

Java Full Stack with AI - Transform Your Career

AI-Integrated Full Stack Developer Pathway



About **St.School**

Student Tribe has launched ST School, a place where learning feels real and practical. At ST School, we bring Industry Experts, CEOs, CTOs, and Mentors to teach you directly. Our goal is to make you job-ready, not just classroom-ready.

What We Do

- We teach every topic in a simple and practical way.
- You will work on real-time projects and learn how companies actually build things.
- We take mock interviews to help you feel confident before real interviews.
- We guide students until they get placed, with full career support.
- Our classes are not like regular classes you get real industry exposure.
- You will learn the latest tools used in top companies for better understanding.
- We focus on hands-on learning, not just theory.
- Learn directly from people who work in the industry.
- Get real experience, real projects, and real guidance.
- Become confident, skilled, and ready for your first job

Placement Testimonials



Golla.Meghana

Mern stack (front-end developer)
Company: abhyaas edu technologies



Koyya. Tejeswhar

Mern stack
Company: CREDERA



T.ramgopinath

Mern stack
Company: Arc stream technologies



K.upendra

Mern stack
Company: yard global software solutions



Koyya. Tejeswhar

Mern stack
Company: kis.ai



Y.monohar

Mern stack
Company: studenttribe



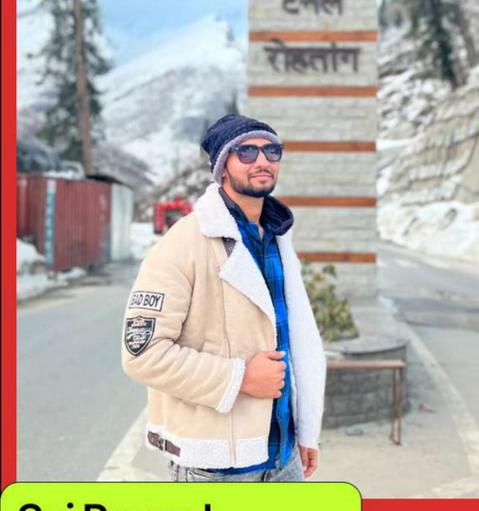
Mounika

Mern stack
Company: marut drones



T.Jagadhesh hanuman

Mern stack
Company: kis.ai



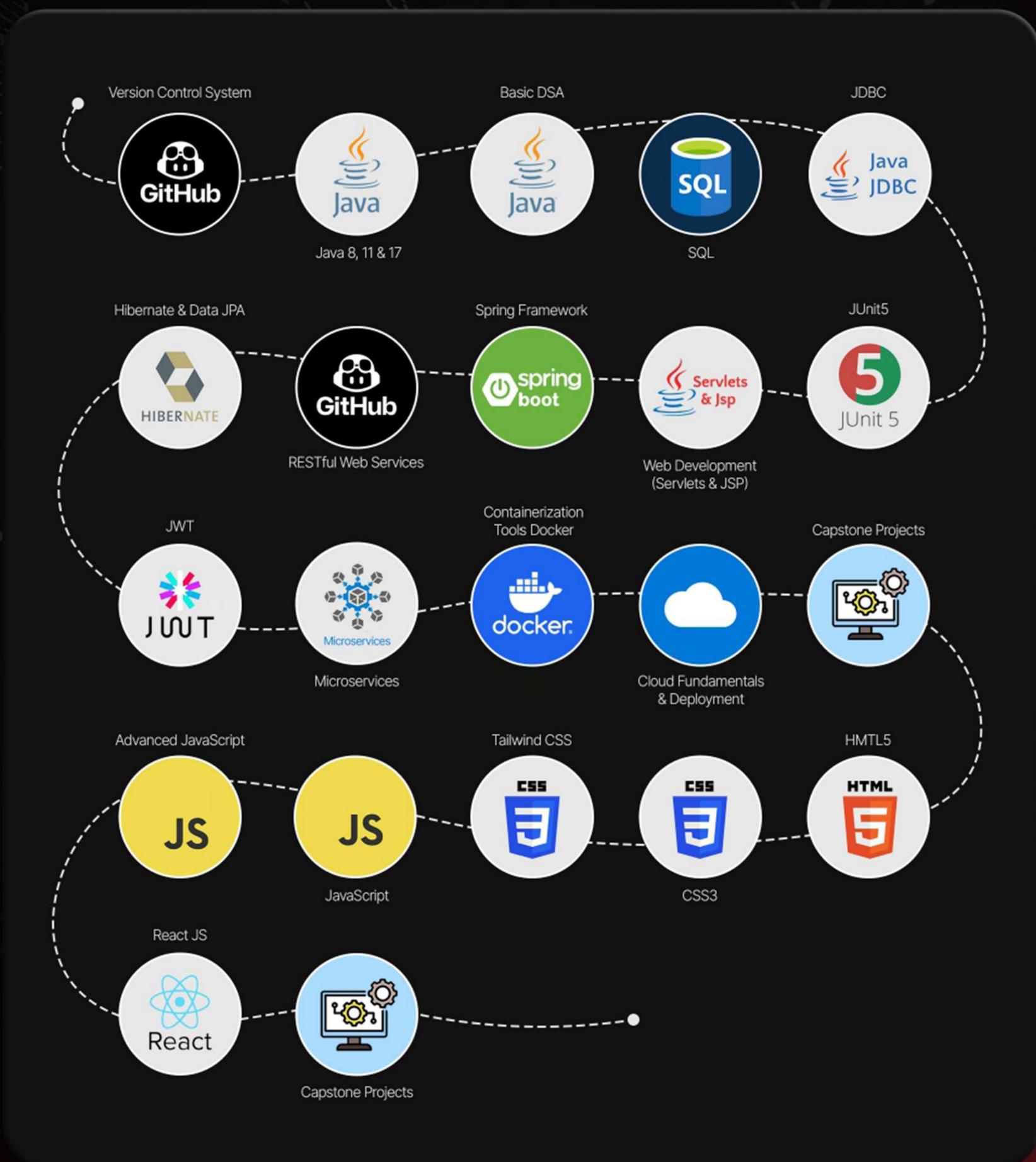
Sai Prasad

Mern stack
Company: svamyio



Java Full Stack

Learning Path with Key Highlights



Module 1 (2.5 Weeks)



Foundation : Front-End Technologies

This module teaches you how the front end of a website is made. You'll design responsive web pages, work with real data using APIs, and practise using modern tools like HTML, CSS, JavaScript, and Tailwind. By the end, you will be able to build full responsive web apps that can fetch and show real data. You will also learn simple testing methods to check if your code works correctly.



Topics Covered:

Web Page Structure

- HTML5
- Semantic Elements
- Document Structure

Programming Basics

- JavaScript Fundamentals
- Functions & Functional Programming
- Arrays, Strings
- ES6 Features

Development Tools

- Visual Studio Code
- Static Servers (http-server, live-server, json-server)
- Version Control (GitHub)

Testing

- Unit Testing: Jasmine
- Karma

Styling & Layout

- CSS3
- Applying Styles
- CSS Selectors
- Responsive Web Design
- Media Queries
- Bootstrap 4
- Components
- Responsive Grid System

Working with Data

- Async Programming
- Callback Functions
- Promises
- AJAX
- Fetch API
- JSON Server
- Async & Await

Module 2 (3 Weeks)



TypeScript & React

This module introduces you, how to use TypeScript and React to build strong, scalable, and easy-to-maintain web applications. TypeScript helps you write cleaner and safer JavaScript code by catching errors early. React allows you to create fast, interactive, and dynamic user interfaces. Through practical tasks, real projects, and group learning, you'll gain confidence in both technologies. By the end, you will know how to build a complete application using TypeScript and React.

Topics Covered:

TypeScript Basics

- Introduction to TypeScript
- Basic TypeScript Concepts
- Advanced TypeScript Features

React Fundamentals

- Getting Started with React
- React Component Lifecycle
- State Management in React

Building Applications

- Routing in React Applications
- Form Handling in React
- API Integration

Quality & Deployment

- Testing React Applications
- Deploying React Applications



Module 3 (3 Weeks)



Mastering Java Programming

In the Mastering Java Programming module, learners will understand the core concepts needed to build stable applications. This module covers data types, loops, methods, object-oriented programming, and handling errors in Java. Students will also learn collections and generics, which help in managing groups of data safely and efficiently.

Through hands-on coding and practical examples, you will build strong programming skills and learn the best practices of Java development. By the end, you'll be confident in solving basic to intermediate programming tasks and ready to move into advanced full-stack topics.

Topics Covered:

Core Java Basics

- Programming Fundamentals
- JDK, JVM, JRE

Working with Data

- Arrays & Strings
- Exception Handling
- Working with Input/Output (I/O)

Testing

- Unit Testing with JUnit

Classes & Object-Oriented Programming

- Working with Classes, Objects, and Methods
- OOP Features: Inheritance, Polymorphism, Abstraction, Encapsulation

Advanced Java Concepts

- Collection Framework
- Streams API
- Multi-Threaded Programming



Module 4 (2.5 Weeks)



Back-End Development: SpringFramework

In this module, learners will explore Spring Framework and Spring Boot, two important tools for building modern Java applications. Spring helps manage the structure of an application, while Spring Boot makes development faster and easier with built-in setups. You will learn core topics like dependency injection, data access, and Spring Security, along with practical hands-on exercises. By the end, you will be able to build scalable and maintainable backend applications using Spring and Spring Boot.

Topics Covered:

Spring Framework Basics

- Spring Core Container
- Spring Architecture
- IoC (Inversion of Control)
- Dependency Injection

Web Development with Spring

- Spring MVC
- Dispatcher Servlet
- View Resolvers

Database & ORM

- Hibernate ORM Framework
- Entities & DAO with Spring-Hibernate
- Entity Relationships:
 - One-to-One
 - One-to-Many
 - Many-to-Many

Spring Boot & REST APIs

- Testing REST APIs using Mockito
- Spring AOP
- Spring Security with JWT

Testing & Security

- Unit Testing with JUnit

Modern Databases

- Working with NoSQL Databases
- Working with GraphQL Databases



Module 5 (2.5 Weeks)



Microservices Architecture

The industry is shifting from building large monolithic applications to smaller, modular Microservices. Microservices is an architecture where an application is broken into small, independent services that are easy to maintain, scale, and deploy. This approach allows companies to deliver large enterprise applications faster, more reliably, and using multiple technologies.



Topics Covered:

Introduction to Microservices

- Microservices Architecture
- Monolithic vs Microservices
- Microservices Design Patterns

Resilience & Monitoring

- Fault Tolerance with Hystrix
- Distributed Tracing with Zipkin
- Monitoring Microservices using Grafana & Prometheus

Spring Cloud Essentials

- Spring Cloud Overview
- Eureka Service Registry & Discovery
- Zuul API Gateway
- Client-Side Load Balancing (Feign, Ribbon)
- Config Server for Distributed Configuration

Documentation

- Documenting Web Services using Swagger

Communication Between Services

- REST communication using RestTemplate
- Declarative communication using Feign
- Asynchronous communication using Message Brokers



Module 6 (1 Week)



Engineering - DevOps : CI/CD

In the Deployment and CI/CD module, learners will understand how to automate the software release process using Continuous Integration and Continuous Deployment (CI/CD). This module explains deployment pipelines, version control, and environment setup with tools like Jenkins, GitHub Actions, and Docker. By the end, students will be able to design CI/CD pipelines and deploy applications to cloud platforms for fast and reliable software delivery.

Topics Covered:

DevOps Fundamentals

- Introduction to DevOps
- Challenges in shipping a product
- Importance of automating build, test & deploy stages

Continuous Integration (CI)

- Understanding Continuous Integration
- Writing CI files with different stages for front-end & back-end applications

Docker & Containerization

- Docker Basics: Docker Engine, Docker Images, Containers, Networks
- Containerizing Front-End Applications
- Containerizing Back-End Services
- Working with Docker Compose

Continuous Delivery (CD)

- Understanding Continuous Delivery
- Building automated delivery pipelines



Module 7 (1 Week)



Practical AI for Full-Stack Engineers

In the Practical AI for Full-Stack Engineers module, learners will understand how to use and integrate large language models (LLMs) and AI tools. You will learn how AI can speed up development, testing, documentation, and help build AI-enabled features. The module also covers the limitations and safety aspects of using AI in real projects.

Topics Covered:

AI & LLM Fundamentals

- Introduction to Large Language Models (LLMs)
- Overview of AI Developer Tools

Tools & Platforms

- GitHub Copilot
- Cursor IDE
- ChatGPT / OpenAI

Automating Development Tasks

- Using AI to automate repetitive dev tasks
- Integrating AI into daily workflows

AI in Coding

- Code Generation
- Code-Assist Workflows
- Improving Code Quality, Security & Evaluation

Prompt Engineering

- Prompt Engineering Basics
- How to write effective prompts



Meet Our Instructor



Madhu Samala

Career Highlights

- **16+** Years of Corporate Training Experience
- Guided **10,000+** Learners in Transforming Their Careers.
- Founder & CEO:
Training Mug & PrepVerse

Core Technology Companies Worked With



Where Development Meets AI Intelligence

(25+ AI Tools Covered)



Express



Uizard



Java
JDBC



mongoDB®



Hugging Face



aws



kubernetes

Maven™



Jenkins

JUnit



cucumber



git

Jira Software



Our Alumni Are Working At

experion
technologies

ThermoFisher
SCIENTIFIC

Infosys

tcs TATA
CONSULTANCY
SERVICES

JPMorganChase



accenture

amazon

 **Microsoft**

Capgemini

Talk to Our Academic Counsellor:



Manisha Nare

84989 63240

THANK YOU

Need more insights?

Speak with Our Career Counsellor for a Detailed
Overview of Our Program.

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