

Da Documenti Statici a Risposte Immediate: La Rivoluzione AI nel Settore Industriale

MACCHINONE



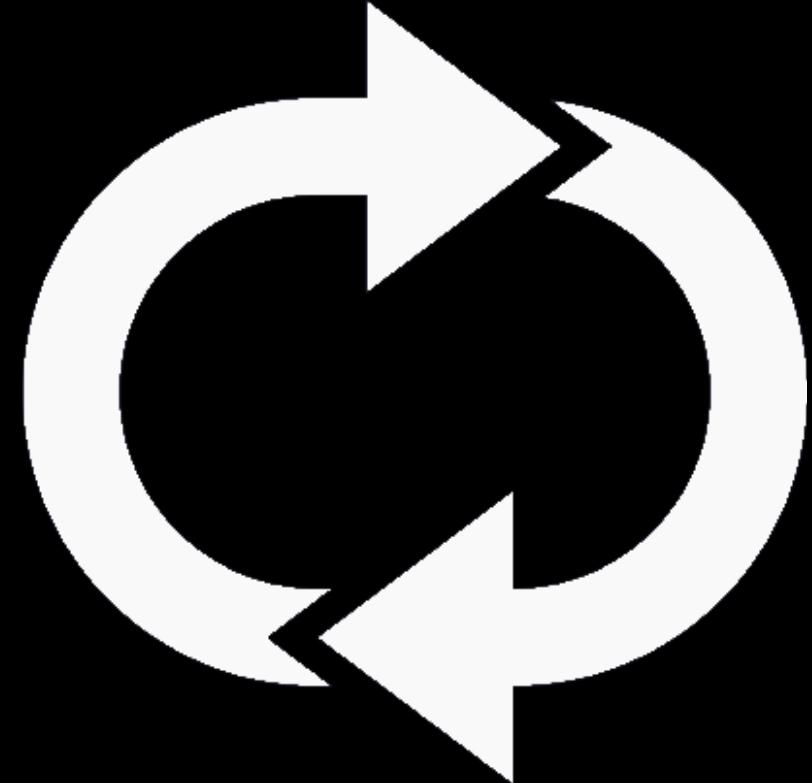




How did we fix and address such problems with AI?

How we achieved the result

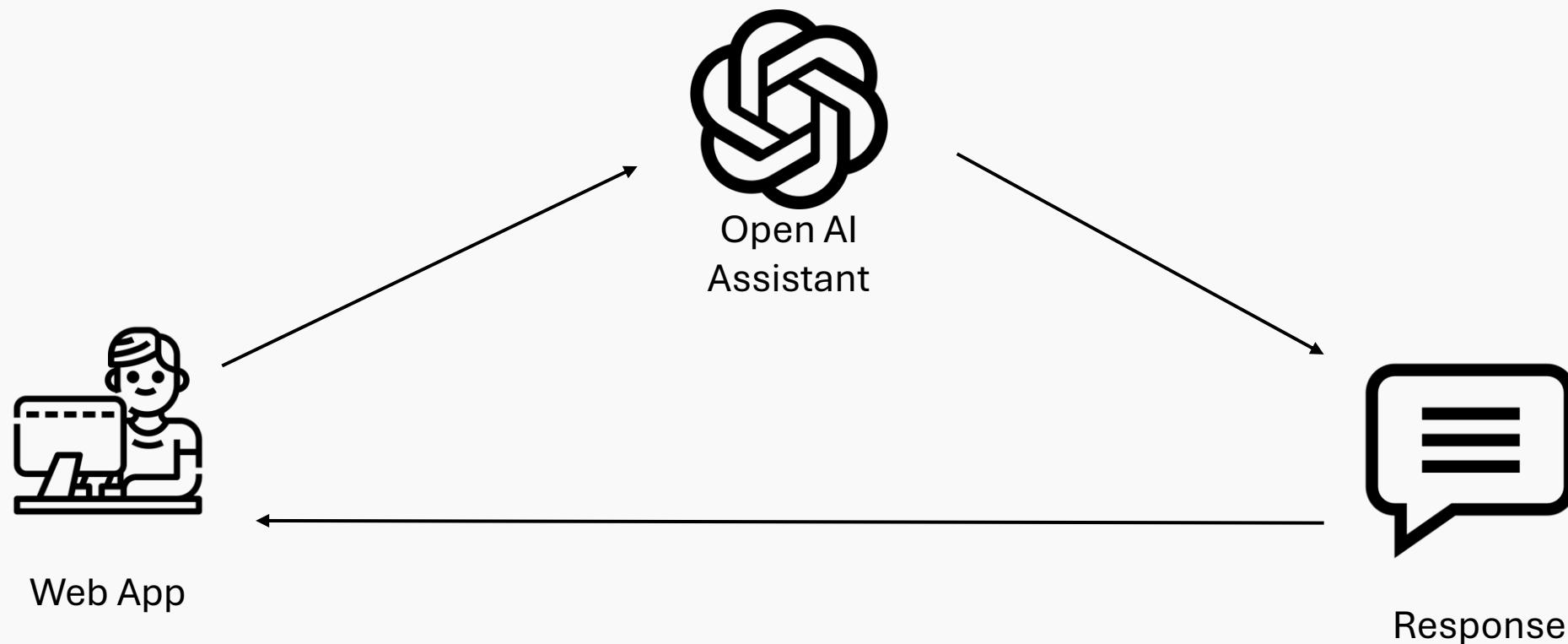
- Agile approach
- Small valuable features
- Continuous feedback
- Incremental deliveries



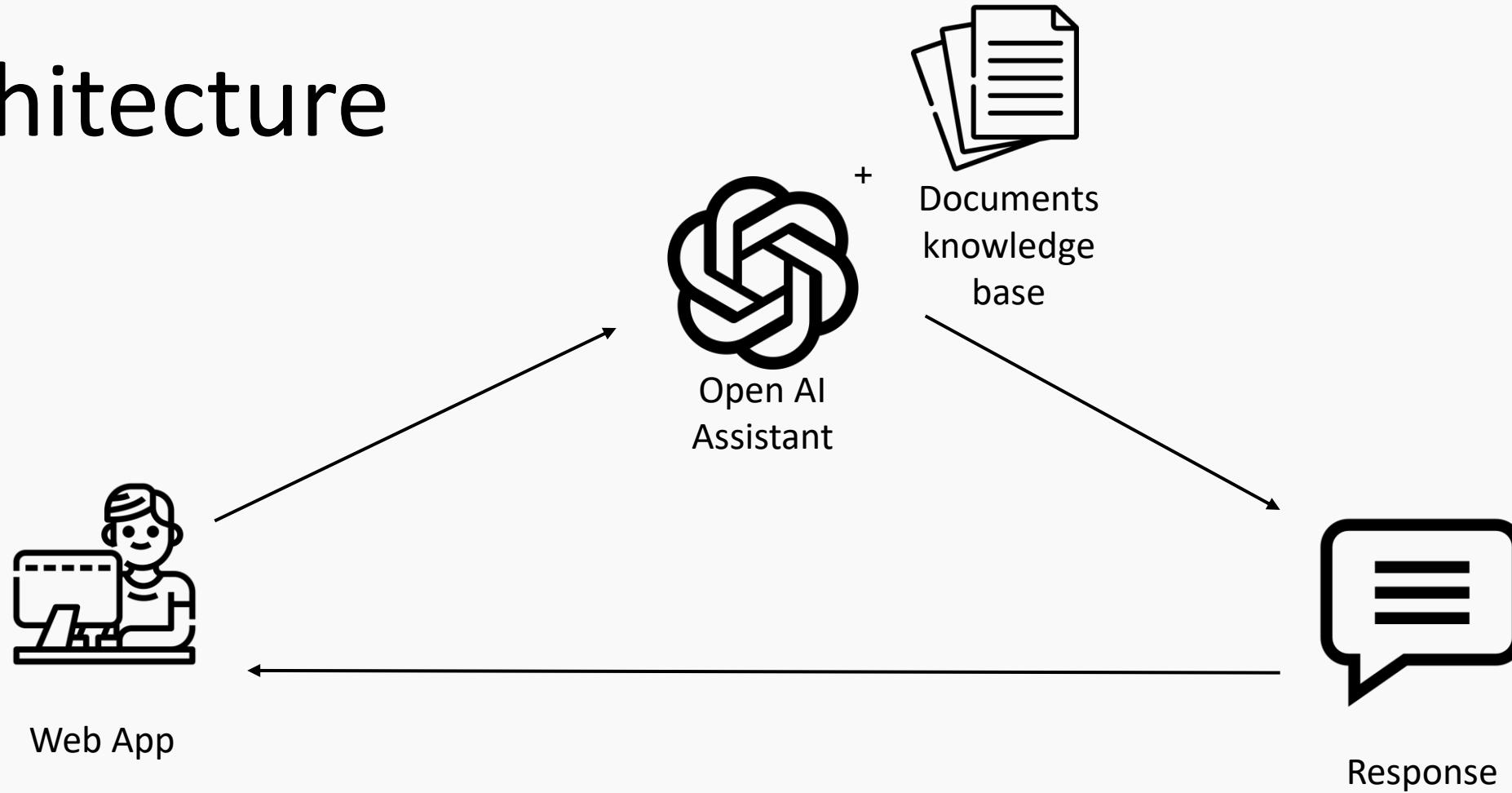
First Sprint

Building the web app

Architecture



Architecture



Open AI or a custom model ?

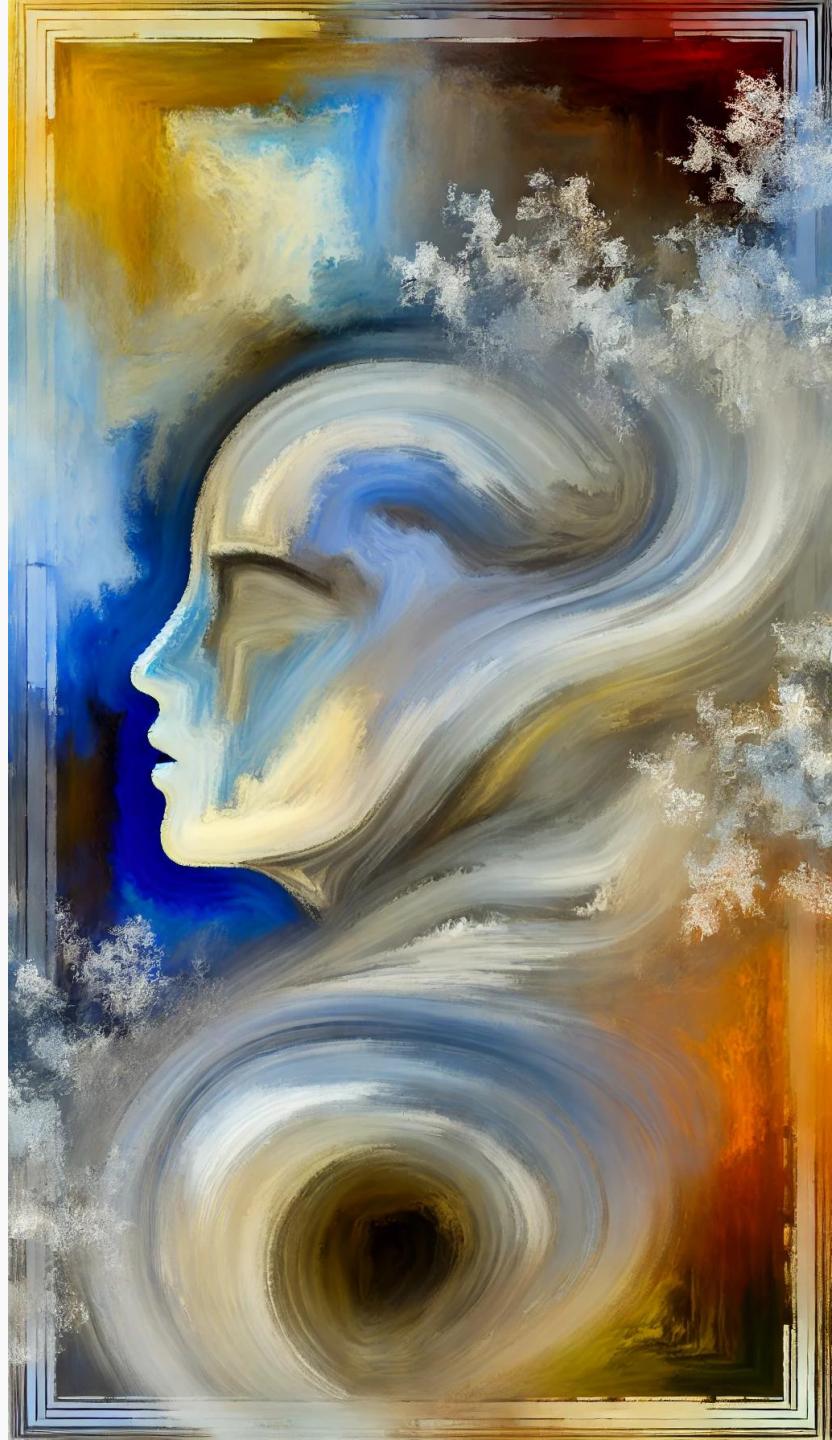
Open AI or a custom model ?

- Maximize results with minimal investments



Open AI or a custom model ?

- Maximize results with minimal investments
- State of the art



Open AI or a custom model ?

- Maximize results with minimal investments
- State of the art
- Able to be swapped out



First sprint review



But



Second Sprint

Retrieval of chatbot response document references

OpenAI message annotations

- [13+source]

OpenAI message annotations

- **【13+source】**
- File citation

OpenAI message annotations

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- The response sometimes contained no citation

OpenAI message annotations

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- Only gave citations to the document

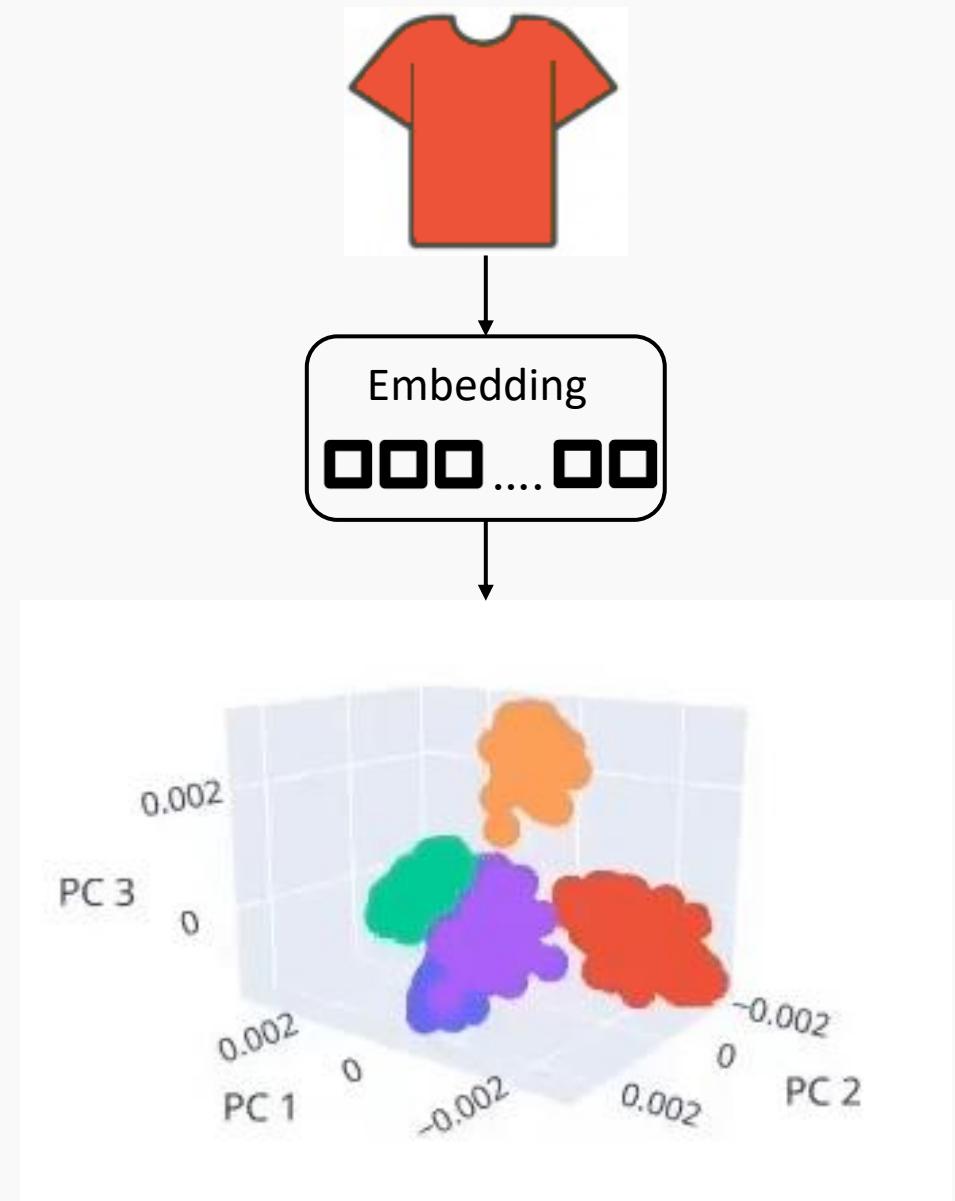
OpenAI message annotations

- 【13+source】
- File citation
- The response sometimes contained no citation
- Only gave citations to the document
- We needed page references

We built our vector space

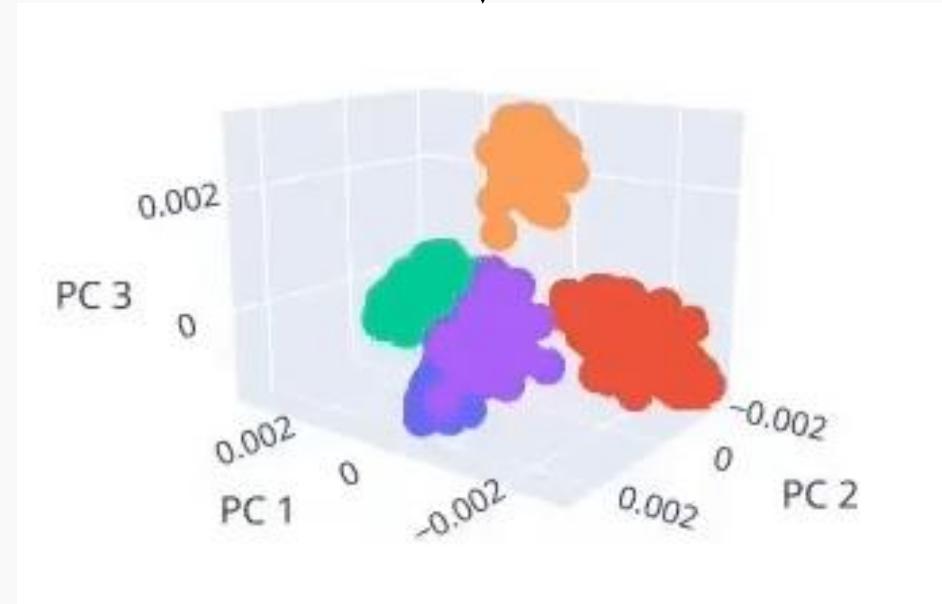
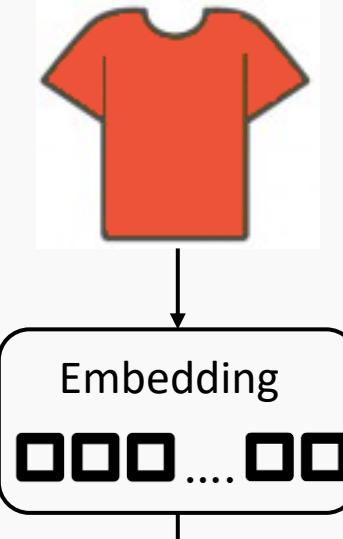
What is a vector space?

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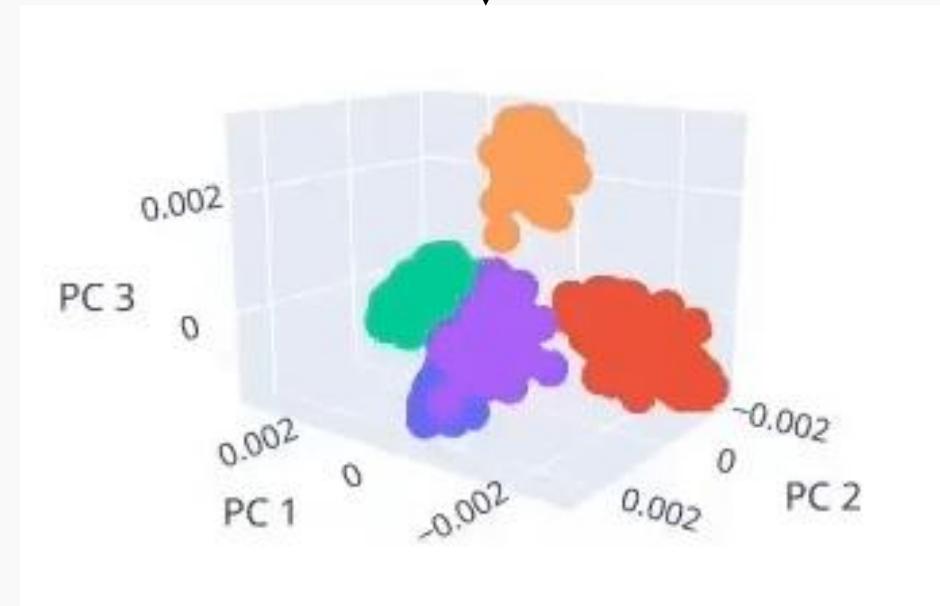
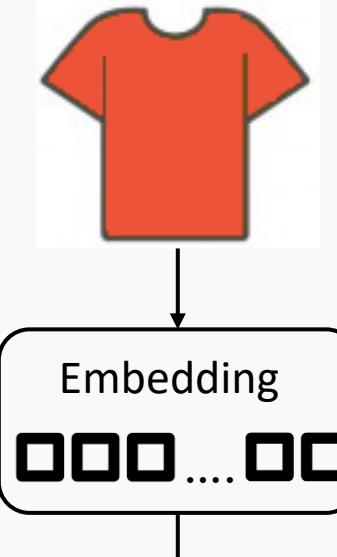
What is a vector space?

- N dimensional space (depending on the size of the vector)



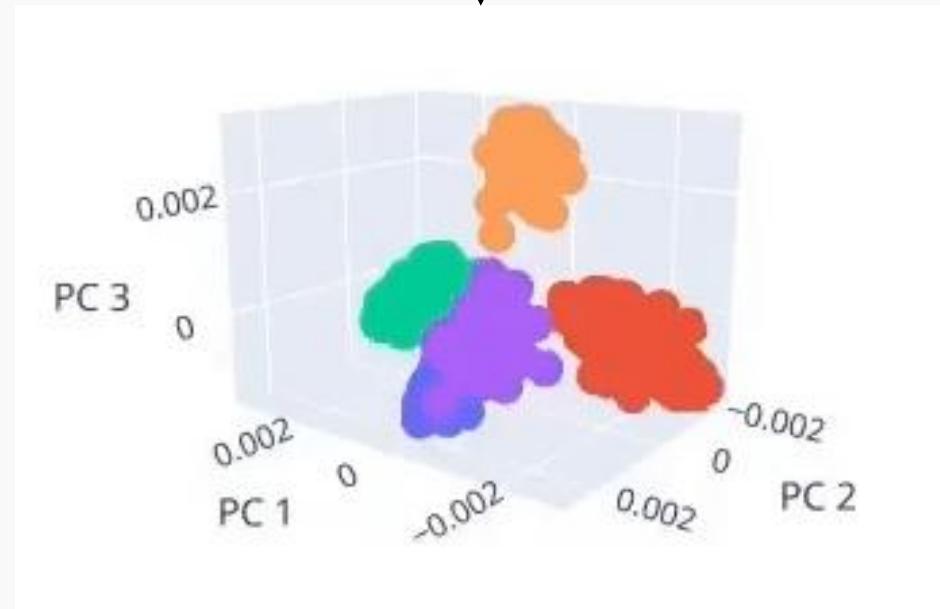
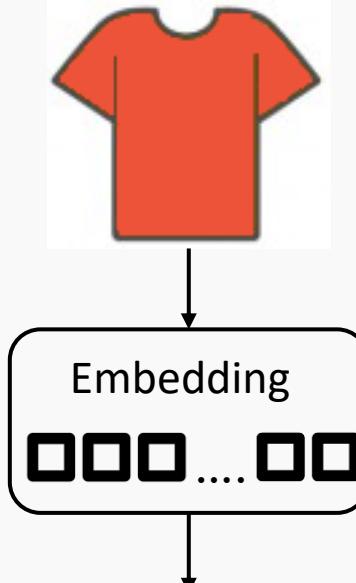
What is a vector space?

- N dimensional space (depending on the size of the vector)
- Each item is located at a certain coordinate



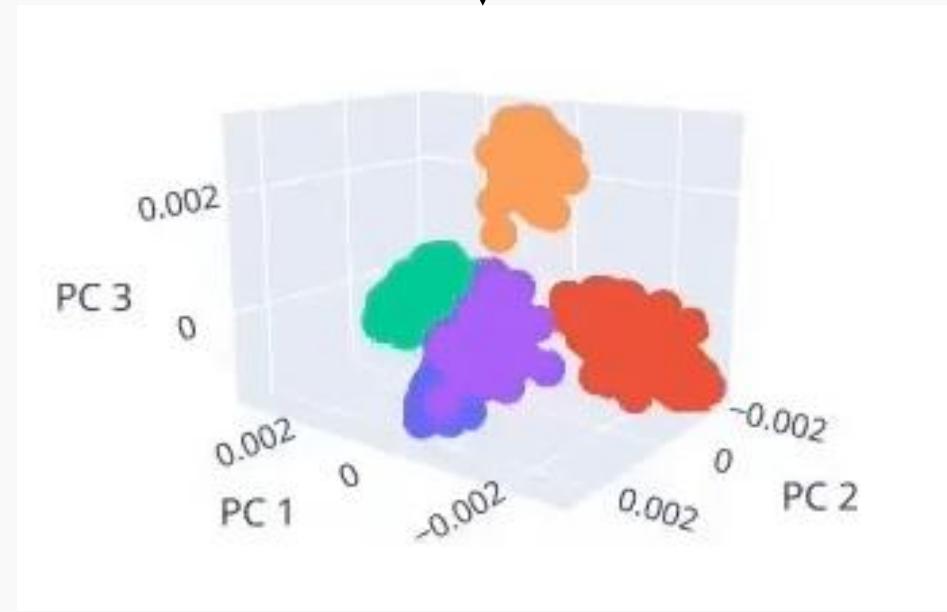
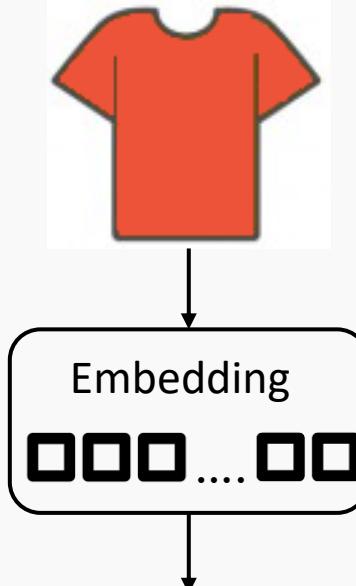
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What is a vector space?

- N dimensional space (depending on the size of the vector)
- Each item is located at a certain coordinate
- Items with similar embedding representation tend to be closer
- Huge performances in search

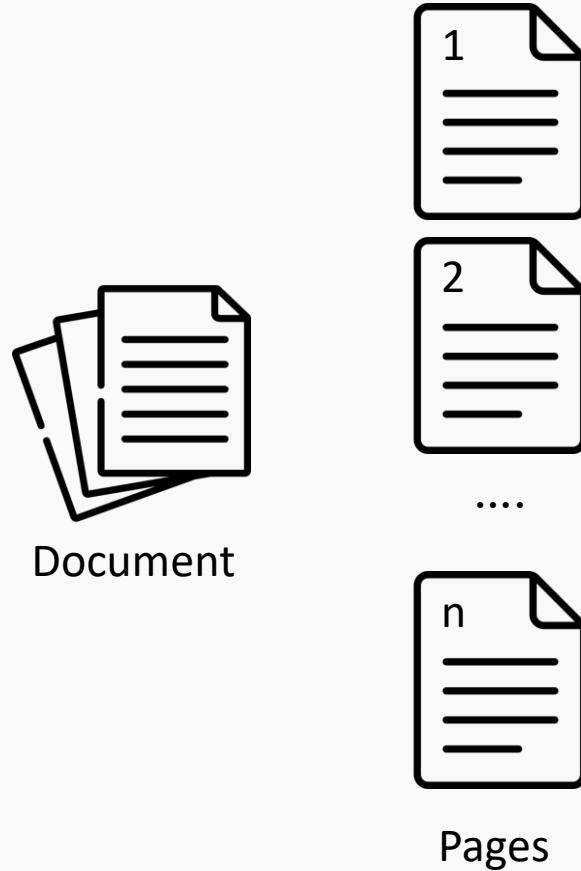


Our vector space

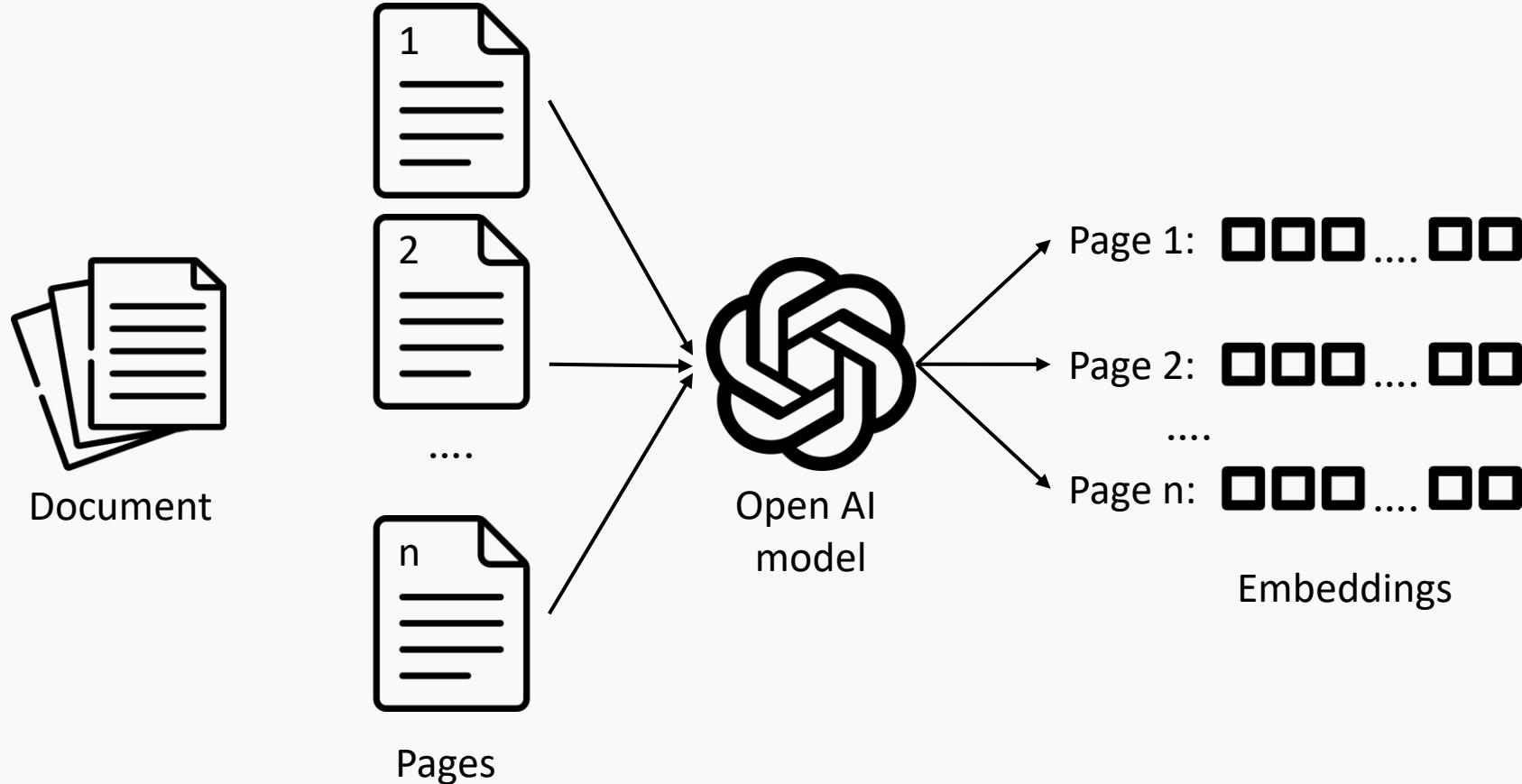


Document

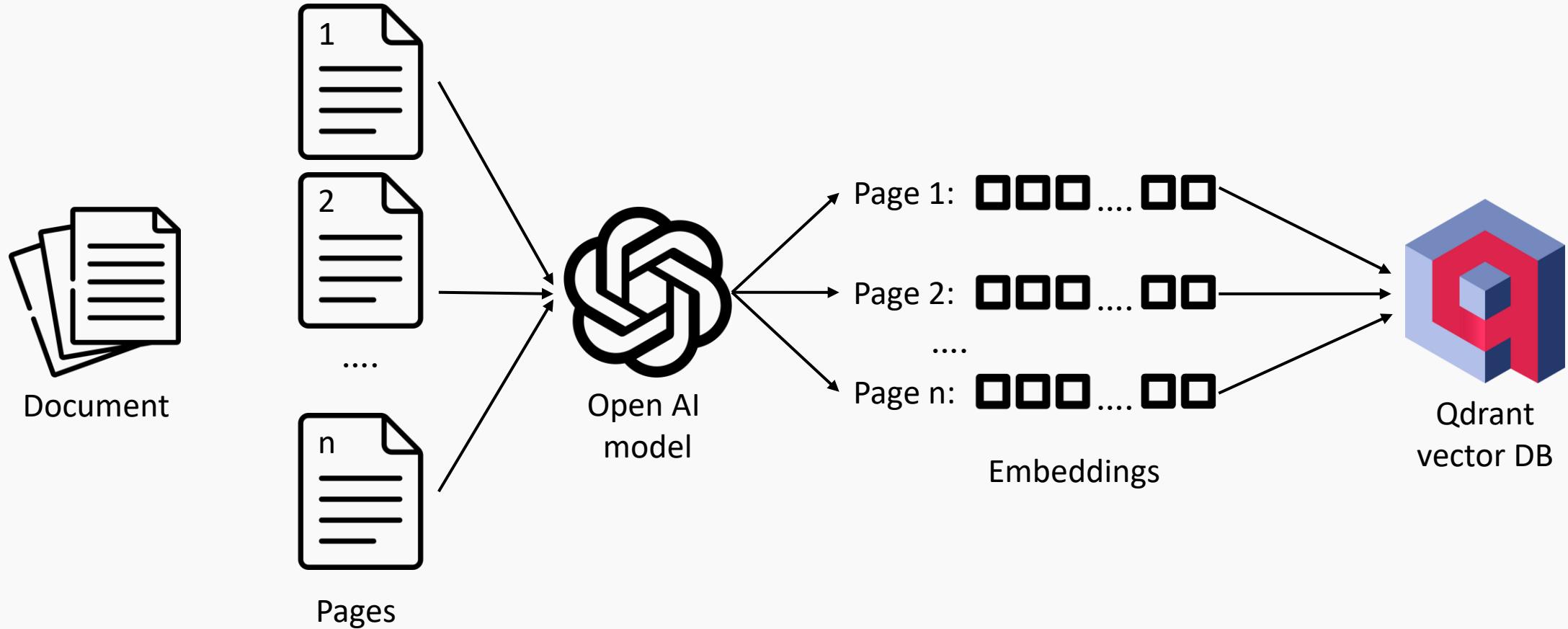
Our vector space



Our vector space



Our vector space



Qdrant

- Vector Database



Qdrant

- Vector Database
- Performances in vector search



Qdrant

- Vector Database
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- Possibility to choose granularity



Qdrant

- Vector Database
- Performances in vector search
- Possibility to choose granularity
- Model independent

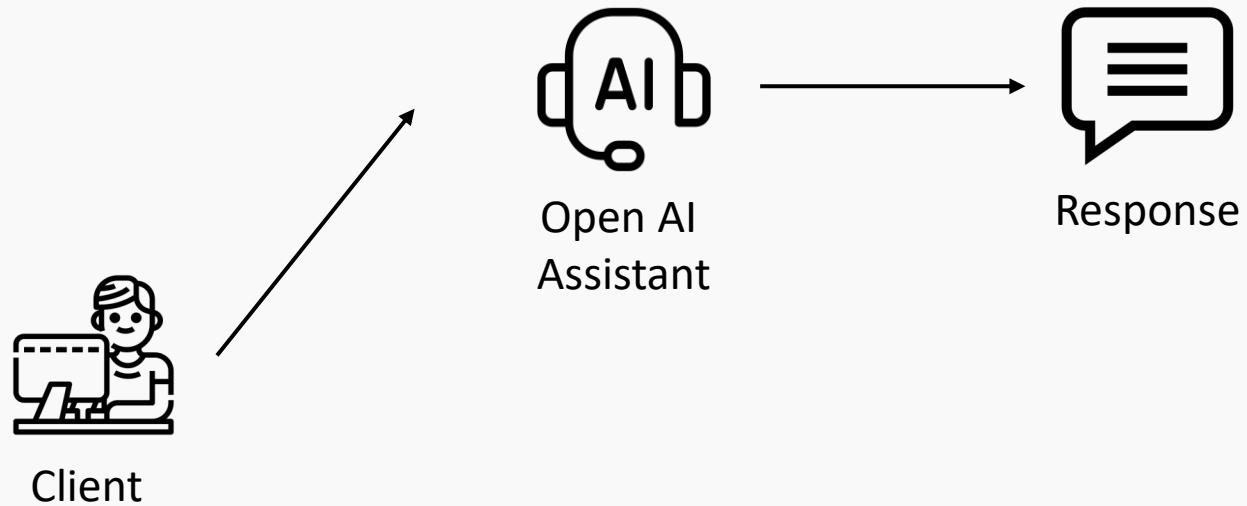


Qdrant

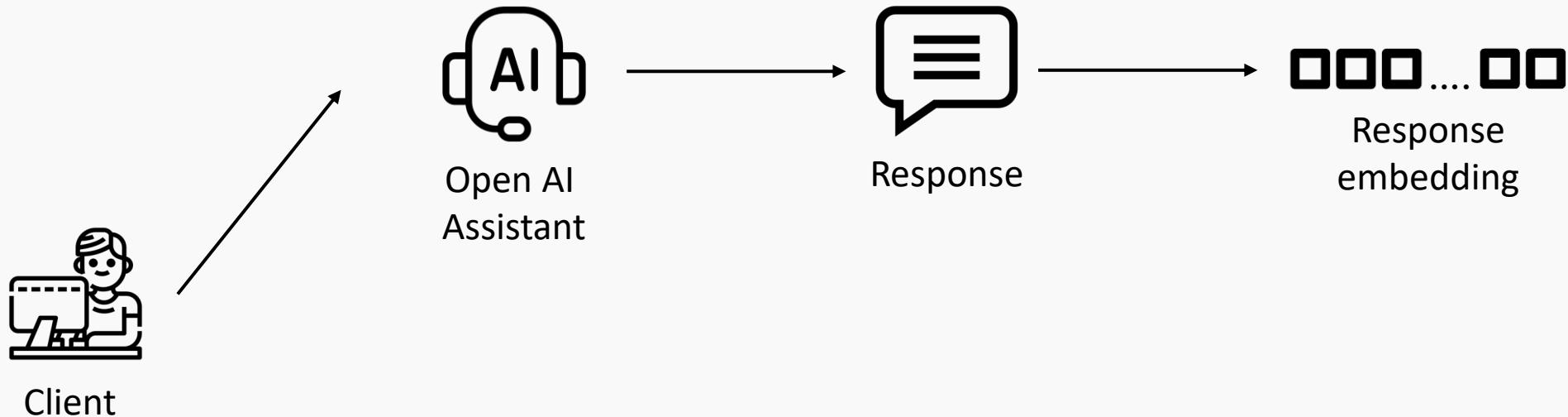
- Vector Database
- Performances in vector search
- Possibility to choose granularity
- Model independent
- Open-source



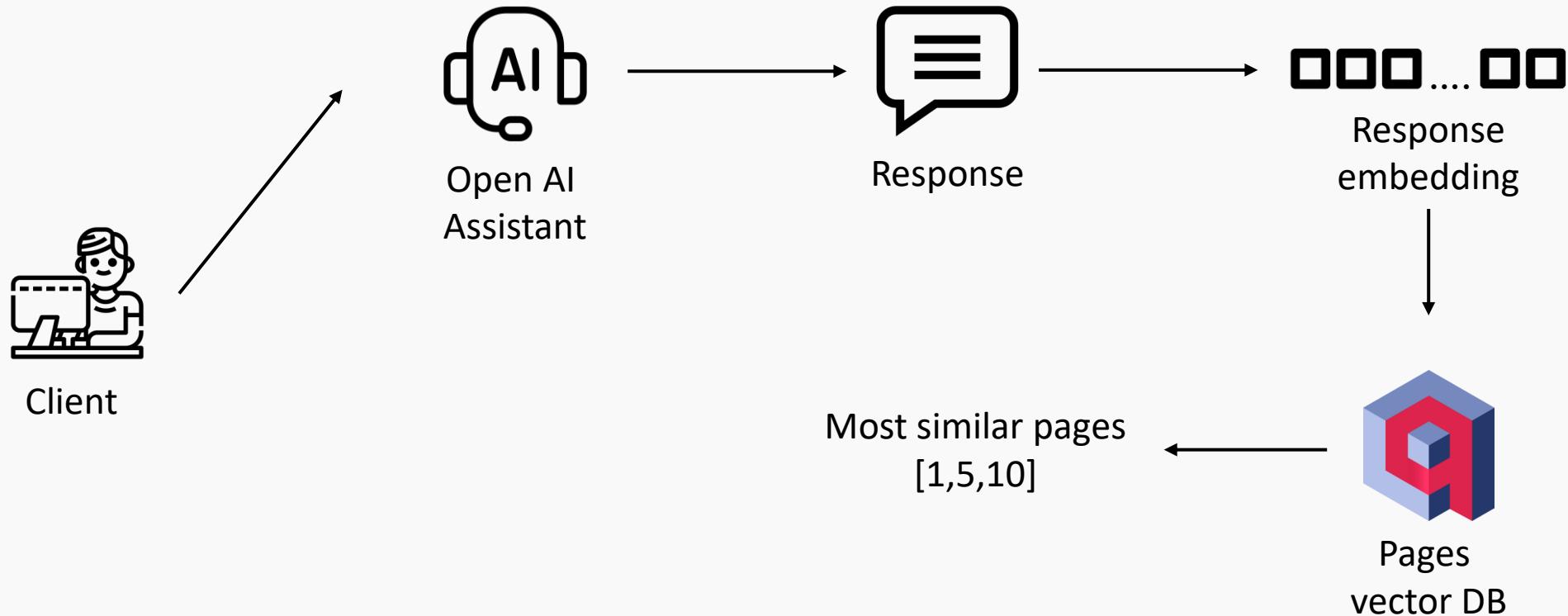
Web App



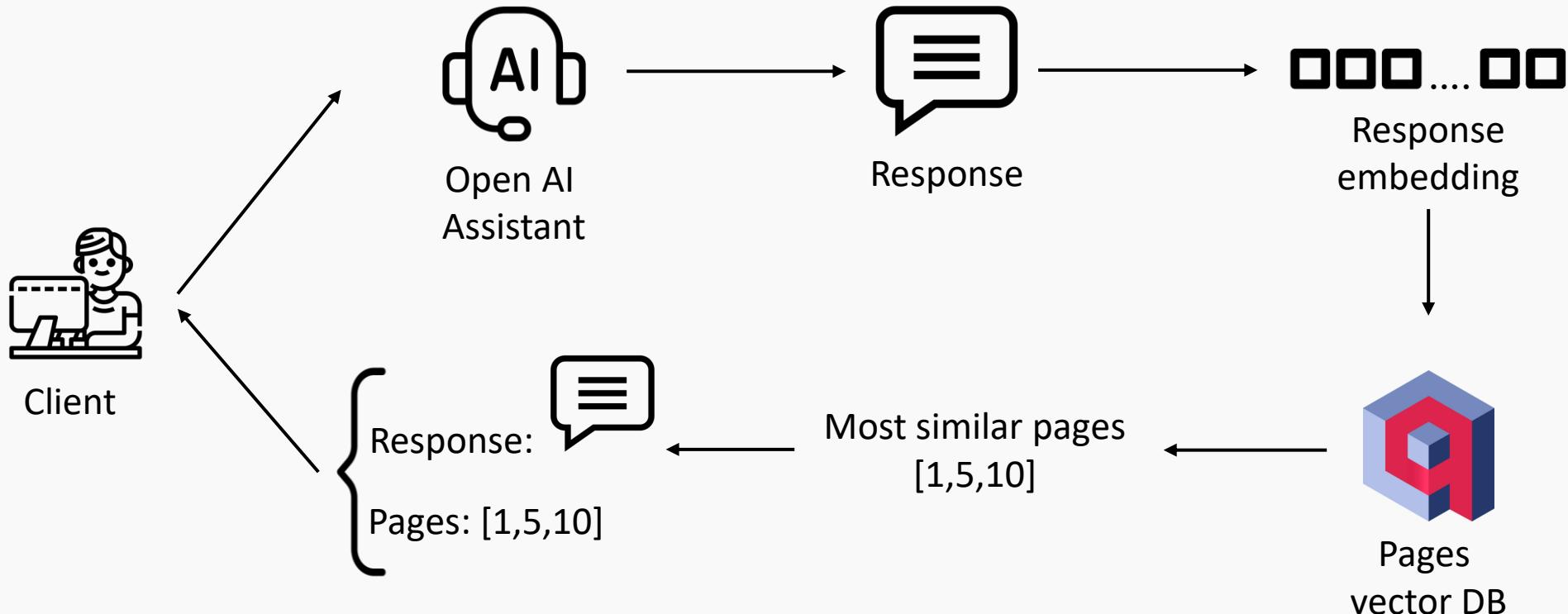
Web App



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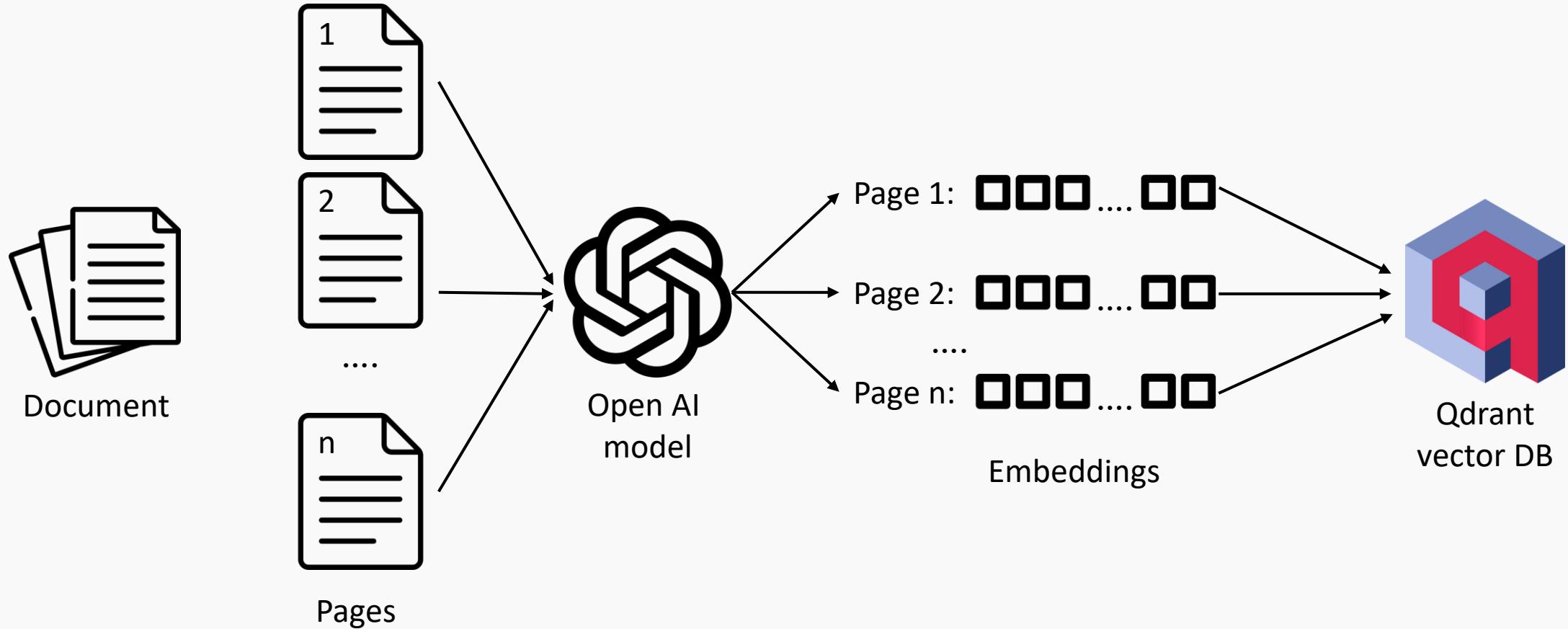
Web App



Third Sprint

Automatic generation of vector space

Our vector space



Haystack

- Pipeline



Haystack

- Pipeline
- Multi-model support



Haystack

- Pipeline
- Multi-model support
- Flexibility (e.g. embedding size and type)



Haystack

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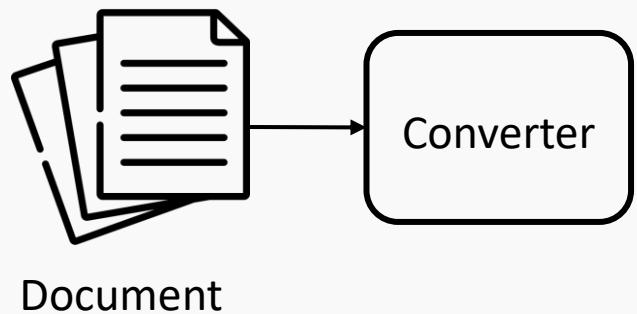


Haystack pipeline

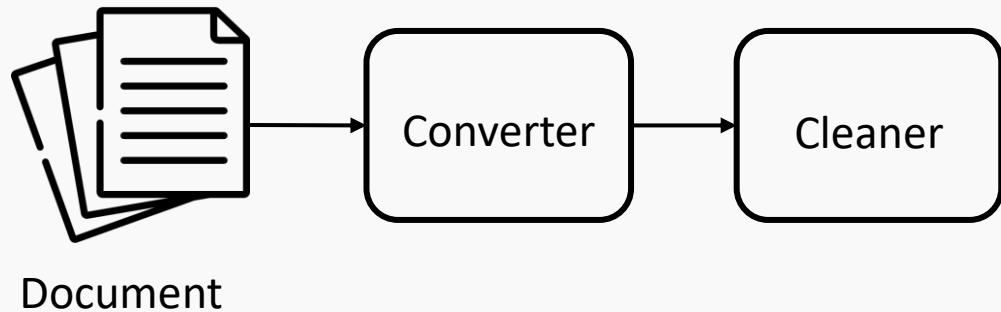


Document

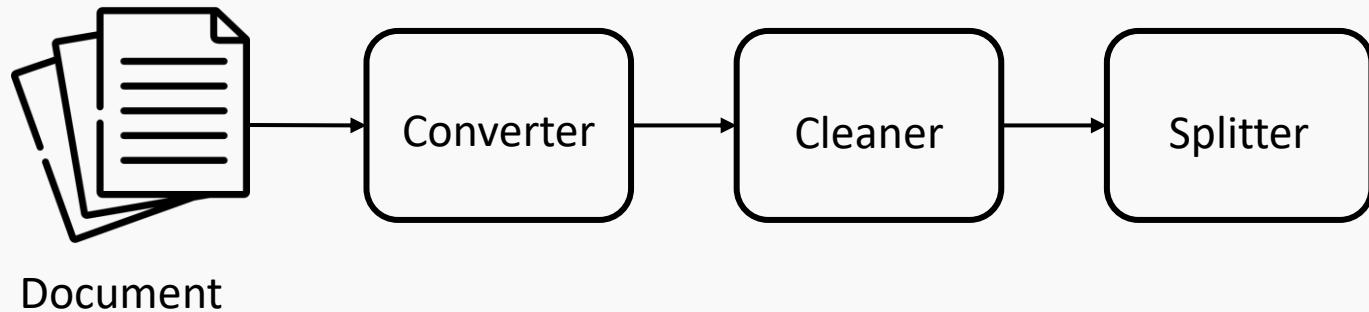
Haystack pipeline



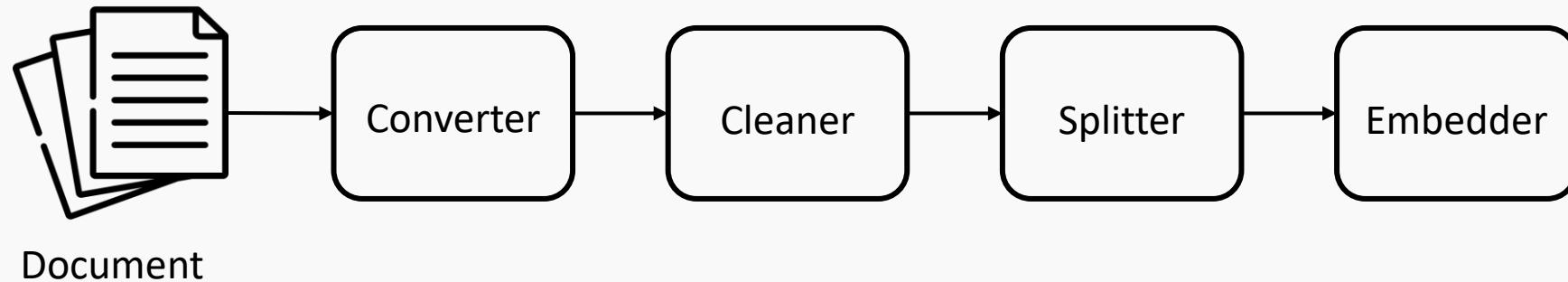
Haystack pipeline



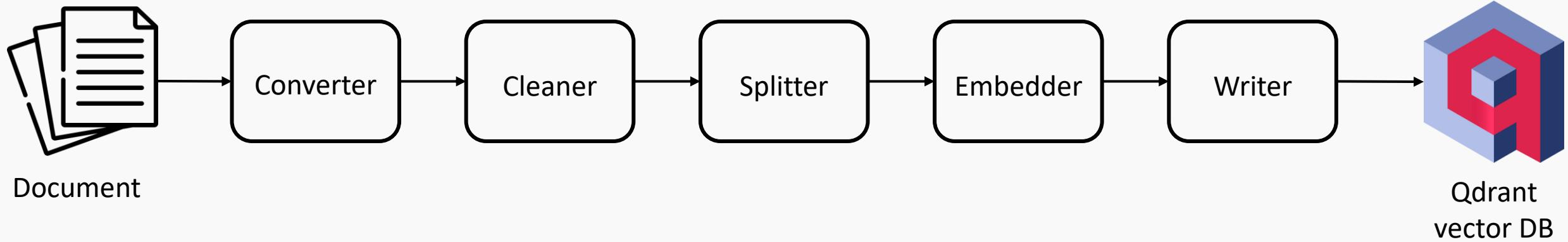
Haystack pipeline



Haystack pipeline



Haystack pipeline



DEMO

YOUR WAY
INTO
THE
FUTURE

WHO IS MEMORIA

INTRÉ



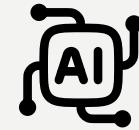
Memoria



INTRÉ

INTRÉ VENTURE

What we do

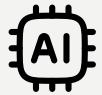


PROJECTS



KNOWLEDGE

Projects



CUTTING EDGE &
TAILOR MADE



NEEDS & REQUIREMENTS
ANALYSIS



INCREMENTAL
DEVELOPMENT



COMPLETE PROCESS
COVERAGE

WHO IS MEMORIA

Knowledge



WORKSHOPS



ONLINE COURSES



MENTORING

Thanks, questions?

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