

01.27Mar. Application

27 March 2023 08:02 PM

Basic
Intermediate
Advance

Module 1: Application Development Fundamentals

1. Application Development

- Types of Applications
- Servers (Multi-Tier Application)
- Web Server
- Database Server
- Application Using
- Java(80%)
- Python
- MS.Net
- FSD(MEAN/MERN)
- Monolithic vs Microservice

Module 2: Java Concepts

- Java Architecture
- OOP
- Compile & Packaging
- Web & Console Application
- Run Java Web Application

Module 3: Python

Module 4: SQL

Module 5: AWS

Module 6: Linux

Module 7: DevOps

Module 8: Source Code(Github)

Module 9: Build Tool(Maven)

Module 10: CT(Selenium)

Module 11: CI (Jenkins)

Module 12: Docker

Module 13: K8S

Module 14: Ansible

Module 15: Monitoring (Prometheus, Grafana)

Module 16: CloudOps(DevOps+ AWS)

Module 17: Terraform

Projects

Interview

Submission

Vision (CloudOps = Cloud + DevOps) :

Application --> Prepare **Infra**(Cloud- AWS = IaaS, PaaS) --> **Deploy**(DevOps)

Softwares Requirements:

- Virtualization: Oracle VirtualBox --> **Linux (Ubuntu, Kali, Centos --> Redhat)**
- RAM: Minimum (4GB)
- HDD: Free 20GB
- SSH Clients: (Any one)
 - MobaXterm
 - Putty & Puttygen
 - SSH Command
- VSCode + Git-SCM
- MySQL Client
- Online Github Account**
- AWS Account**

Learning Journey

- 1) Training Delivery (Mujahed)
 - a. Topic Delivery
- 2) Mentor (Questions --> Share)
 - a. Questions
 - b. Stuck
- 3) Assignments
 - a. Trainer Solve --> Dynamic
 - b. Explain --> Mentor
 - c. Solve ---> Learner
 - d. Submit --> L&D

Computer

- Monitor
- Keyboard
- CPU

- Mouse

Group Discussion

Module 1: Application Development Fundamentals

1. Application Development
2. Types of Applications
3. Servers (Multi-Tier Application)
 - a. Web Server
 - b. Database Server
4. Application Using Java(80%)

Programming Language

User (English)	PL	Computer(Binary-1/0)
----------------	----	----------------------

Assembly

C of Advantages:

- Hardware interactions
- Easy Learn & Debug
- Lower language(Speed)

High Level PL:

- Python
- Go
- Java
- C#.Net
- JavaScript
- Node.JS
- ECMI Script

- PHP
- Visual Basic
- Cobol
- Pascal
- Ruby

Application

- Software Interact with End User --> Operating System
- Developed with Programming Language

Types of Application:

- **Console based(CLI - Command Line Interface)**
- Windows/Forms(outdated)
- **Web based**
 - **Website = Static**
 - **Web Application = Dynamic**

Create Simple Application:

1. Text Editor Source Code (VSCode)
2. Translator(Compiler/Interpreter)
3. Runtime(Output)

Display Message Simple Application

1. Java
 - a. Install Java
 - i. **JDK- Java Development Kit**
 - ii. **JRE- Java Runtime Environment**
 - b. Set Path(Address of Executable file)
 - c. Code(VSCode)
 - d. Compile

- i. \$ javac FileName.ext
- e. Run
 - i. \$ java FileName

1. Download Java(JDK+JRE)

<https://builds.openlogic.com/downloadJDK/openlogic-openjdk/11.0.18+10/openlogic-openjdk-11.0.18+10-windows-x64.msi>

2. Install Java

3. Test in terminal/Command Prompt