



simplilearn

Full Stack Java Developer

Master's Program

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Full Stack Java Developer Capstone Project



Certificates



About Simplilearn



About the Course

This Full Stack Java Developer program will help you master both front-end and back-end Java technologies and accelerate your career as a full stack software developer. This course will expose you to basic and advanced concepts of web development. You will also learn Angular, Spring Boot, Hibernate, Servlets, and JSPs, MVC, web services, and other critical skills. You will learn how to use JavaScript, iQuery, and Node.js to build dynamic and interactive websites; write APIs; build web applications using Java; test and deploy code using DevOps; store data using MongoDB; and much more. This course will help advance your career as a full stack developer and help you learn some of the most high-demand skills in the industry.

Key Features



Comprehensive blended learning program



30+ in-demand tools and skills



16 hours of rigorous capstone project training



350 hours of in-depth training



20 lesson-end + 6 phase-end hands-on projects

Top Skills and Tools covered

- | | | |
|---------------------|------------------|-----------------|
| ✓ Agile | ✓ Angular | ✓ JUnit |
| ✓ Java | ✓ MongoDB | ✓ Servlets |
| ✓ MySQL | ✓ Selenium | ✓ Apache Tomcat |
| ✓ Hibernate and JPA | ✓ Docker | ✓ Git |
| ✓ Spring Core 5.0 | ✓ Jenkins | ✓ Maven |
| ✓ RabbitMQ | ✓ AWS | ✓ SOAP and REST |
| ✓ DevOps | ✓ JavaScript ES6 | ✓ JSP |
| ✓ HTML5 and CSS3 | ✓ TypeScript | |

Program Outcomes

- ✔ Master software programming concepts, the basic building blocks of designing great apps
- ✔ Become an Agile practitioner with the ability to get on to an on-going industry project quickly
- ✔ Clone and start working on a live repository
- ✔ Build awesome front-end features
- ✔ Architect scalable back-end infrastructure
- ✔ Choose your own stack as per the requirement and delivery timeline
- ✔ Test features with minimal effort and deploy features seamlessly to production
- ✔ Build a working industry application from scratch

Potential Roles

After completing the program, you will be eligible for a variety of career opportunities and build your career in front-end developer, back-end developer, API, or full stack developer roles in organizations ranging from start-ups to Fortune 500 companies.

Program Eligibility Criteria and Prerequisites

Any technical degree or equivalents such as B.tech, M.tech, a degree in engineering, bachelor/master's in computer science, and basic programming knowledge.

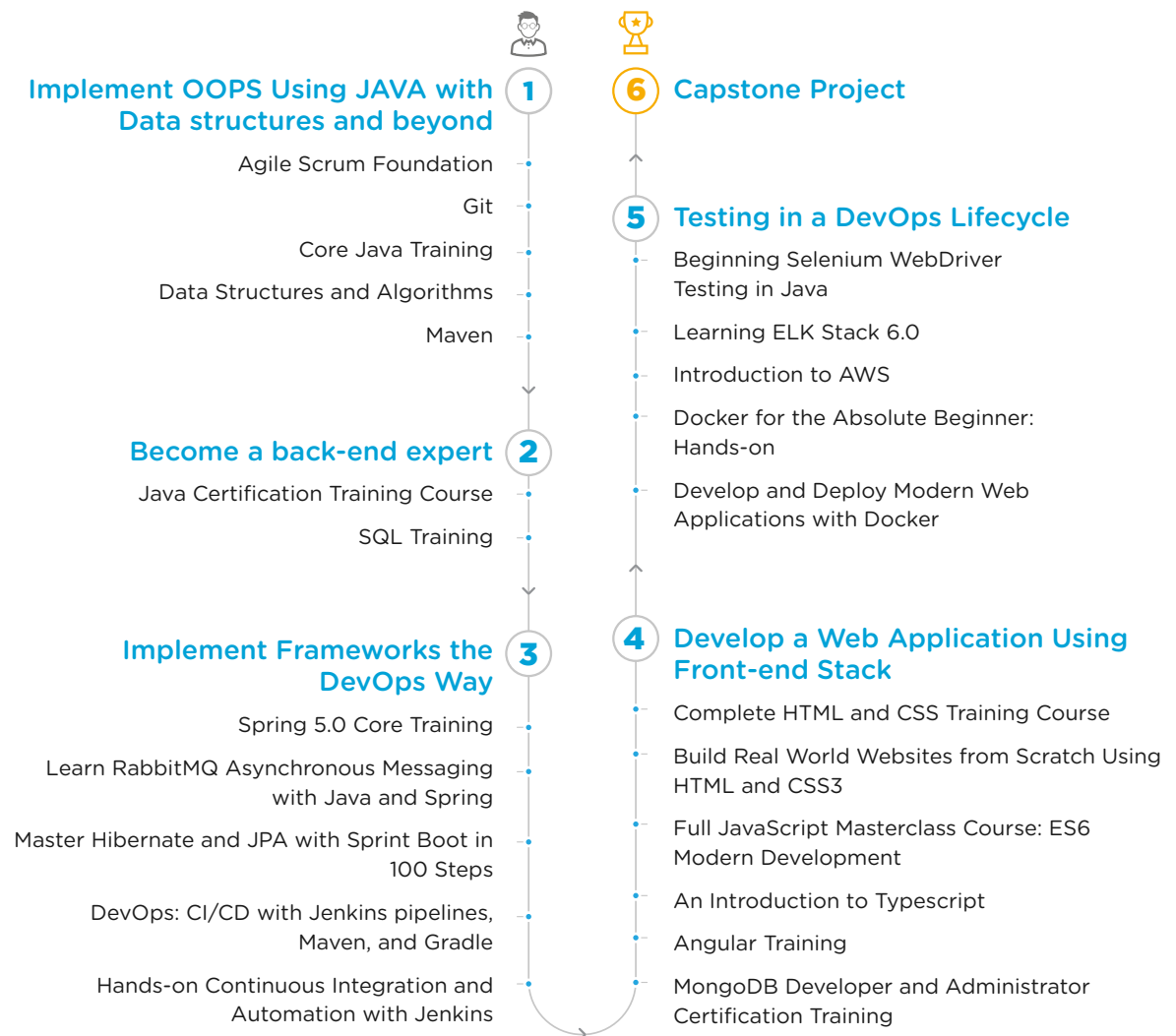
Who Should Enroll in this Program?

This program caters to a wide audience, from those who are hoping to enter the industry to those who have already gained some experience and are aspiring to become full stack developers.

The following are the few professional profiles that are ideal students for this course:

- ✓ Fresh graduates who are intent on taking the plunge into the job market
- ✓ Developers who are working in one of the functional roles of front-end or back-end development and want to shift to full stack development
- ✓ Test engineers, system engineers, and others who want to make a career shift to development

Learning Path



Implement OOPS Using JAVA with Data Structures and Beyond

Brush up on your knowledge of essential software development fundamentals with this introductory phase of our Full Stack Java Developer track. Get familiar with Agile and Scrum methodologies to deliver projects on time, and learn the basics of Java and data structures to implement object oriented programming concepts. Get an in-depth understanding of GIT to manage version control systems and Maven to manage project dependencies.

Course Learning Objectives:

After completing this phase, you will be able to:

- ✓ Understand the underlying principles of Agile and Scrum
- ✓ Get an overview of Git, GitHub, and Git Rebase
- ✓ Learn about Java and its basic concepts such as methods, constructors, strings, inheritance, multithreading, and arrays

Skills and Tools Covered:

- | | |
|-------------------|---------|
| ✓ Agile and Scrum | ✓ Java |
| ✓ Git | ✓ Maven |

Become a Back-end Expert

Familiarize yourself with the back-end technologies by implementing knowledge of SQL, Java servlets, and relational database ORM with Hibernate. Learn to connect databases with JDBC and work with RESTful web services.

Course Learning Objectives:

After completing this phase, you will be able to:

- ✔ Understand the servlets and basics of SQL including DDL and DML
- ✔ Get an overview of JDBC, JSP, REST, and Hibernate

Skills and Tools Covered:

- | | |
|-----------|-------------|
| ✔ Servlet | ✔ Hibernate |
| ✔ SQL | ✔ REST |
| ✔ JDBC | |

Implement Frameworks the DevOps Way

Master UI skills with advanced HTML and CSS and build 3-tier applications with rich front-end features using Spring framework, Angular, JUnit5, and SoapUI. This phase will enable you to deploy continuous integration and automation using a common DevOps tool: Jenkins.

Course Learning Objectives:

After completing this phase, you will be able to:

- ✓ Understand Spring basics, including its framework architecture
- ✓ Handle exceptions using Spring Boot
- ✓ Build RESTful web services
- ✓ Comprehend JUnit 5 platform and architecture and SoapUI features
- ✓ Integrate continually and automate with Jenkins pipelines

Skills and Tools Covered:

- | | | |
|----------------|-----------|-----------|
| ✓ Spring | ✓ JUnit 5 | ✓ Jenkins |
| ✓ RabbitMQ | ✓ SoapUI | |
| ✓ Apache Kafka | ✓ CI/CD | |

Develop a Web Application Using Front-end Stack

Build real-world websites and applications using the front-end stack technologies such as HTML, CSS, JavaScript, and Angular. Handle diverse data types and manage your applications efficiently using MongoDB.

Course Learning Objectives:

After completing this phase, you will be able to:

- ✔ Understand the basics of HTML, CSS, Javascript, Typescript, Angular, and MongoDB
- ✔ Configure Jasmine, test source codes, and test your angular application

Skills and Tools Covered:

- | | |
|----------------|-----------|
| ✔ HTML and CSS | ✔ Angular |
| ✔ Javascript | ✔ MongoDB |
| ✔ Typescript | ✔ Jasmine |

STEP

1

2

3

4

5

Testing in a DevOps Lifecycle

Begin automation testing and integration with Selenium Webdriver. Create seamless development and product environments using containerization with Docker and manage applications on Amazon S3 servers.

Course Learning Objectives:

After completing this phase, you will be able to:

- ✔ Understand Webdriver basics and its architecture
- ✔ Run tests with Selenium using TestNG
- ✔ Comprehend ELK stack and Kibana monitoring tool
- ✔ Get familiar with AWS and its services such as EC2, IAM, S3, EBS, and VPC
- ✔ Develop and deploy modern web applications with Docker

Skills and Tools Covered:

- | | | |
|-------------|-------------|--------------|
| ✔ Selenium | ✔ Cucumber | ✔ AWS |
| ✔ Webdriver | ✔ ELK Stack | ✔ Docker |
| ✔ Gherkin | ✔ Kibana | ✔ Kubernetes |

Full Stack Java Developer Capstone Project

The Full Stack Java Developer Capstone project will allow you to implement the skills you've learned in this program across domains such as e-commerce, food delivery, entertainment, and healthcare. With dedicated mentoring sessions, you'll know how to solve a real industry-aligned problem. You will receive hands-on experience developing an entire application from scratch and deploying into a pseudo-production environment. The Capstone project is the final step in the learning path and will help you showcase your expertise to employers.

E-commerce

Create a dynamic and responsive Java e-commerce web application using technologies such as Angular, Hibernate, MySQL, and Docker.

Food Delivery

Build a food-delivery app from scratch using your knowledge of the Spring framework, web services, and MySQL with a strong back end to support operations.

Entertainment

Create an entertainment application like BookMyShow using your back-end knowledge, API development, and HTML and CSS skills.

Healthcare

Build a dynamic and effective healthcare app. Create rich UI for effective diagnosis and health advice with Angular, Javascript ES6, and more.

Certificates



About Simplilearn

Simplilearn is a leader in digital skills training, focused on the emerging technologies that are transforming our world. Our Blended Learning approach drives learner engagement and backed by the industry's highest completion rates. Partnering with professionals and companies, we identify their unique needs and provide outcome-centric solutions to help them achieve their professional goals.



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