



# ICT Training Center

**Il tuo partner per la Formazione e la Trasformazione digitale della tua azienda**



### Note

[illegible]

# SPRING AI

## GENERATIVE ARTIFICIAL INTELLIGENCE CON JAVA

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

Settembre 2025

### Note

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## JSON USER PROMPT TEMPLATES

### Note

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

-  Simone Scannapieco

### Note

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, and the paper is completely blank except for the lines themselves.

**File** get-json-user-format-definition-prompt.st

Il JSON deve avere la seguente struttura:

- il lemma deve essere inserito come valore della chiave `''lemma''`;
- la definizione in stile formale e conciso deve essere inserita come valore della chiave `''definizione''`;
- esempi di utilizzo del lemma come strutture JSON annidate sotto la chiave `''esempi''`. Le strutture JSON annidate devono riportare come unico valore la `''frase''` di esempio.

### Note

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface. There is no handwriting or other markings on the paper.

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

import it.venis.ai.spring.demo.model.Answer;
import it.venis.ai.spring.demo.model.DefinitionRequest;
import it.venis.ai.spring.demo.model.Question;

public interface GeminiFromClientService {

    String getAnswerFromClient(String question);

    Answer getAnswerFromClient(Question question);

    Answer getDefinitionFromClient(DefinitionRequest definitionRequest);

    Answer getCustomFormatDefinitionFromClient(DefinitionRequest definitionRequest);

    Answer getJSONUserFormatDefinitionFromClient(DefinitionRequest definitionRequest);

}
```

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

import java.util.Map;
import org.springframework.ai.chat.client.ChatClient;
import org.springframework.ai.template.st.StTemplateRenderer;
import org.springframework.beans.factory.annotation.Value;
import org.springframework.core.io.Resource;
import org.springframework.stereotype.Service;
import it.venis.ai.spring.demo.model.Answer;
import it.venis.ai.spring.demo.model.DefinitionRequest;
import it.venis.ai.spring.demo.model.Question;

@Service
public class GeminiFromClientServiceImpl implements GeminiFromClientService {

    private final ChatClient chatClient;

    public GeminiFromClientServiceImpl(ChatClient.Builder chatClientBuilder) {
        this.chatClient = chatClientBuilder.build();
    }

    @Override
    public String getAnswerFromClient(String question) {
        return this.chatClient.prompt()
            .user(question)
            .call()
            .content();
    }
}
```

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```
...
@Value("classpath:/get-json-user-format-definition-prompt.st")
private Resource JSONUserFormatDefinitionPrompt;

@Autowired
ObjectMapper objectMapper;

@Override
public Answer getJSONUserFormatDefinitionFromClient(DefinitionRequest definitionRequest) {
    String chatResponse = this.chatClient.prompt()
        .user(u -> u.text(this.JSONUserFormatDefinitionPrompt)
            .params(Map.of("lemma", definitionRequest.lemma())))
        .templateRenderer(StTemplateRenderer.builder().startDelimiterToken('<')
            .endDelimiterToken('>')
            .build())
        .call()
        .content();
    System.out.println(chatResponse);
    String responseString;
    try {
        JsonNode jsonNode = objectMapper.readTree(chatResponse.replace("`", "").replaceFirst("json", ""));
        responseString = jsonNode.get("definizione").asText();
    } catch (JsonProcessingException e) {
        throw new RuntimeException(e);
    }
    return new Answer(responseString);
}
}
```

### Note

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

import org.springframework.web.bind.annotation.RestController;
...
import it.venis.ai.spring.demo.services.GeminiFromClientService;
import org.springframework.web.bind.annotation.PostMapping;
import org.springframework.web.bind.annotation.RequestBody;

@RestController
public class QuestionFromClientController {

    private final GeminiFromClientService geminiService;

    ...

    @PostMapping("/client/definition")
    public Answer getDefinitionFromClient(@RequestBody DefinitionRequest definitionRequest) {
        return this.geminiService.getDefinitionFromClient(definitionRequest);
    }

    @PostMapping("/client/definition/custom")
    public Answer getCustomFormatDefinition(@RequestBody DefinitionRequest definitionRequest) {
        return this.geminiService.getCustomFormatDefinitionFromClient(definitionRequest);
    }

    @PostMapping("/client/definition/json/user")
    public Answer getJSONUserFormatDefinition(@RequestBody DefinitionRequest definitionRequest) {

        return this.geminiService.getJSONUserFormatDefinitionFromClient(definitionRequest);
    }
}
```

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