♥ Project Creation using Spring Initializr

- 1. Open **Spring Initializr** (https://start.spring.io/).
- 2. Select the following configurations:
 - Project: Maven Language: Java
 - o **Spring Boot:** (Leave default version)
 - o **Packaging:** WAR
 - o **Java Version:** Choose 17, 21, or 24 (based on your setup)
- 3. Project Metadata:
 - o **Name:** gtecsiteapp (example)
 - o **Artifact:** gtecsiteapp
 - o **Group ID:** Use reverse of company URL, e.g., com.gtecsite
 - o Package Name: com.gtecsite.gtecsiteapp
- 4. Click **Next** and in **Dependencies**, add:
 - o Spring Web
 - o Spring Boot DevTools
- 5. Click **Finish** and allow project to load in your IDE (STS or Eclipse).

Create Controller Class

- 1. In src/main/java, navigate to package com.gtecsite.gtecsiteapp.
- 2. Right-click the package \rightarrow New \rightarrow Class
- 3. In the dialog:
 - o **Package:** com.gtecsite.gtecsiteapp.controller
 - o Name: HomeController
- 4. Click Finish.

Your project will now have the controller class located at:

src/main/java/com/gtecsite/gtecsiteapp/controller/HomeController.java

III Edit HomeController.java

```
package com.gtecsite.gtecsiteapp.controller;
import org.springframework.stereotype.Controller;
import org.springframework.web.bind.annotation.GetMapping;
@Controller
public class HomeController {
    @GetMapping({"/", "Index"})
    public String IndexPage() {
        return "Index";
    }
    @GetMapping("/About")
    public String AboutPage() {
        return "About";
    }
}
```

Use Ctrl + Shift + O to auto-import required classes.

Create JSP Pages

1. In src/main/webapp, create the following structure:

```
WEB-INF/
L views/
L jsp/
Index.jsp
About.jsp
```

2. Sample content for Index.jsp:

Add Embedded Jasper Dependency

- 1. Open Maven Repository.
- 2. Search for: tomcat-embed-jasper
- 3. Choose a version (e.g., 11.0.6) and copy the Maven snippet:

4. Paste it under <dependencies > section in pom.xml.

© Configure application.properties

Edit src/main/resources/application.properties and add:

```
server.port=8087
spring.mvc.view.prefix=/WEB-INF/views/jsp/
spring.mvc.view.suffix=.jsp
```

▶ Run the Application

- 1. In **Project Explorer**, right-click the project \rightarrow **Run As** \rightarrow **Run Configurations**
- 2. Create a new Maven Build configuration:
 - o Name: (Optional)
 - o **Base Directory:** Select the current project
 - o Goals:
 - o clean spring-boot:run -X
 - \circ Click **Apply** \rightarrow **Run**

4) Expected Console Output

Look for:

```
INFO ... LiveReload server is running on port 35729
INFO ... Tomcat started on port 8087 (http) with context path '/'
```

Accessing Your Web Pages

• Open browser and go to:

http://localhost:8087
or
http://localhost:8087/Index

• To access About page:

http://localhost:8087/About

Tips

- You can add more .jsp files like Contact.jsp, Services.jsp, etc. inside views/jsp/.
- Add corresponding @GetMapping() methods in HomeController.java for routing.
- Always save all files before running the project.

△ Document Prepared for Copying into Microsoft Word with Web Links, JSP Setup, Maven Dependencies, and Console Verification