**Download and Install Eclipse IDE**

* **Download Eclipse IDE:**
  1. Go to the Eclipse official website.
  2. Download the "Eclipse IDE for Enterprise Java and Web Developers" package.
* **Install Eclipse:**
  1. After downloading, run the installer.
  2. Select the "Eclipse IDE for Enterprise Java and Web Developers" package.
  3. Choose the installation path and click Install.

**2. Set Up a Dynamic Web Project**

* **Launch Eclipse:**
  1. Open the Eclipse IDE once the installation is complete.
  2. Select a workspace directory (this is where your projects will be stored).
* **Install JDK (if not already installed):**
  1. Download and install the [Java Development Kit (JDK)](https://www.oracle.com/java/technologies/javase-jdk11-downloads.html).
  2. Ensure that the JDK is properly installed by running java -version in the Command Prompt.
* **Create a New Dynamic Web Project:**
  1. Go to File > New > Dynamic Web Project.
  2. Enter a project name (e.g., MyDynamicWebProject).
  3. Select the target runtime environment. If no server runtime is configured:
     + Click New Runtime and select a server (e.g., Apache Tomcat).
     + Click Next and download the required server files.
  4. Click Next, and keep default configurations for the Java and Web Module settings.
  5. Click Finish.

**3. Configure Apache Tomcat Server (Optional)**

* **Add a Server:**
  1. Go to Window > Show View > Servers.
  2. Right-click in the Servers view and select New > Server.
  3. Choose Apache Tomcat and click Next.
  4. Browse to the installation directory of Tomcat and click Finish.
* **Associate the Project with the Server:**
  1. Right-click on the server in the Servers view.
  2. Select Add and Remove.
  3. Add your Dynamic Web Project to the Configured list and click Finish.

**4. Create a Sample JSP File**

* **Create a JSP File:**
  1. Right-click on the WebContent folder within your project.
  2. Select New > JSP File.
  3. Name the file (e.g., index.jsp) and click Finish.
  4. Edit the JSP file, for example:

jsp

Copy code

<%@ page language="java" contentType="text/html; charset=UTF-8"

pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Welcome to Eclipse</title>

</head>

<body>

<h1>Hello, World!</h1>

</body>

</html>

**5. Run the Project**

* **Deploy the Project:**
  1. Right-click on your project in the Project Explorer.
  2. Select Run As > Run on Server.
  3. Choose the configured server and click Finish.
* **Test the Application:**
  1. Eclipse will start the server and deploy the web application.
  2. The browser should open with the URL http://localhost:8080/MyDynamicWebProject/index.jsp.
  3. You should see "Hello, World!" displayed on the webpage.

This will set up a basic dynamic web project using JSP and the Tomcat server in Eclipse on Windows.