Whatsapp Group Link : https://chat.whatsapp.com/HyQItzMkHh04ABmjH6lAyd

Welcome to Ashok IT...!!

Java Real-time Project (fullstack) (24 - JRTP)

Trainer : Mr. Ashok

IT Exp : 10+ Years Exp

Role : Tech lead

Training Exp : 7 Years

Note: Ashok IT started in 2020

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Course Name : 24 - JRTP
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1) Pre-Requisites for attending 24-JRTP
2) Who can attend this course
3) Course Content
4) What Projects we are going to develop
5) How this course will help
6) Course Info (duration + timings + fees)

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Pre-Requisites
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1) Core Java (jdk 17)
2) Adv Java (JDBC + Servlets)
3) Database (SQL)
4) Spring Boot
5) REST APIs
6) Data JPA (ORM)

7) HTML & CSS
8) Java Script
9) Bootstrap

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Who can attend this course ?
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1) Java Freshers

2) Career Gap

3) Employees

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24-JRTP Course Content
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Module-1 : Software Industry Details

Module-2 : Realtime Tools (20+ Tools)

1) Maven
2) Gradle

3) Git Hub & BitBucket
4) Log4J & SLF4J
5) Log Monitoring (ELK)
6) Junit & Mocking
7) Jacocco
8) SonarQube
9) JMETER
10) Jenkins
11) Docker
12) Kubernetes
13) Apache Kafka
14) Redis
15) PostMan
16) Swagger
17) JIRA

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Module-3 : Mini Projects
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1) Functional Design Document (FDD)
2) Requirements Analysis
3) Database Analysis
4) Java Classes Analysis
5) How to improve Coding Skills
6) How to become independent developer
7) 3 Mini Projects Development

Note: 2 mini projects will be developed in class from scratch. 1 Mini project is assignment for the students.

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Module-4: Major Project
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1) Requirements Analysis
2) Project Introduction
3) Project Architecture
4) Project Modules
5) Project Backend Development (Microservices)

Note: 7 Modules will be available. I will develop 4 modules in class. 3 Modules you have to develop.

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Module-5 : Front end development
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1) Angular
2) Frontend Development for Major Project

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Module - 6: AWS Cloud
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1) Linux OS
2) AWS Cloud Services

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Module-7 : Interview Guide
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1) Resume Preparation
2) Mock Interviews
3) FAQs
4) HR Discussion

5) Do's & Don'ts
6) Joining Formalities
7) Exit Formalities

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Course Info
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Name : 24-JRTP

Start Date: 17-Aug

Timings: 9:00 AM - 10:30 AM (IST) (Mon-Sat)

Duration: 3 to 4 months

Course Fee :

Plan-1 : 8000 (Live classes + soft copy notes)

Plan-2 : 12,000 (Live classes + soft copy notes + backup videos - 1 year access)

Noe: You can attend 5 classes for free

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Module-1 : Software Industry Info

Module-2 : Realtime Tools

Module-3 : Mini Projects

Module-4 : Major Project

Module-5 : Angular Development

Module-6 : Linux + AWS Cloud

Module-7 : Interview Guide

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What is Project ?
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Collection of programs is called as Project.

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Why we need to develop Software Projects ?
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=> To simplify humans life

=> To automate the work

Ex: Netbanking, Tickets Booking, Online shopping etc...

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Types of software projects
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1) Scratch Development Projects (Brand New)

2) Maintenence Projects (CR, Enhancements, Bug Fixes)

3) Migration Projects (conversion)

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Types Software Companies
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1) Product Based

2) Service Based

3) Outsourcing

=> Product Based companies will develop projets and they will sell in the market

Ex: Oracle, IBM, Microsoft, Google, facebook, Apple etc....

Skills : DSA, Problem Solving, System Design, Design Patterns.....

Pakage : Exp * 8 lakhs

=> Service Based companies will develop projects based on client requirments

Ex: TCS, Infy, HCL, Capgemeni, CTS, TechM, Wipro, Deloitte, Accenture...

Skills : Fullstack (frontend + backend + DB + Cloud + DevOps)

Package: Exp * 4 Lakhs

=> Outsourcing companies will do resource staffing
(they will send employees to other companies on contract basis)

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Types of Software Job ?
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1) Permanent Job

=> Selected for Deloitte as permenent
=> Deloitte is your payroll

2) Contract Job

Selected For HCL as permanent employee
Deployed in Microsoft as Contract Employee

HCL is your Payroll company
Microsoft is your client company

CodeBuster Infotech : Providing Exp documents to cover gap

In resume we mentioned working for TCS

TCS : Client
CodeBuster : Payroll

=> Types of companies

=> Types of projects

=> Interview Process

=> Package Structure

=> Types of Jobs

=> Payroll & Client

=> How to cover gap as experience

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Realtime Tools
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=> In Realtime environment, we will use several tools as part of our SDLC.

####### Maven & Gradle : Build Tools #########

-> Maven/Gradle are used to automate project build process
-> Create Project Structure
-> Download required libraries (ex: springboot, jpa, junit....)
-> Compile Source Code
-> Execute Unit Test cases (Junit)
-> Package our project as a jar/war file

########### Nexus / JFrog : Artifactory servers ###############

-> To maintain remote repositories
-> To store shared libraries

######## Junit & Mocking : Unit Testing Tool #########

-> To perform Unit testing
-> To identify bugs in code
-> We can improve code quality

######### Jacocco : Code Coverage Tool ########

-> To generate code coverage report
-> To identify unit testing statistics
        (how many lines tested & not tested)

######### Log4J : Logging Tool ##############

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-> To generate log messages
-> We can see application execution flow
-> We can see exceptions occured in project
-> We can undertand run-time behaviour of our application

########## ELK / Splunk : Log monitoring tools #######

-> To get applications logs from log files
-> To troubleshoot application exceptions
-> ELK (Elastic Search + Log Stash + Kibana) - Open source products
-> Splunk is licensed software


######### SonarQube : Code Review Tool ########

-> To perform code review
-> To identify developers mistakes in coding
-> We can identify bugs in code
-> We can identity duplicate code blocks
-> We can identify vulnerabilities (security issues)


########### Postman : API Testing Tool ##########

-> To test rest api functionality
-> To test backend application behaviour

########### JMETER : Performance Testing Tool ########

-> Test application stability
-> Test application responsiveness
-> To identify bottleneck of the application

##########  Docker : Containerization  #########

-> Run the application in container
-> We can isolate app execution from our machine
-> We can make our application portable

########### Kubernetes : Orchestration #########

-> To manage docker containers
-> Auto Scaling
-> Load Balancing
-> Rolling Updates & Rollbacks
-> Deployment activities

########## JENKINS : CI CD tool ###########

-> To automate build & deployment process
-> To achieve CI & CD


########### Git Hub & BitBucket :: Version Control Tools ############

-> To maintain project source code
-> Code Integration at one place
-> Code Monitoring Access (who/when/why/what)

########### JIRA :: Project Management ##########

-> Project tasks creation
-> Task assignment for team members
-> Bug Reporting by testing team
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-> Bug Assignmen to developers
-> Generate report of project tasks pending/completed

########### Swagger : Documentation #############

-> To generate REST API documentation
-> To test Rest API through user interface

########## Kafka & Redis ##############

-> Kafka is used for message broker (b 2 b)
-> Redis is used for cache implementation

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Every Java Developer Should Know
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1) Backend Development (SpringBoot + Rest API + Microservices)

2) Frontend Development (Angular / React JS)

3) DevOps Tools (Maven, Git, sonar, jenkins, docker, k8s....)

4) Linux Commands

5) Cloud Computing (AWS/Azure/GCP)