



# Full Stack Web Development Certification

Course Book



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# About us

Welcome to Codeango Learning, the leading provider of online training solutions for professionals in the ever-evolving world of technology. With a diverse portfolio of 180 cutting-edge technologies, we empower individuals and organizations to stay ahead in the rapidly changing digital landscape. Whether you're a seasoned professional looking to upskill or a beginner eager to embark on a tech-driven journey, Codeango is here to guide you towards success.

At Codeango, we understand the importance of continuous learning in today's digital age. Technology advancements occur at lightning speed, and keeping pace with the latest trends and tools can be a daunting task. That's why we've built a comprehensive platform that offers a wide range of online training courses, catering to professionals from various industries and experience levels.

## Our Accreditations



MICRO, SMALL & MEDIUM ENTERPRISES  
सूक्ष्म, लघु एवं मध्यम उद्यम  
OUR STRENGTH • हमारी शक्ति

Ministry of MSME, Govt. of India



सत्यमेव जयते

GOVERNMENT OF INDIA



# About us



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# Course Introduction

## What is Full Stack Development ?

Full-stack Python development refers to the practice of using the Python programming language to develop both the front-end and back-end components of a web application. It involves working with different layers of a web application, including the client-side (front-end), server-side (back-end), and the database.



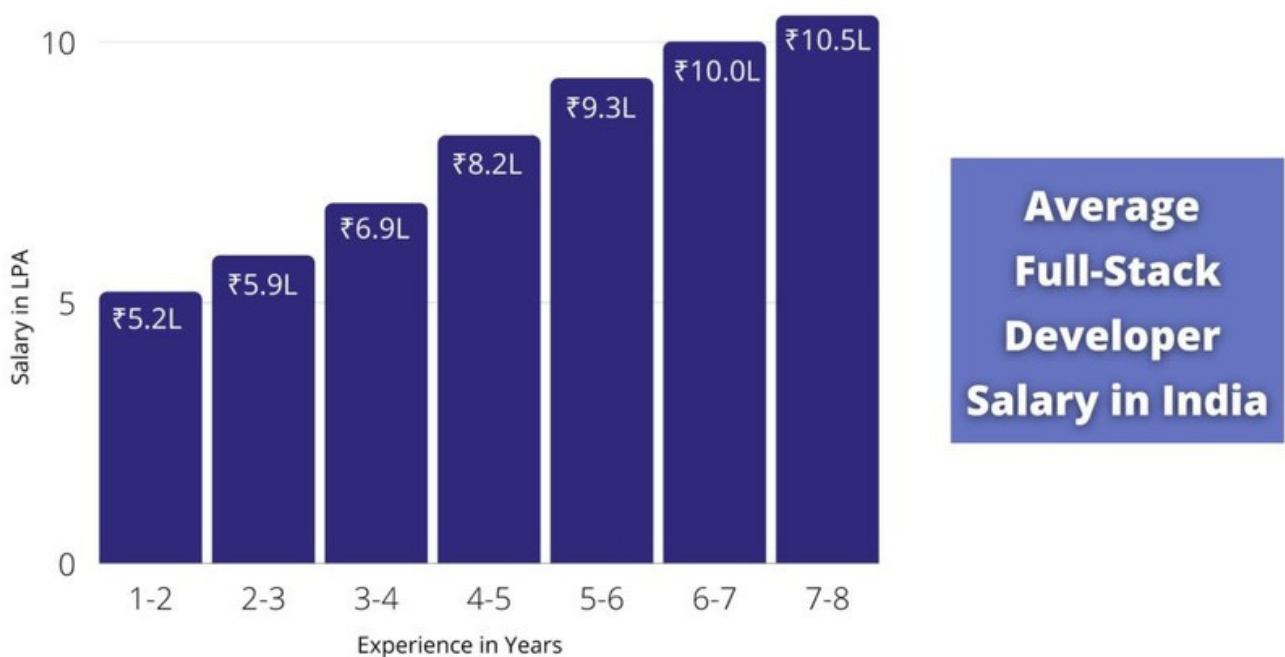
## Key Components in Full Stack web Development

- **Front End** : This involves creating the user interface (UI) and handling the interactions that occur on the client-side of a web application
- **Back End** : This encompasses the server-side logic and database management that powers the web application
- **Database & Storage** : Full stack developers work with databases to store and retrieve data efficiently

# Salary in Full Stack Development



Source: Crempate



Source: VS Cube TEch



# RECURITERS FOR FULL STACK DEVELOPMENT

## Top Companies



# *COURSE BENEFITS*

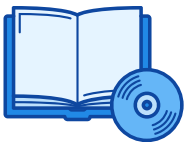
Codeango Learning provides all possible things to ensure smooth learning process and this is what you will be getting in this course



Live Classes



Certificate of Completion



Study Materials



Internship  
Guaranteed while  
learning



Recording of  
each session



Job Guaranteed



Flexible Schedule



Lifetime Support



Experienced Faculty



24/7 guidance



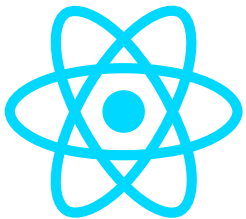
# Technologies Covered

We will be covering all the essential technologies required to get right skills and good job

**HTML**



**CSS**



React



ANGULAR

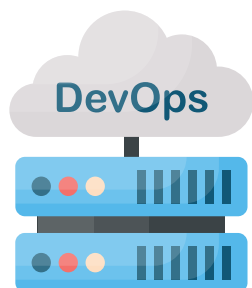


python



SQL

django



aws



# Course Content

- Introduction to HTML
- Understanding the structure of web pages
- HTML tags and elements
- Creating headings, paragraphs, lists, and links
- Working with images and multimedia
- Creating forms and input validation
- Introduction to Cascading Style Sheets (CSS)
- Selectors and properties
- Styling text, backgrounds, and borders
- Working with layouts and positioning
- Responsive design and media queries
- Bootstrap Framework
- Overview of the Bootstrap framework
- Setting up Bootstrap in a project
- Working with grids and responsive design
- Utilizing Bootstrap components and utilities
- Customizing Bootstrap themes
- Introduction to JavaScript
- Introduction to JavaScript programming
- Variables, data types, and operators
- Control flow and conditional statements
- Loops and iterations
- Functions and scope
- Advanced JavaScript Concepts
- Arrays and array manipulation
- Objects and object-oriented programming in JavaScript
- DOM manipulation and event handling
- Asynchronous JavaScript and AJAX
- Error handling and debugging techniques
- Introduction to React
- Introduction to React and its core concepts
- Setting up a React development environment
- Components and JSX syntax
- State and props
- Handling events and rendering lists
- Node.js Basics
- Introduction to server-side development with Node.js
- Setting up Node.js and npm (Node Package Manager)
- Working with modules and creating a server
- Handling HTTP requests and responses
- Introduction to Express.js framework

- Building Web Applications with Node.js and Express
- Creating RESTful APIs with Express
- Working with databases using MongoDB and Mongoose
- User authentication and authorization
- Error handling and middleware in Express
- Deployment and hosting options for Node.js applications

- Introduction to AngularJS
- Introduction to the AngularJS framework
- Setting up an AngularJS development environment
- Building components, directives, and services
- Data binding and two-way data binding
- Routing and navigation in AngularJS

- Building Single-Page Applications with AngularJS
- Working with forms and user input validation
- Handling HTTP requests and RESTful APIs in AngularJS
- Authentication and security in AngularJS
- Testing and debugging AngularJS applications
- Performance optimization and best practices

- Advanced Topics in Web Development
- Introduction to TypeScript
- Webpack and module bundlers
- State management with Redux
- Introduction to GraphQL
- Real-time communication with WebSockets

- Introduction to Python Programming
- Introduction to Python and its syntax
- Variables, data types, and operators
- Control flow and conditional statements
- Loops and iterations
- Functions and modules

- Python Object-Oriented Programming (OOP)
- Understanding the principles of OOP
- Classes, objects, and inheritance
- Encapsulation, polymorphism, and abstraction
- Working with modules and packages
- Error handling and exceptions

- Django Web Framework
- Introduction to web development with Django
- Setting up a Django project and environment
- Creating models and working with databases
- Views, templates, and URL routing
- Form handling and validation

- Django Advanced Concepts
  - Authentication and authorization in Django
  - Working with Django ORM (Object-Relational Mapping)
  - Handling file uploads and static files
  - Middleware and request/response processing
  - Testing and debugging Django applications
- 
- MS SQL Database
  - Introduction to relational databases and SQL
  - Installing and configuring MS SQL Server
  - Creating tables, views, and stored procedures
  - Querying and manipulating data using SQL
  - Database administration and optimization
- 
- Git Version Control
  - Introduction to version control and Git
  - Setting up a Git repository
  - Basic Git commands and workflows
  - Branching, merging, and resolving conflicts
  - Collaborating with Git using remote repositories
- 
- DevOps Practices
  - Introduction to DevOps and its principles
  - Continuous Integration (CI) and Continuous Deployment (CD)
  - Automating build, test, and deployment processes Configuration management with tools like Ansible
  - Containerization with Docker
- 
- Introduction to AWS Cloud Basics
  - Introduction to cloud computing and AWS
  - Creating an AWS account and managing resources
  - AWS core services: EC2, S3, RDS, and IAM
  - Deploying applications on AWS
  - Monitoring and scaling applications on AWS
- 
- Advanced AWS Services
  - AWS Lambda and serverless computing
  - AWS API Gateway and managing APIs
  - AWS DynamoDB and NoSQL databases
  - AWS CloudFormation for infrastructure as code
  - Security and access control in AWS

- Building Scalable Web Applications
  - Architecting scalable web applications
  - Performance optimization and caching strategies
  - Load balancing and auto-scaling in AWS
  - Handling asynchronous tasks and message queues
  - Implementing RESTful APIs
- 
- Testing and Deployment
  - Writing unit tests and test-driven development
  - Continuous integration and deployment pipelines
  - Deployment strategies and blue-green deployments
  - Monitoring and logging in production
  - Performance testing and profiling
- 
- Project Development and Deployment
  - Building a complete web application using the learned technologies
  - Project planning, architecture, and development best practices
  - Testing, debugging, and optimizing the web application
  - Deployment and hosting options for web applications
  - Final project presentation and showcase



We will be happy to serve you  
Please Whatsapp in case of any query