



# Job Bootcamp 2024

## Java Spring boot

Success starts with a decision  
to try.



# About **Job Bootcamp**

I **Built to help you #SwitchToDreamJob**

**Job bootcamp** is a one-stop solution for working professionals to land their dream job. We cater to Recent graduates and final year students accepted too.

**Ankush Singla** | Co-Founder & Instructor

Ankush holds a Bachelor's degree in Computer Science from India's most premier institute - IIT Delhi and a Master's degree in Computer Science from Stanford University.

He is a coding enthusiast and has worked with bigwigs like Amazon & Facebook in the past.





## Our Impact

**1 Lac+**

Learners  
taught so far

**128%**

Avg Increase  
in salary

**32 LPA**

Highest CTC

**1200+**

Hiring  
partners

**90%**

Placement  
Record

**11 Crores+**

Problem  
Submissions



# Doubt **Support**

We have developed a very scalable solution using which we are able to solve **7000+ doubts** every single day with the help of our **2000+ TAs** on the platform itself with an average rating of 4.8 out of 5.

## **Live Projects**

Build Industry standard end-to-end Mini, Major and Capstone projects.

## **Get an Industry Recognised Certificate**

Get awarded with an industry-recognised certificate as you complete your Boot camp.

## **Be a part of the learning community:**

Performance tracking team and Slack groups to connect with your peers.

## **Live Mentorship:**

Interact live 1:1 with industry experts and schedule mock interviews with mentors.



# Programme Overview

## I Course Overview

The purpose of this course is to learn Web Development with technologies like Spring Boot, reactjs and advanced HTML & CSS etc., which will enable you to create effective and responsive web applications for all intents and purposes. Additionally, it will teach you how to create servers, work with databases, and develop scalable, robust systems using System Design Techniques.



# Program Details



## Program Duration

9 Months



## Eligibility Criteria

Recent Graduates and Final Year Students and Working Professionals

## Admission Process

### Step 1:

Complete your Coding bootcamp application

### Step 2:

The profile is reviewed by our admissions team.

### Step 3:

Connect for a live 1:1 counseling session to understand whether this course is a right fit for you.

### Step 4:

Reserve your seat.



# Content Delivery



## Structured

Thoughtfully designed curriculum for graduates, final year college students and working professionals to help them emerge as confident tech professionals.

## Blended delivery

Here, content is released every week followed by pre-recorded videos, 1:1 doubt resolution & live webinars.

## Industry-relevant

Industry-tested curriculum vetted by IT and Stanford alumni to make you job ready.

## Hands-on

Projects and assignments designed to implement concepts.



# Course Module

## I **Front end Web Development with React**

Learn the best practices of converting data to a graphical interface, through the use of HTML, CSS, and JavaScript.

Build amazing user interfaces or UI components using React library.

## I **Backend web development with Spring Boot**

Learn the essential Spring concepts, RESTful API development, data manipulation, security, microservices, and JUnit testing.

## I **Introduction to Programming**

Learn the basics of the most popular programming languages and become an expert in the core fundamentals of programming.

## I **Data Structures and Algorithms**

Data structures and algorithms is all about organising the information and finding the most efficient approach to solve a problem. Learning these concepts will in turn help you to improve your problem-solving skills and solve any real-world problems using technology.



## I **Interview Preparation - Aptitude**

This module will enhance your Quantitative Aptitude, Logical Reasoning, Verbal Ability and Data Interpretation skills and conquer the aptitude round of the interviews.

## I **Operating System**

This module will help you prepare for the questions asked on Operating systems in software engineering interviews, with the unique perspective to view operating systems in three parts: Virtualization, Concurrency and Persistence. This module also includes, demonstrations to aid learning and to map theoretical concepts to Linux OS.

## I **Database Management System (DBMS)**

This DBMS module covers fundamental concepts such as Data, Database, DBMS, ER diagrams, Relational Models, ACID properties, SQL, Normalization. This module also introduces you to advanced topics like Transactions, Indexing, NoSQL databases and database optimization. Data is an important part of any software and there are many opportunities for people having the skills to work on data. The DBMS module makes you ready for job positions requiring database and SQL knowledge such as business analyst, data analyst, software engineer, SQL developer, data scientist for companies such as Oracle, Google, Amazon etc..



## | **System Design**

Learn how to create efficient large scale applications through our System Design course which covers core concepts of architectural patterns, required application characteristics, database optimization, networking, security for strong foundations. The module covers real-life use cases in detail, assignments for practical implementation of learned concepts, and gives a sneak peek of the interview process.

## Course **Outcome**

- | **Upskill with latest industry practices and get your first tech job**
- | **Switch to IT sector-(People from different domain)**
- | **Switch to product based organisation**
- | **Build live projects with industry mentors**



# Placement **after the course**



**Himanshu, 32 LPA**  
Company : **Amazon**



**Rahul Singhla, 32 LPA**  
Company : **Cadence**



**Gouri Hegde, 25LPA**  
Company : **Paypal**



**Rutresh, 20 LPA**  
Company : **Quotient Technology**



**Supratik De, 18.5 LPA**  
Company : **Kronos**



**Srinidhi, 18 LPA**  
Company : **Narvar**



**Shubham, 14.5 LPA**  
Company : **Mobelium**



**Siddhant, 14 LPA**  
Company : **Vymo**



**Avinash, 13.5 LPA**  
Company : **Samsung**



# Tools and Techniques

HTML



CSS



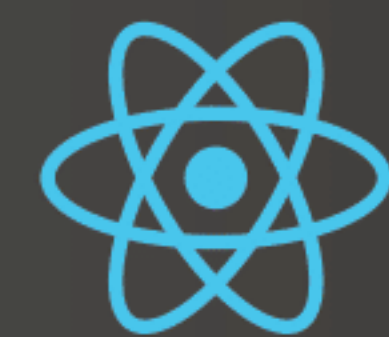
JS



JUnit



REACT JS





# Projects



## Music Player

Build and style a music player like Spotify/Youtube Music using HTML and CSS



## Stock Market Analysis

A project which allows users to add different stocks to their portfolio and get real-time data on their stocks using API, which automatically updates after a few sec.



## iPod

Build a clone of iPod nano 5th gen



## PhotoFolio

An online photo album app that allows users to upload, organise, and share their digital photos.



## BusyBuy

A web-based application that allows users to browse and purchase products online.



# Projects



## Movie Booking Application

Building a Mini Project using restful web service in Spring Boot.



## Expense Manager

Building a Mini Project using Restful Web Services, Hibernate and Relationship.



## E-voting Application

Building a Mini Project using Restful Web Services, Spring Data JPA, JPQL and Named Query.



## Secure Online Banking Application

Building a Mini Project using Restful Web Services, Spring Data JPA, and Spring Security



## Ecommerce Application

Building an end to end Ecommerce Project in Spring Boot using Rest API, Spring Data, Microservice architecture and Security.



## I Introduction to Programming

### Topics

Basics of Programming

Loops and Functions

Arrays

Strings and 2D Arrays

Problem Solving Techniques

Object-oriented programming

Linear Data Structures

Trees

Advanced Data Structures



# Detailed Curriculum

## I Introduction to Programming

### Topics

Dynamic Programming

## I Frontend Module

### Topics

Getting started with Basics

Introduction to HTML

More on HTML

Forms

Intro to CSS



## I Frontend Module

### Topics

Styling with CSS

Starting with Resume project

Flex

Responsive designs

Completing Resume

Animations and 3D space

Bootstrap

Major Project



## I Frontend Module

### Topics

Starting with JavaScript

Fundamentals of JavaScript

Loops, Arrays, Function & Objects

Working of JS

Functions in JS

oop in JS

ES6 Classes

DOM Manipulation

Mini-project: Quiz Game



## I Frontend Module

### Topics

Asynchronous JavaScript

Modules in js

Intro to jQuery

Event handling in jQuery

Intro to Git & Branches

Git Workflow



## | Backend Module with Spring Boot

### Topics

Introduction to Spring Boot

Dependency Injection

Bean Scope

Bean Scope Life Cycle

Spring Annotations

MVC Core Principles

MVC and Web

Rest API: Get and Post

Rest API: Put & Delete



## Backend Module with Spring Boot

### Topics

Introduction to Spring Boot

REST Template

Hibernate and CRUD operation

Hibernate and Relationships

Project

Spring Data JPA and Queries

Project

Introduction to Spring Security

User Authentication and Authorization



## Backend Module with Spring Boot

### Topics

Password Security and Session Management

Spring Security and Advanced Topics

Project

Spring Boot Actuator and Dev Tools

Logging and Metrics

JUnits Testing

Microservice

Capstone Project



## I React Module

### Topics

Intro to React

Learning JSX

Score-Keeper App

Create-React-App

React Components - I

React Components - II

Styling in React

Component Lifecycle Methods

React Hooks



## I React Module

### Topics

Firebase 9

CRUD with Firebase & Querying Data

React Router v6

Context API

Redux in React: Intro

Store, Action, Reducers

Thunk Middleware

Redux Toolkit

ADVANCED Redux



## Interview Preparation - Aptitude

### Topics

Numbers

Averages and Mixtures

Arithmetic and Word Problems

Counting

Time, Speed and Distance

Reasoning

English

Data Interpretation

Miscellaneous Topics



## I Introduction to Operating System

Introduction to OS

Process Management

Memory Management

Concurrency

Storage Management

Case Study: Linux OS



## I Introduction to DBMS

### Topics

Introduction to DBMS

Data Modeling

Entity-Relationship Model

Relational Model

SQL

Normalization

Transactions

Indexing

Classification of Databases

# Detailed Curriculum

## Introduction to DBMS

### Topics

NoSQL Databases

Database optimization

## Introduction to System Design

### Topics

Introduction

Architectural patterns

Application characteristics I

Application characteristics II



## I Introduction to System Design

### Topics

Application characteristics III

Database

Database Optimization

Communication

Web Applications

Servers and security

Real Life Use Cases

Distributed web crawler

Global chat service : Messenger

## I Introduction to System Design

### Topics

Video streaming service (Youtube)

File storage and sharing system(Dropbox)

Global ride sharing system(Uber)

Practice projects

Mock interview sessions