free tier limited in vectors and queries; larger scale requires paid plan