

[illegible]

SPRING AI

GENERATIVE ARTIFICIAL INTELLIGENCE CON JAVA

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Corso avanzato per Venis S.p.A, Venezia, Italia

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Note

[illegible]



RETRIEVAL AUGMENTED GENERATION

PARTE 2

Note

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- 3 / 12

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```
...
<dependency>
  <groupId>org.springframework.ai</groupId>
  <artifactId>spring-ai-tika-document-reader</artifactId>
</dependency>
...
```

Note

[illegible]

```
spring:
  ...
  profiles:
    active: rag-document-to-vector-store
  autoconfigure:
    ...
```

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```
demo:
  rag:
    prompt:
      system:
        ita: classpath:templates/get-rag-hr-data-system-ita-prompt.st
        eng: classpath:templates/get-rag-hr-data-system-eng-prompt.st
      user:
        ita:
        eng:
    vectorstore:
      qdrant:
        collection-name:
          ollama: vector_store_dtvvs_ollama
          gemini: vector_store_dtvvs_gemini
```

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Sei un assistente utile che risponde a domande sulle politiche di risorse umane dell'azienda Venis SpA ai suoi dipendenti.
 Dato il contesto nella sezione DOCUMENTI e senza conoscenze pregresse, rispondi alla domanda del dipendente.
 Se la risposta non si trova nella sezione DOCUMENTI, rispondi che non puoi rispondere alla domanda.

You are an helpful assistant, answering questions about Venis SpA policies to it's employees.
Given the context in the DOCUMENTS section and no prior knowledge, answer the employee's question.
If the answer is not in the DOCUMENTS section, then reply that you cannot answer to the question.

7/12

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```
package it.venis.ai.spring.demo.rag;

...

@Component
@Profile("rag-document-to-vector-store")
public class DocumentDataLoader {

    private final VectorStore geminiVectorStore;
    private final VectorStore ollamaVectorStore;

    public DocumentDataLoader(@Qualifier("geminiVectorStore") VectorStore geminiVectorStore,
                              @Qualifier("ollamaVectorStore") VectorStore ollamaVectorStore) {
        this.geminiVectorStore = geminiVectorStore;
        this.ollamaVectorStore = ollamaVectorStore;
    }

    @Value("classpath:Venis_HR_Policies_ENG.pdf")
    Resource venisHREngDocument;

    @Value("classpath:Venis_Politiche_HR_ITA.pdf")
    Resource venisHRItaDocument;

    ...
}
```

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Componente popolamento Qdrant - II

```

    ..
    @PostConstruct
    public void loadVenisHREngDocumentIntoVectorStore() {

        SearchRequest searchRequest = SearchRequest.builder()
            .query("Check")
            .similarityThresholdAll()
            .build();

        List<Document> similarDocs = geminiVectorStore.similaritySearch(searchRequest);

        if (similarDocs.size() == 0) {
            TikaDocumentReader tikaDocumentReader = new TikaDocumentReader(venisHREngDocument);

            List<Document> docs = tikaDocumentReader.get();

            TextSplitter textSplitter = TokenTextSplitter.builder()
                .withChunkSize(100)
                .withMaxNumChunks(400)
                .withKeepSeparator(true)
                .build();

            this.geminiVectorStore.add(textSplitter.split(docs));
        }
    }
    ...

```

Note

[illegible]

```

...
@PostConstruct
public void loadVenisHRItaDocumentIntoVectorStore() {

    SearchRequest searchRequest = SearchRequest.builder()
        .query("Check")
        .similarityThresholdAll()
        .build();

    List<Document> similarDocs = ollamaVectorStore.similaritySearch(searchRequest);

    if (similarDocs.size() == 0) {
        TikaDocumentReader tikaDocumentReader = new TikaDocumentReader(venisHRItaDocument);

        List<Document> docs = tikaDocumentReader.get();

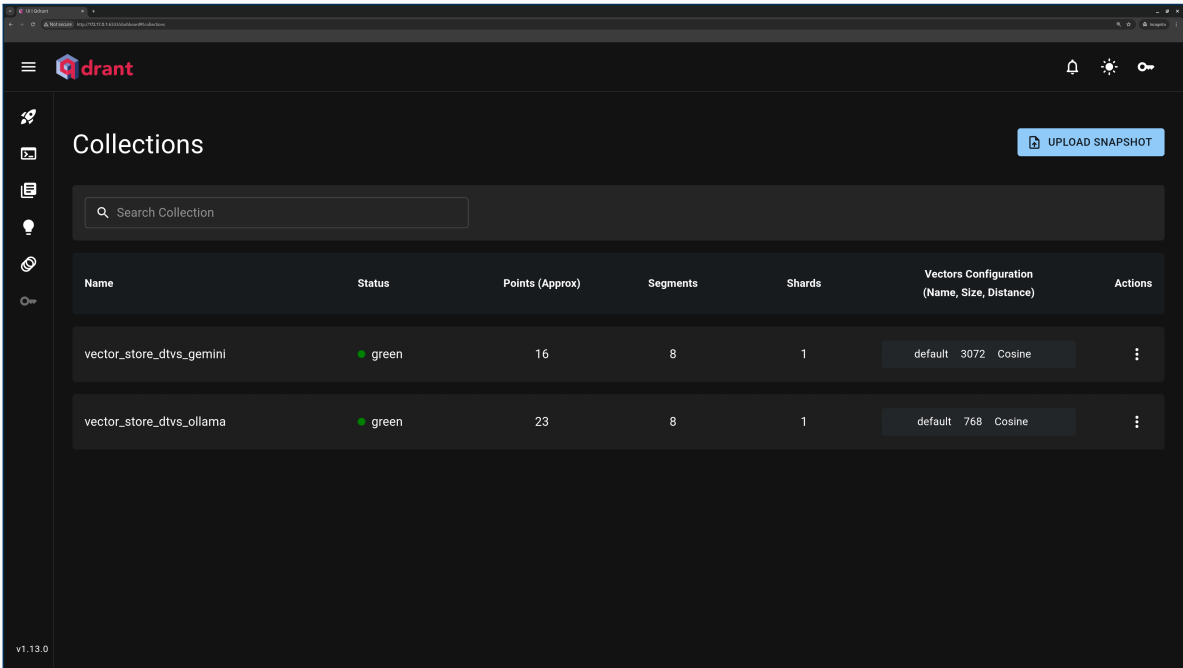
        TextSplitter textSplitter = TokenTextSplitter.builder()
            .withChunkSize(100)
            .withMaxNumChunks(400)
            .withKeepSeparator(false)
            .build();

        this.ollamaVectorStore.add(textSplitter.split(docs));
    }
}
}

```

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 Verificare la *dashboard* Qdrant (<http://172.17.0.1:6333/dashboard>)



Note

A series of horizontal lines for taking notes.

Branch:

8-spring-ai-gemini-ollama-rag-document-to-vector-store

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