### JavaServer Pages (JSP) Learning Roadmap

#### 1. Introduction to JSP

- o Overview of JSP and its role in Java web applications.
- o Difference between Servlets and JSP.
- Lifecycle of a JSP page.

## 2. JSP Syntax Basics

- o JSP elements: Directives, Scriptlets, Expressions, and Declarations.
- Using HTML and JSP together.

## 3. Handling Requests and Responses

- Using request and response objects in JSP.
- Accessing request parameters.

## 4. JSP Implicit Objects

- Overview of implicit objects (e.g., request, response, session, application).
- Common use cases for implicit objects.

#### 5. JSP Directives

- o Page directive: setting attributes like content type, error page.
- o Include directive: including other resources.
- o Taglib directive: using custom tag libraries (JSTL).

#### 6. Expression Language (EL)

- Using EL for simplified access to data in JSP.
- Basic syntax and use cases.

#### 7. JSP Standard Tag Library (JSTL)

 Using core JSTL tags for common tasks like iteration, conditionals, and formatting.

## 8. Error Handling in JSP

- o Configuring custom error pages in web.xml.
- Handling exceptions within JSP.

# 9. Session Management

- o Managing sessions in JSP using session implicit object.
- o Handling cookies and session tracking.

## 10. **JSP Best Practices**

- o Avoiding Java code in JSP (Model-View-Controller pattern).
- o Writing clean and maintainable JSP code.