



# Roadmap to Becoming a Java Full Stack Developer

This document outlines a structured roadmap to becoming a Java Full Stack Developer, along with visual aids to better understand the journey.

## Step 1: Foundational Skills

Before diving into Java and web development, it's crucial to build a strong foundation in programming and computer science concepts.

- **Core Java:** Understand Java syntax, object-oriented programming, data structures, and algorithms.
- **Database Basics:** Learn about relational databases and SQL.
- **Version Control:** Familiarize yourself with Git for version control.

## Step 2: Front-End Technologies

With a solid foundation, you can move on to front-end technologies.

- **HTML, CSS, and JavaScript:** Learn the basics of web development.
- **Front-End Frameworks:** Explore frameworks like React, Angular, or Vue.js (optional but recommended).

## Step 3: Back-End Technologies & Frameworks

Now you can delve into Java back-end development.

- **Java Servlets and JSP:** Understand the basics of server-side Java.
- **Spring Framework:** Learn Spring Boot, Spring MVC, and other modules.
- **RESTful APIs:** Learn how to build and consume RESTful web services.

## Step 4: Database Management

Understanding database management is crucial for full stack development.

- **Relational Databases:** Deep dive into SQL and learn database design principles.
- **ORM Tools:** Learn about Object-Relational Mapping tools like Hibernate.

## Step 5: Deployment & DevOps

Finally, learn how to deploy and maintain applications.

- **Cloud Platforms:** Learn about AWS, Azure, or Google Cloud.
- **CI/CD:** Understand Continuous Integration and Continuous Deployment.

| Step | Description                                   |
|------|---|
| 1    | Build Foundational Skills                     |
| 2    | Learn Front-End Technologies                  |
| 3    | Understand Back-End Technologies & Frameworks |
| 4    | Master Database Management                    |
| 5    | Explore Deployment & DevOps                   |