Lecture 05: Creating a Spring AI Project

Project Setup with Spring Initializr:

- Go to **start.spring.io**.
- Choose:
    - **IDE**: Intellij IDE
    - **Project Type**: Maven
    - **Language**: Java
    - **Spring Boot Version**: Latest stable
    - **Group ID**: com.telusko
    - **Artifact/Project Name**: springAICode

Dependencies to Add:

- Spring Web—for building a web application.
- Spring AI (Model-specific):
    - **For OpenAI** → add Spring AI OpenAI Starter.
    - **For Anthropic** → add Anthropic Starter.
    - **For Ollama** → add Ollama Starter.
    - **For Vertex AI** (Google) → add Vertex Starter.
- In this lecture, only Spring Web and Spring AI OpenAI Starter are added.

POM.xml after Adding Dependencies:

- **spring-boot-starter-web**

```xml
<dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-web</artifactId>
</dependency>
```

- **spring-ai-openai-spring-boot-starter**

```xml
<dependency>
    <groupId>org.springframework.ai</groupId>
    <artifactId>spring-ai-starter-model-openai</artifactId>
</dependency>
```

Running the Project:

- When you run the app, it starts on the Tomcat server.
- But on the first run, it fails.

Why Does It Fail?

- **Error**: OpenAI API key must be set.
- **Missing property:** spring.ai.openai.api-key=YOUR_KEY_HERE
- This must be added in **application.properties.**

Note: To fix the error, you need to generate and set the OpenAI API key.