Dt : 6/7/2023(Day-1)

Course : Full Stack Java Developer

Module-1 : Programming Module

(CoreJava,AdvJava,Spring)

Module-2 : UI Module

(HTML,CSS,JS,Anguler)

Module-3 : DB Module

(Oracle)

Module-4 : Testing Module

(Testing Basics - Selenium)

Module-5 : Tools Module(DevSecOps)

(LOG4J,SLF4J,Chef,Gradle,Maven,Docker...)

Duration : 6 Months

Advantages:

1.NASSCOM - Certificate

2.Project

3.Placement Assistence

Langauge:

1.Alphabets

2.Grammer

3.Construction rules

Note:

=>Every Programming Language will have its own Alphabets, Grammer and Construction rules

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Java:

part-1 : CoreJava

part-2 : AdvJava

part-1 : CoreJava:

(1)Programming Components(Java Alphabets)

(2)Programming Concepts

(3)Object Oriented Programming features

(1)Programming Components(Java Alphabets)

(a)variables

(b)Methods

(c)Blocks

(d)Constructors

(e)Classes

(f)Interfaces

(g)AbstractClasses

(2)Programming Concepts

(a)Object Oriented Programming

(b)Exception Handling process

(c)Java Collection Framework(JCF)

(Data Structures in Java)

(d)Multi-Threading Concept

(e)File Storage

(f)Networking in Java

(3)Object Oriented Programming features:

(a)Class

(b)Object

(c)Abstraction

(d)Encapsulation

(e)PolyMorphism

(f)Inheritance

Dt : 7/7/2023(Day-2)

Note:

=>Using CoreJava Components and Concepts we can develop Stand-Alone-Applications

faq:

define Stand-Alone-Applications?

=>The Applications which are installed in one computer and performs actions in the same computer are known as Stand-Alone-Applications or DeskTop Applications or Windows Applications

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Part-2 : AdvJava

=>AdvJava provide the following technologies to develop Web Applications

1. *JDBC*
2. *Servlet*
3. *JSP*

faq:

define Web Application?

=>The Application which is executed in Web Environment or Internet Environment is known as Web Application or Internet Application.

Web Application Architecture:

JDBC : JDBC Stands for Java DataBase Connectivity and which is used to interact with DataBase product

Servlet : Servlet means Server-program and which is used to accept the request from user.

JSP : JSP stands Java Server Page and which is response from Web Application

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Dt : 10/7/2023(day-3)

faq:

wt is the diff b/w

(1)Language

(2)Technology

(3)Framework

(1)Language:

=>Language will provide Programming Components and Concepts which are used in constructing programs.

Ex:

CoreJava

(2)Technology:

=>The process of tranforming the knowledge into realtime application development is known as Technology

Ex:

AdvJava

(3)Framework:

=>The structure which is ready constructed and available for application development is known as Framework

Ex:

Spring

WebServices

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Summary:

Level-1 : CoreJava => Stand-Alone-Applications

Level-2 : AdvJava => Web Applications

Level-3 : Frameworks => Enterprise Applications

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faq:

define Enterprise Applications?

=>The applications which are executed in distributed environment and depending on the features like "Security","Load Balancing" and "Clustering process" are known as Enterprise applications or Enterprise Distributed Applications.

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Notes available in google drive:

https://bit.ly/VMFSJAVA6PM

Dt : 11/7/2023

define Program?(Syllabus)

=>Program is a set-of-Instructions

Note:

=>After writing the program,the program is saved with language extention.

Ex:

Test.c

Test.cpp

Test.java

=>The programs will have the following two stages to generate result:

1.Compilation

2.Execution

1.Compilation:

=>The process of checking the program constructed according to the rules of language or not,is known as Compilation process

=>After compilation process successfull,

=>C and c++ programs generate Objective Code and Java programs generare ByteCode

2.Execution:

=>The process of running the compiled codes and checking the required output(result) is generated or not,is known as Execution process.

=>This execution process internally having the following SubProcess:

(i)Loading

(ii)Linking

(i)Loading:

=>The process of loading the required components into current running program is known as "Loading process".

(ii)Linking:

=>The process of linking the loaded components into current running program where they are needed is known as "Linking process"

Note:

=>In c and c++ languages,after loading and linking processes the Objective code is converted into Executable code and generate result

=>In Java language,ByteCode is executed directly in JVM(Java Virtual Machine) and JVM internally having Loading and Linking processes

Diagram:

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faq:

wt is the diff b/w

(i)Objective Code

(ii)Byte Code

(i)Objective Code:

=>The compiled Code generated from c and c++ programs is known as Objective Code.

=>while Objective Code generation OperatingSystem is participated and Objective Code is Platform dependent code

DisAdvantage:

=>The Objective Code which is generated from one Platform cannot be executed on other Platforms

Note:

=>C and c++ languages which are generating Objective Code are Platform dependent languages.

(ii)Byte Code:

=>The Compiled Code generated from Java Programs is known as ByteCode

=>While Byte Code generation OperatingSystem is not participated and the Byte Code PlatForm independent code

Advantage:

=>The ByteCode which is generated from one PlatForm can be

executed on all PlatForms where JVM is available.

Note:

=>Java Language which is generating Byte Code is PlatForm independent language