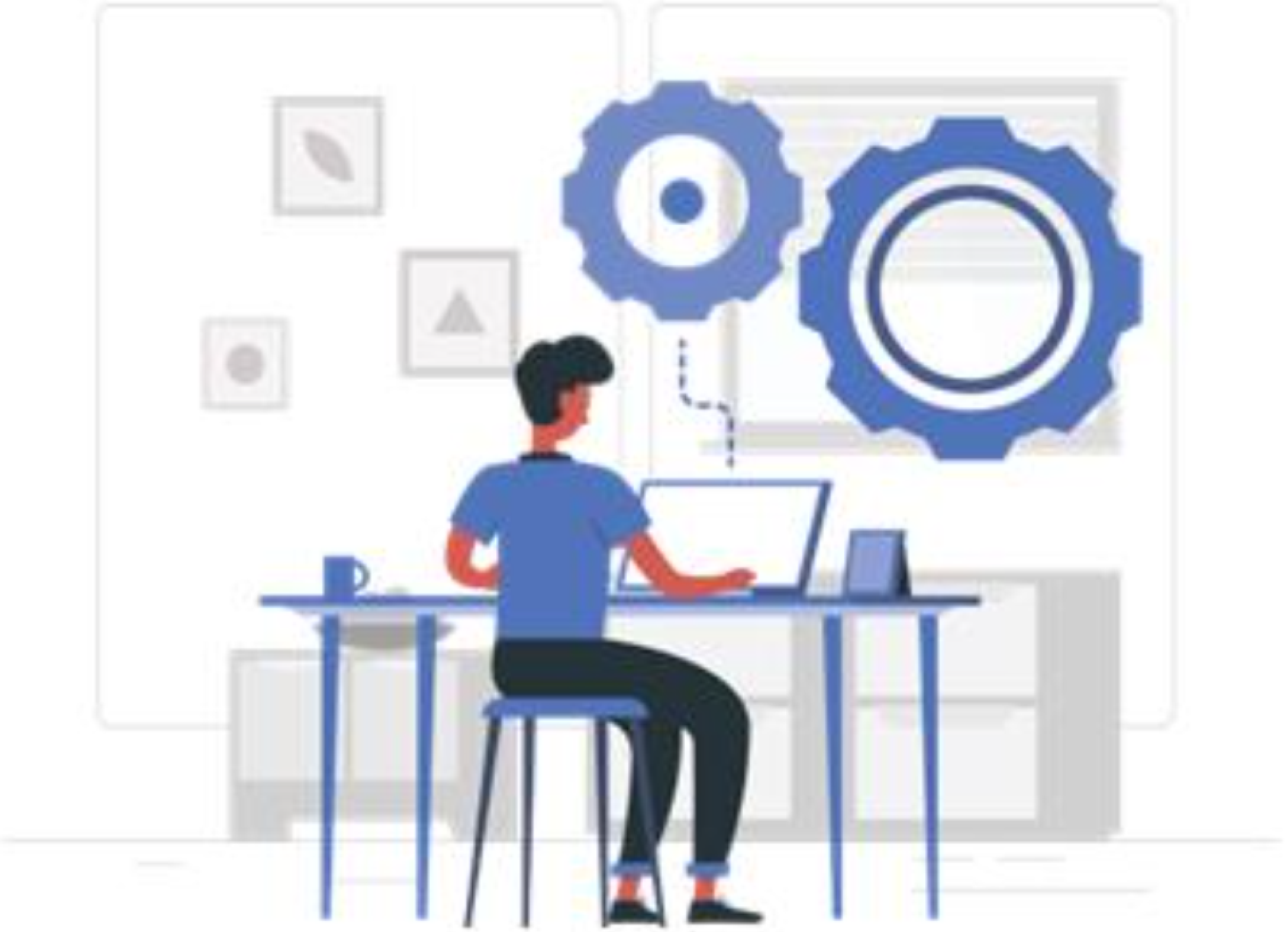


Practice

Implement Inversion of Control (IoC) Inside the Spring Application by Using Annotations

Practice

- Manage the employees and departments of an organization

PRACTICE

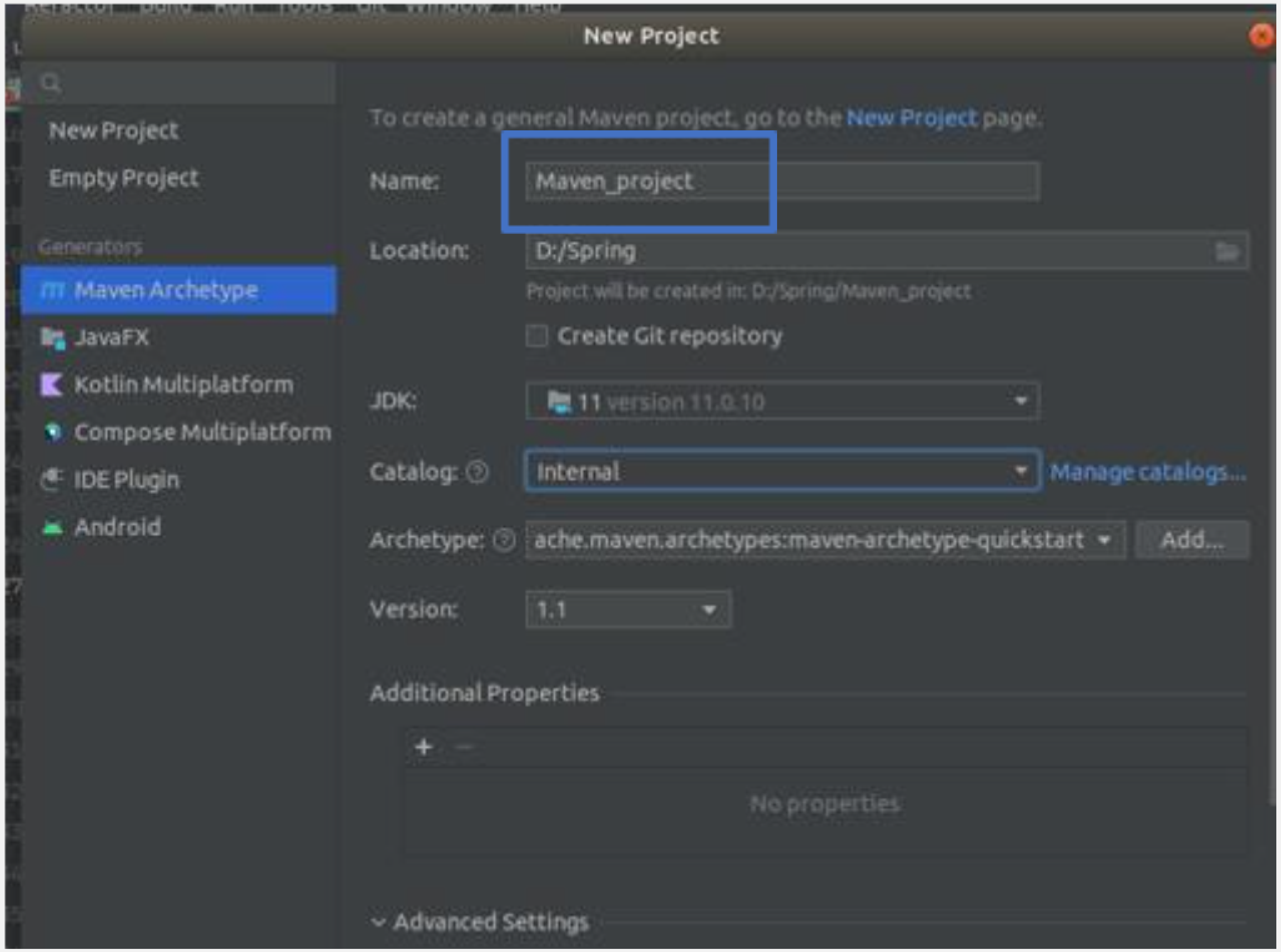
Practice: Manage the Employees and Departments of an Organization

A start-up builds an application that keeps records of all employees. As an initial step, the employees and their departments must be mapped in the application.

Build a Spring application that will manage the employee and department objects.

Implementation Environment

- Install the community edition of IntelliJ on your machine
- Click here to install
- After installation, open the IntelliJ IDE
- Click on **File -> New Project**
- Select the **Maven Archetype**
- Provide the name of the project and select the location
- Select the Archetype as maven-archetype-quickstart
- Provide groupId and artifactId in Advanced settings
- Click on **Create**



To create a general Maven project, go to the New Project page.

Name: Maven_project

Location: D:/Spring

Project will be created in: D:/Spring/Maven_project

□ Create Git repository

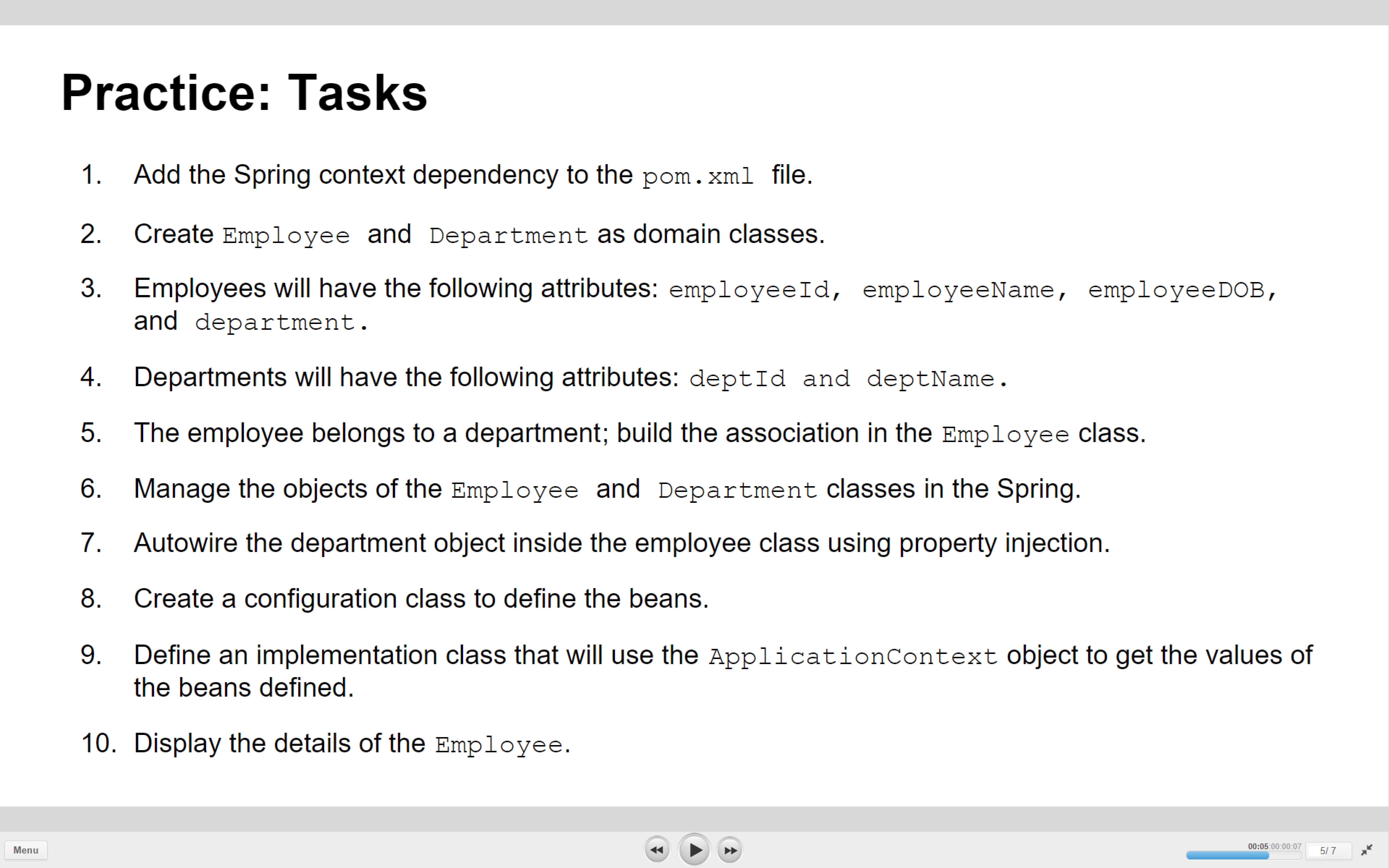
JDK: 11 version 11.0.10

Catalog: Internal

Archetype: ache.maven.archetypes:maven-archetype-quickstart

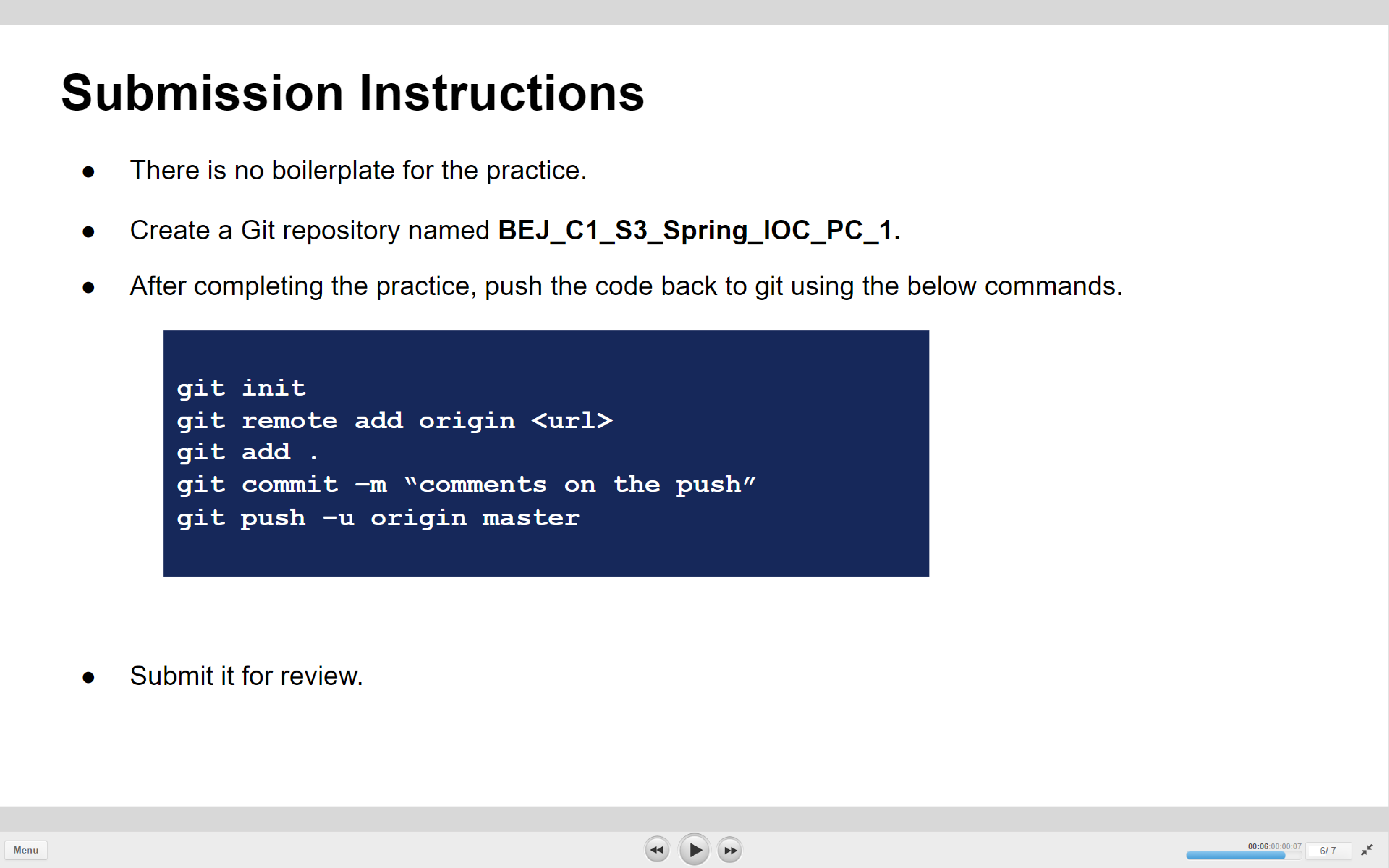
Version: 1.1

No properties



Practice: Tasks

1. Add the Spring context dependency to the `pom.xml` file.
2. Create `Employee` and `Department` as domain classes.
3. Employees will have the following attributes: `employeeId, employeeName, employeeDOB,` and `department.`
4. Departments will have the following attributes: `deptId and deptName.`
5. The employee belongs to a department; build the association in the `Employee` class.
6. Manage the objects of the `Employee` and `Department` classes in the Spring.
7. Autowire the department object inside the employee class using property injection.
8. Create a configuration class to define the beans.
9. Define an implementation class that will use the `ApplicationContext` object to get the values of the beans defined.
10. Display the details of the `Employee`.



Submission Instructions

- There is no boilerplate for the practice.
- Create a Git repository named **BEJ_C1_S3_Spring_IOC_PC_1.**
- After completing the practice, push the code back to git using the below commands.

```
git init
git remote add origin <url>
git add .
git commit –m “comments on the push”
git push –u origin master
```

- Submit it for review.