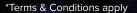


## Advanced Full-Stack Development Bootcamp for Working professionals

**Interview Opportunities in Product Companies** 

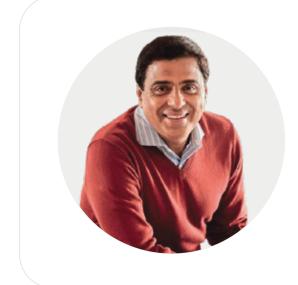


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# ABOUT UPGRAD

upGrad is an online education platform to help individuals develop their professional potential in the most engaging learning environment. With an exponential increase in demand for skilled individuals, our aim is to help working professionals upskill in emerging new-age technologies. With our meticulously designed upGrad's Advanced Full-Stack Development Bootcamp, we equip you with conceptual knowledge, give you hands-on experience and ensure you start a successful career in the industry. At upGrad, we aim to leverage technology in order to transform the way education is delivered in the digital age.



#### Our aim is simple:

We strive to create high-impact, hands-on experiences that prepare students for meaningful and productive careers.

### Ronnie Screwvala Co-founder and Executive Chairman upGrad

# ABOUT THE BOOTCAMP

### The Advanced Full-Stack

**Development Bootcamp** Program by upGrad is designed to equip you with all the skills to level you up as a Full stack software engineer at a top-tier product company. You will go from learning the fundamentals to mastering the critically important data structures, algorithms, and system design topics using a host of expert led sessions, world-class curated content and interactive cloud-lab enabled exercises.

You also get incredible support from our highly experienced mentor pool who will share their knowledge with you so that you are prepared and able to ace the interviews at product companies with ease.

This program is designed for working professionals with computer science or IT backgrounds and those already familiar with coding. The program covers the fundamentals of Java for the first month and then familiarizes you with software development and DSA and system design- needed to help you crack those interviews at product companies.

Gain a deep understanding of how to build, deploy, secure and scale programs and build expertise across the user interface, business logic and database stacks. Learn by doing with Cloud Labs and experience working on capstone projects that simulate real-world web development. With our bootcamp, you'll dive deeper into topics and techniques via independent and group projects, receive individualized feedback, get doubt solving sessions from Top product companies experts, hone your skills in hackathons spread across the program, and get intense interview preparation and career launch support.



# **PROGRAM HIGHLIGHTS**

# 328

Hours Instructor-Led Sessions

# 90

Hours of Live Interactive **Doubt-Sloving Sessions** 

# 4

Webinars and Master Classes by Industry Experts

# 287+

Hands-On Exercises for Practice

# 11

**Real-World Projects for Practical Learning** 

# 90

Hours of Self-Paced Video Content

400

Hours of Cloud Labs-Enabled Learning

Hackathon

# 10

**Case Studies for Applied Learning** 

Mock Interviews



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**Program Duration** 

10 Months

### **Eligibility Criteria**

Anyone with computer science or IT educational background along with 1+years of experience in the tech domain

### **Admission Process**

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**Step 1:** Apply for the program

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**Step 2:** Complete your application

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**Step 3:** Clear the scholarship test

**Step 4:** Reserve your seat

# WHY THIS BOOTCAMP?

The Advanced Full-Stack Development Bootcamp is designed by the best industry experts to help you kickstart your tech career. The core components of our program help us stand out from all alternatives you may have.

	Video Courses	Bootcamps	upGrad
Cloud Labs	No	Νο	Yes
Industry projects	No	Yes	Yes
Doubt Solving Sessions	No	No	Yes
Career guidance sessions	No	Yes	Yes
Java beginners course	No	No	Yes
Top product companies instructors	No	No	Yes

- **Cloud Labs** is an intelligent immersive learning platform to practice codes and receive instant feedback on areas of improvement
- **Top product companies instructors** stands for industry experts from best tech firms.

### **1.** Fundamentals and Mastering Java

Introduction to Fullstack software development

Software development job roles and growth opportunities

The Software Development Lifecycle [SDLC] Process, Phases and Models

Data types and Java essentials

Classes, Methods, Interfaces and more

**Object-Oriented Programming** 

Recursion

Collection framework

Multithreading and Concurrency

Lambda functions

Version control systems

Using Git and the workflow

Working with local vs remote repositories

Git Branches, Cloning, Forking

Code reviews

Using GitHub for collaboration and more

### 2. Software Development 101

Introduction to Design Patterns

Interpreting UML notation and diagrams

Impact of design on performance

Use cases

Creational design patterns

Structural design patterns

Behavioural design patterns

Understanding Operating System Concepts

Memory

Threads and Process

**Process Synchronization** 

Deadlock

**Understanding Computer Networks** 

**Protocols and Layers** 

**Security Essentials** 

Network Address Translation (NAT)

Introduction to Data Structures & Algorithms

Introduction to Arrays, Stacks, Linked Lists and more

Basic Algorithms & Time and Space Complexity

**3. Mastering Data Structures and Algorithms** 

Arrays, Stacks and Queues

Linked Lists, Tree, Heaps and Graphs

**Binary Search** 

Sorting

**Bit Manipulation** 

Hashing Algorithms

**Greedy Algorithms** 

Dynamic Programming

Backtracking and more

### 4. Interview Prep I

Mock Interviews

Essential communication skills

Behavioural interview preparation

Time management

### 5. Mastering System Design

Mastering SOLID Design Principles

System Design Essentials

Storage, Stores and Databases

Network and Load Balancers

Caching, Proxies and Rate Limiting

Logging and Monitoring

Security and more

Low-Level Design (LLD) with case studies

High-Level Design (HLD) with case studies

### 6. Interview Prep II

Essential communication skills

Behavioural interview preparation

**Resume and LinkedIn Profiles** 

Art of keeping the interviewer engaged

Interview Strategy

Time management

Salary Negotiation and Referrals

7. Full Stack Software Development

Types of Databases

**Relational Databases - Important Concepts** 

Introduction to MySQL

Introduction to NoSQL concepts

Basics of MongoDb

Fitment into various architectures

CAP Theorem

Deep Dive into APIs - Types and use cases

Basics of Spring Core and MVCs

Introduction to Spring Boot

Dependency Injection and Inversion-of-Control

Service Architecture Patterns

Basics of DevOps - Concepts and Workflows

Introduction to Frontend Development

Learning HTML5 and CSS3

Learning JavaScript

Basics of Module Bundlers and toolchain development

Building interactive UIs and apps using React

Capstone Project Development and Review

# OUR COURSE AUTHORS



Ashish Sarkar Computer Scientist Adobe, Ex-PayPal



### Shishir Chandra

Director of Engineering Target, Ex-Apple



Sachin Bhatnagar Program Director -Full-Stack upGrad Knowledgehut



Jeane-Marc Julien

Vice President -Techonlogy Goldman Sachs



Venu Gopal Software Engineer Microsoft



### Darsh Sanghavi Software

Engineer Microsoft



Raghavendra M Jagdish Staff Software Engineer VISA



Jainil Vachhani Software

Engineer II Microsoft

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### S Career Planning & Coaching

- Goal Setting
- Personalized Career Planning
- Career Coaching

### B Interview Preparation

- DS, Algo, and System Design
- Hackathons and Mock Interviews
- Interview Analysis and Feedback

### Dedicated Placement Support

- Target Software Developer Roles
- Resume, LinkedIn, and GitHub Reviews
- Comprehensive Placement
  Assistance

# OUR TESTIMONIALS



### Darshan

#### $\star$ $\star$ $\star$ $\star$

I was looking forward to upskill my learning in the tech domain. One of my friends recommended upGrad courses to me and I was excited to learn from the industry experts. The curriculum has been updated with the need of the industry today. I received a lot of support in the form of doubt solving and mentorship sessions. My overall experience has been great and I have enjoyed learning with upGrad.



# Vedprakash

I have been working as a backend developer and I wanted to work with a product based company at a more senior position. That's when I searched for upGrad's tech courses. I liked the learning outcomes the Advanced FSD bootcamp was offering. I enjoyed learning DSA and System Design the most as the instructor covered the overall aspect from academic information to real-world applications. I have enjoyed my overall learning journey so far with upGrad.



### Samiha



During lockdown, I decided to swap my career from a teacher to a Tech Developer. I discussed about this with my husband and was recommended this course by his friend. The curriculum started from basics and the training was conducted by the best industry experts. I can surely say that I am confident to practice Java and DSA and I am enjoying this growth as a professional. The learning curriculum is great and is designed to ensure the oucomes are met.



Q upgrad.com

For further details, contact



bootcampsupport@upgrad.com



We are available 24\*7

upGrad Education Private Limited. Nishuvi, 75, Dr. Annie Besant Road Worli, Mumbai - 400018 Corporate office: Lexington Towers, Bangalore- 560029