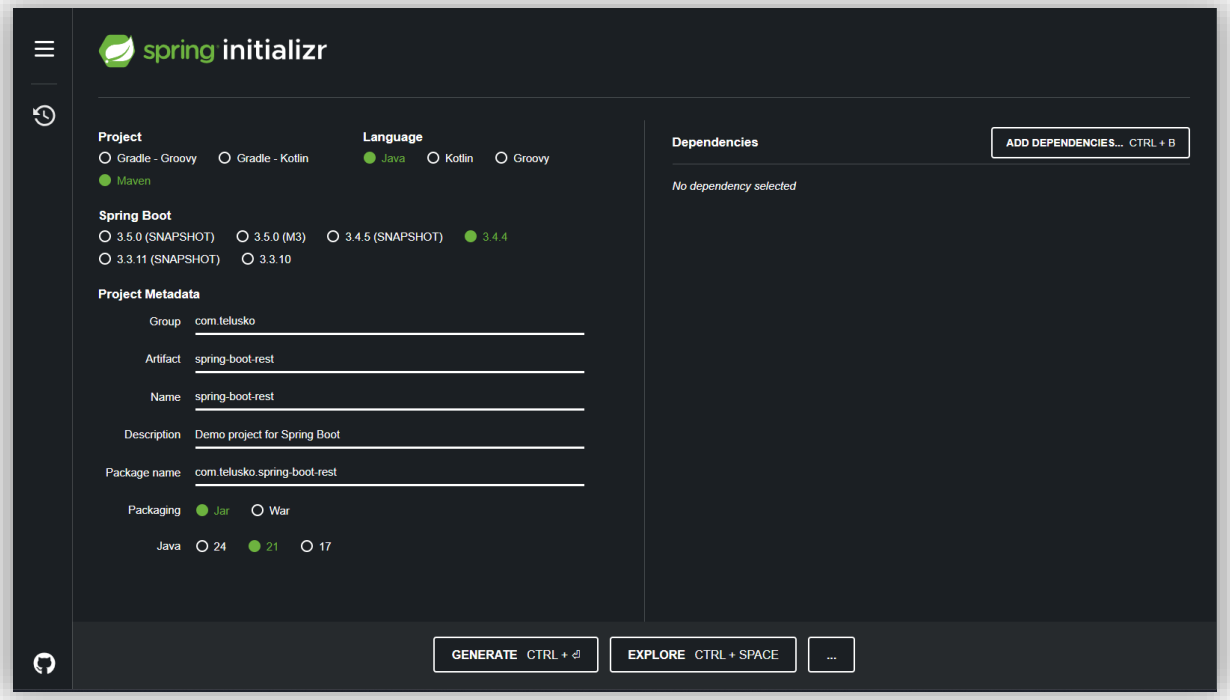
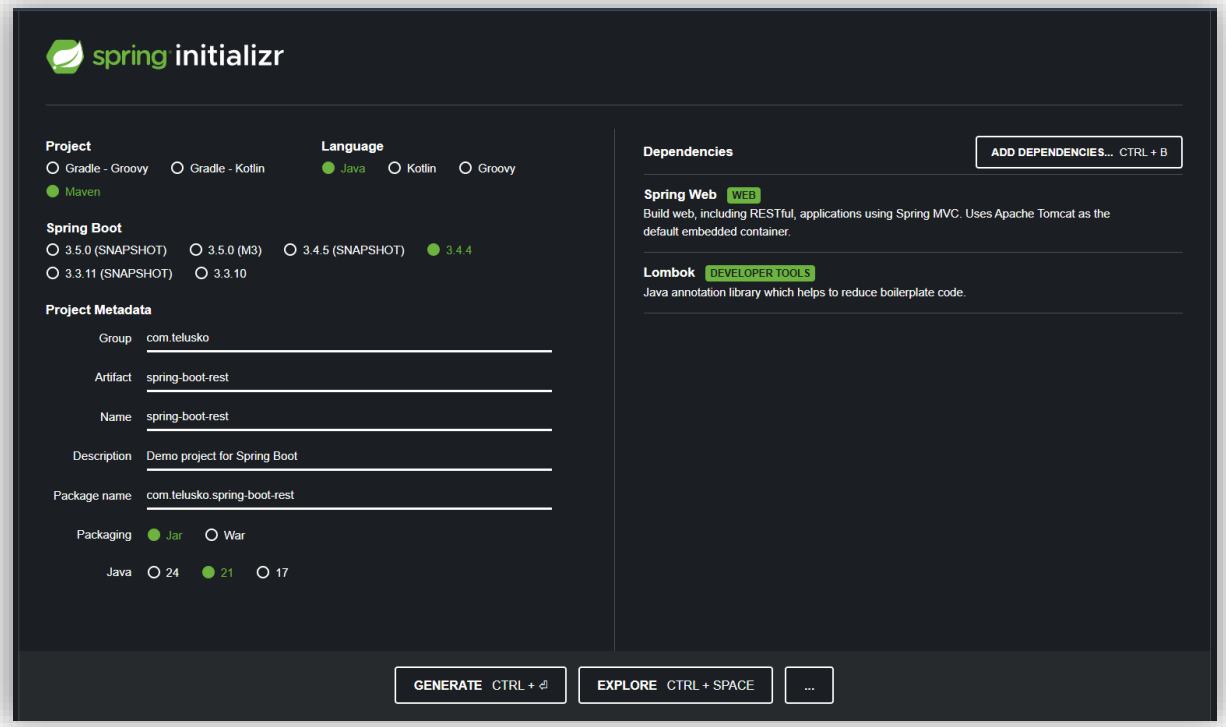
Creating a Rest Controller

👉 Setting up the Project

Step 1: Create a new Spring Boot project using Spring Initializer



Step 2: Add the necessary dependencies:



Step 3: Download, unzip, and open the project in your IDE (IntelliJ, Eclipse, or STS)

Step 4: Import the model, repository, and service classes from your previous codebase

👉 Creating the REST Controller

Now, let's create a controller that will handle HTTP requests:

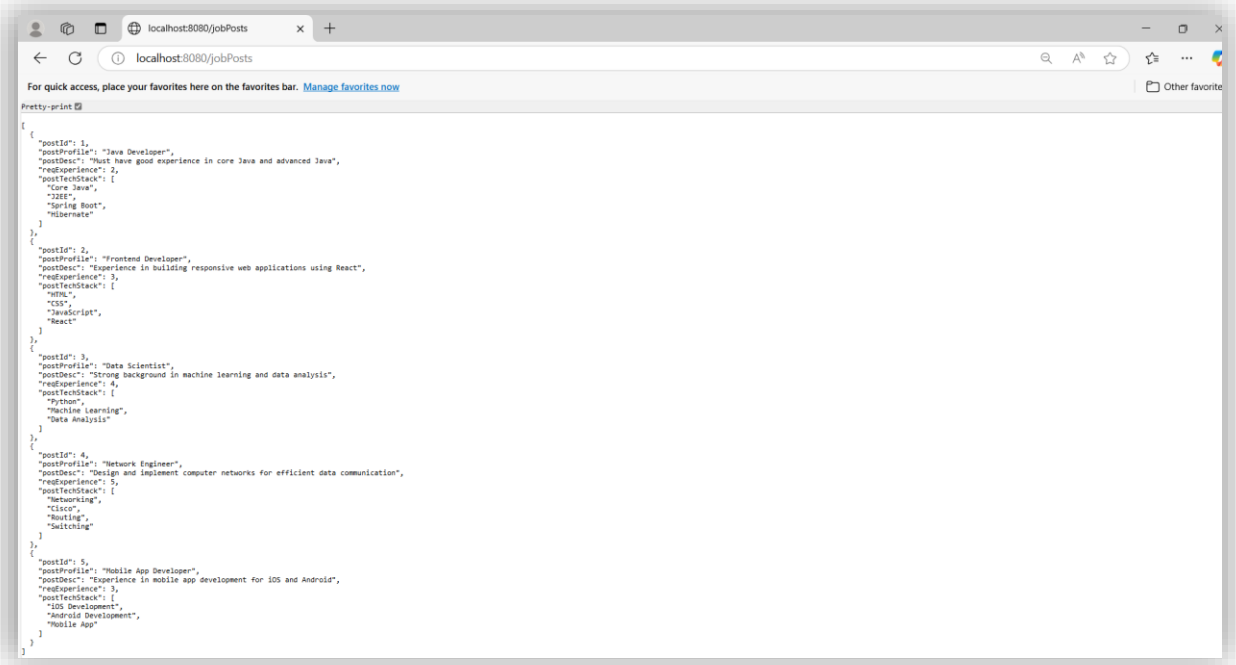
- Create a new class called JobRestController in the controller package
- Annotate it with @RestController
- Inject the JobService using @Autowired
- Create a method called getAllJobs() that returns a list of job posts
- Annotate the method with @GetMapping("jobPosts")

Example:

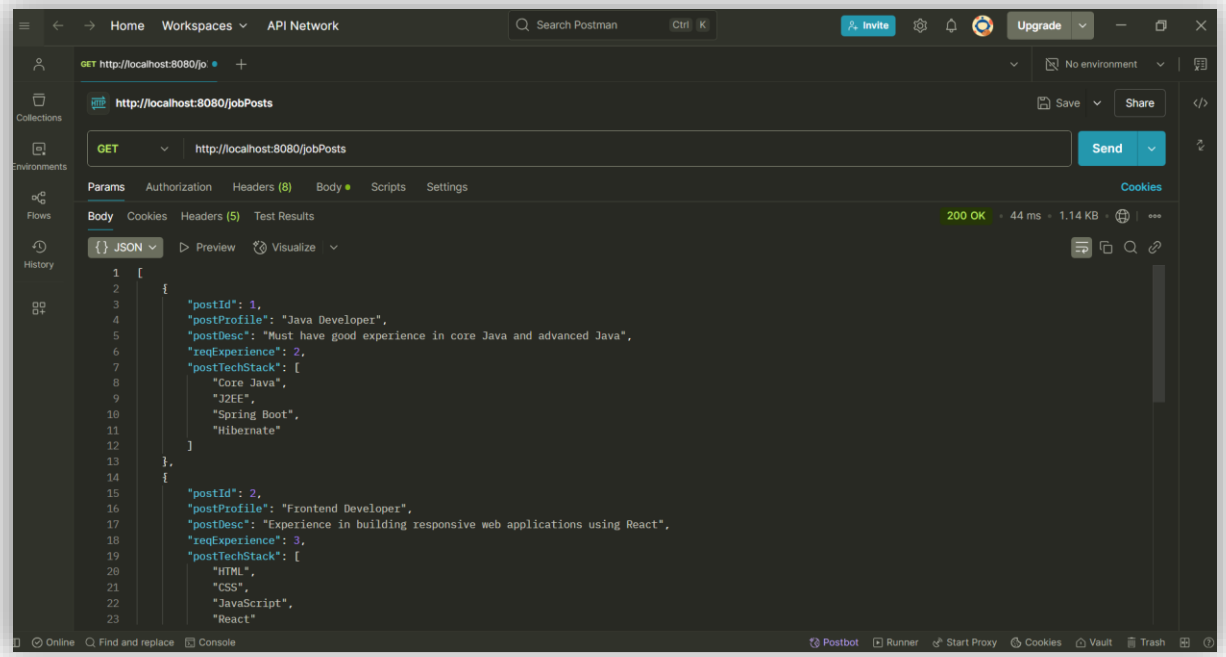
```java
package com.telusko.springbootrest.controller;

import java.util.List;

import org.springframework.beans.factory.annotation.Autowired;
import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

import com.telusko.springbootrest.model.JobPost;
import com.telusko.springbootrest.service.JobService;


//Controller class to handle REST API requests related to job posts.
@RestController
public class JobRestController {

    // Injecting JobService to access business logic related to job posts
    @Autowired
    private JobService service;

    /**
     * Handles GET requests for retrieving all job posts.
     *
     * @return List of JobPost objects
     */
    @GetMapping("jobPosts")
    public List<JobPost> getAllJobs() {
        // Fetching all job posts using the service layer
        return service.getAllJobs();
    }
}
```

➢ After running your Spring Boot application:

1. Open your browser and go to: http://localhost:8080/jobPosts



2. Or use Postman with the same URL to test the GET request



👉 **Understanding @RestController**

@RestController is a special annotation in Spring that combines two other annotations:

- @Controller - Marks the class as a web controller, capable of handling HTTP requests
- @ResponseBody - Tells Spring to convert the return value directly to JSON/XML response

The key difference between a regular @Controller and a @RestController is:

- Regular controllers typically return view names (like JSP pages)
- REST controllers return data objects directly, which Spring automatically converts to JSON

This makes @RestController perfect for building APIs that send and receive data rather than rendering HTML pages. When your frontend React application makes a request to /jobPosts, it will receive the job data in JSON format, which it can then display to the user.