

# upGrad

**Advanced Full-Stack Development Bootcamp  
for Working professionals**

**Interview Opportunities in Product Companies**



\*Terms & Conditions apply

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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.

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### **Ronnie Screwvalla**

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-Solving Sessions

**4**

Webinars and Master Classes by Industry Experts

**90**

Hours of Self-Paced Video Content

**287+**

Hands-On Exercises for Practice

**400**

Hours of Cloud Labs-Enabled Learning

**11**

Real-World Projects for Practical Learning

**1**

Hackathon

**10**

Case Studies for Applied Learning

**3**

Mock Interviews

# PROGRAM DETAILS



## 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



### Step 1:

Apply for the program



### Step 2:

Complete your application



### 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	No	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.

# PROGRAM

## CURRICULUM

### 1. Fundamentals and Mastering Java

Introduction to Fullstack software development

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Software development job roles and growth opportunities

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

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Data types and Java essentials

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Classes, Methods, Interfaces and more

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Object-Oriented Programming

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Recursion

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Collection framework

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Multithreading and Concurrency

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Lambda functions

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Version control systems

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Using Git and the workflow

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Working with local vs remote repositories

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Git Branches, Cloning, Forking

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Code reviews

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Using GitHub for collaboration and more



# PROGRAM

## CURRICULUM

### 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

# PROGRAM CURRICULUM

## 3. Mastering Data Structures and Algorithms

Math Fundamentals

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Arrays, Stacks and Queues

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Linked Lists, Tree, Heaps and Graphs

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Binary Search

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Sorting

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Bit Manipulation

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Hashing Algorithms

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Greedy Algorithms

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Dynamic Programming

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Backtracking and more

## 4. Interview Prep I

Mock Interviews

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Essential communication skills

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Behavioural interview preparation

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Time management

# PROGRAM

## CURRICULUM

### 5. Mastering System Design

Mastering SOLID Design Principles

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System Design Essentials

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Storage, Stores and Databases

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Network and Load Balancers

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Caching, Proxies and Rate Limiting

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Logging and Monitoring

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Security and more

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Low-Level Design (LLD) with case studies

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High-Level Design (HLD) with case studies

### 6. Interview Prep II

Essential communication skills

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Behavioural interview preparation

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Resume and LinkedIn Profiles

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Art of keeping the interviewer engaged

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Interview Strategy

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Time management

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Salary Negotiation and Referrals

# PROGRAM

## CURRICULUM

### 7. Full Stack Software Development

Types of Databases

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Relational Databases - Important Concepts

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Introduction to MySQL

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Introduction to NoSQL concepts

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Basics of MongoDB

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Fitment into various architectures

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CAP Theorem

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Deep Dive into APIs - Types and use cases

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Basics of Spring Core and MVCs

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Introduction to Spring Boot

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Dependency Injection and Inversion-of-Control

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Service Architecture Patterns

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Basics of DevOps - Concepts and Workflows

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Introduction to Frontend Development

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Learning HTML5 and CSS3

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Learning JavaScript

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Basics of Module Bundlers and toolchain development

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Building interactive UIs and apps using React

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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 -  
Technology  
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

# CAREER SERVICES



## Career Planning & Coaching

- Goal Setting
- Personalized Career Planning
- Career Coaching



## 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**



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 outcomes are met.

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🔍 [upgrad.com](https://upgrad.com)

For further details, **contact**



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We are available 24\*7

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