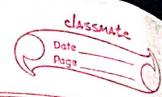


	the state of the s
, /	role of the jum in jave e how does
4	he jum execute java coder
	Roles JUM allows java ellows appli-
	coulons to run on any platform
	without modification, making jours
and the same of	alcutory, Independent
	and the state of t
F	ecution Process
0	class loader sloads java byterede
	into juva.
Q	D. Bytecode Verifier?
	checks carrestness of bytecode to
100	Prevent security violotions
(3)	Execution Engine?
	Converte butecode into me code
	using an interpreter, to JET compile
	then executes it on the host m/c
5	Terrory raanagement in the JUM -
0	Jeno - stores obj. & their instances
100	track a Method store call tramel,
	lacal vari Timtermediate Gall
65	Method area store dass structure
	odm countex red - track or address of
	current exe
	Weswork Marine method stacks
	supports native (non-Java) metho
	many eich.
	1 121
4	
THE R. P. LEWIS CO., LANSING, MICH.	



6	JTT compiles + Bytemdes
	JIT complier (just - in-time)
4 1	
	- part of JVM. - improves performance by compiling bytecode into native m/c code at runtime
	bytecode into native m/c code
1.37	- runtime
	- Various uses optimization techniques
(e)	Archilance
	Architecture of Jum >
<u> </u>	Butecode = Con-
Sec. 1	Bytecode -> generated by Java compiler Platform independ
Maria III	moependent
	runs on Jum
	2) Runtime De loads, links
	DRuntime Data Areas - Memory area
	confere chata 12 and
<u> </u>	CLUYING EXECT
	3) Exercision Engine ->
	Execute bytecoder living
	J
3 814 3 4	Tranagel memory by
	THE TARRES
	Allow javate interact with native
	anes.
	platform Independence of Java through
	Jum.
	rompiling source code into byterdy
	which is platform agnostic. The
	Jum on each plantorm translates
	this bytecoder that me specific



instro. allowing same Java pape @ relass loades & garbage collection a) class loaded >> Loads dasses into Jum during runtime. Handles three main procure loading, linking & initializing daysen Types includes Bootstrap, extension for appr dass loadets. b) Grabage coll -> automatic mem mgt process that reduins memory used by objects no longer referenced, 1) Plat four access modified D) Public -> Accessible from any does 2) protected -> assessible in same package t by subclass Accessible only within the same, 5) Private > accessible only the same class

100 Dife bet public, Proteored 4 default access modifies.

D. Publics

Members are accessible from any closs in any package.

2) Protected 3.

in a subclass

within the same package 4 subclasses in other packages.

3) Defaut 3 only within dasses in the same Package.

10 Overriding Methods with different access Modified. you cannot override a method with a more, restrictive access modifiet

> for instance, a protected method in supercloss cannot be overriden with exprivate method in a subclass The overriden method must mainte the same or more permissive access level.

10 What is the diff. been protected + default (Package - private) access. -> Detacted > Access within same package & by subclass even in other Parkonnes.



default (Paickage - private) 3 access only within the classes the same package Is it possible to make a class private in Javap if yes, where can it be re done and limitations? A private class is allowed only agi an inner class within another class A top-level dass connot the private A private inner class is across only to in same class., limited scope can a top-level class on java declared a variable of method as Private or protected why orwhy Top-level classes in Java connot be deduced as protected or private; they can only be public or package. private What happens it you declare a variable or method as private in a class t try to access it another class within the sam Packager 3 If you declare a variable or method as privater in a class, it connot be accessed from any other cross, even within the same

Paokage.

Paokage.

Texplain the concept of "package-private" or default access. How close it effect the visibility of class members where no access modified is specified in the caces, meaning they are accessible only within classes in the same Package.

The access level provided more control over visibility of class means

bers than public Protected

the package.

without exposing them outside

classmate