Q)Program that Web servers run to generate content for other clients is called as **--> CGI**

Q)Code that can be transferred between computers and runs at destination is **--> Mobile code**

Q)User mobile is connected to internet using _____ protocol **--> WAP**

Q)The standard technical component/s in the web are **--> All**

Q)Heterogeneity in Distributed system applies to different **--> Hardware, O.S and Networks**

Q)Which of the following is an example for distributed system **--> Internet**

Q)The main motivation for distributed system is **--> Sharing**

Q)Ubiquitous Computing is an example for _____System **--> real time**

Q)Unauthorized messages are prevented in internet through **--> Firewall**

Q)Which Research center is birth place for Web **--> CERN**

Q)Mobile Code runs at _____ site **--> Destination**

Q)The number of computer in the internet by the year 1979 is **--> 188**

Q)Programming Abstraction and heterogeneity masking is done by **--> Middleware**

Q)Openness in Distributed System is **--> Resource sharing and Re-Implementation and extension**

Q)CORBA is a an example for **--> Middleware**

Q)RFC stands for **--> Request for comments**

Q)The approach used for code execution on any hardware is **--> Virtual M/C**

Q)Masking heterogeneity in distributed systems is supported by _____ layer. **--> Middleware**

Q)Extension and Re-Implementation in Distributed System refers to **--> Openness**

Q)The number of web servers by the year 1989 **--> 0**

Q)Clients and Browsers fetch the documents and other resources through ___ **--> HTTP**

Q)Bombarding the service with large number of pointless requests is **--> Denial of Service**

Q)_____ Transparency helps in accessing local and remote resources **--> Access**

Q)Fault tolerance in Distributed System can be implemented by **--> Redundancy**

Q)Ability of Re-configuring the system dynamically based on load variations is **--> Performance**

Q)The system Remains effective even significant increase in number of resources and users is called **--> Scalability**

Q)The percentage of Computers in the year 1999 **--> 12**

Q)Redundancy in distributed systems helps in **--> Fault tolerance**

Q)The scalability of Distributed System is ranged from **--> small intranet to internet**

Q)The security components for information are **--> Confidentiality**

Q)The measure of the proportion of time that is available for use is _____ **--> Availability**

Q)Access and Location transparencies are sometimes referred as **--> Network Transparency**

Q)Which of the following is a Request-Reply Protocol **--> HTTP**

Q)In distributed Systems, Corrupted data in a file or message can be detected by **--> Check sum**

Q)Concurrent Environment in Distributed System will be synchronized by **--> Semaphore**

Q)Broadly speaking, Web is an example for **--> Open system**

Q)Harnessing the many small ,cheap computational devices is known for **--> Ubiquitous Computing**

Q)Performance Transparency is related to dynamically reconfiguring the system based on **--> Load**

Q)_____ Component identifies the web documents and resources **--> URL**

Q)Concealment from the user and programmer of components in Distributed System is **--> Transparency**

Q)Internet Web servers in the year 1993 are **--> 130**

Q)The percentage of computers and web servers by the year 1995 **--> 0.4**

Q)Reference Model for Open Distributed Processing majorly identifies ____ forms **--> 8**

Q)Firewalls tend to impede legitimate access to **--> services**

Q)Retransmitting the E-mail until successful delivery is a **--> Failure Transparency**

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Q)XML is a _____ language for Data description. **--> Meta**
Q)Distrubuted Systems will have **--> Common Clock and No Common Clock**
Q)CERN stands for**--> European Center for Nuclear Research**
Q)In Distributed Systems , Computers will be coordinated and communicated through **--> Messages**
Q)HTTP 1.0 supports **--> one request per resource**
Q)One of the difficulty in Distributed Systems is **--> Non-Synchronized clock**
Q)Denial of Service is a/an **--> Internal Threat and External Threat**
Q)Web crawler runs at the search engine in the background using _____ protocol **--> HTTP**
Q)A server may in turn be **--> Client only**
Q)Data Replication helps in **--> Increased Performance and Increased Availability**
Q)Network Time service in internet uses _____ protocol **--> NTP**
Q)Low level hardware and software are referred as **--> Platform**
Q)Remote Method Invocation is a/an example for **--> Middleware**
Q)NTP stands for**--> Network Time Protocol**
Q)Present and likely future demands of a system are defined in _____ model **--> Architecture**
Q)Sopntaneous networks is an integration of **--> Mobile devices and Non-Mobile devices**
Q)Which is the Dependability Characteristic? **--> Correctness**
Q)The tradition measure for Computer performance is **--> Throughput**
Q)Discovery services has following interfaces**--> Registration, Look up**
Q)Functions available for invocation in a process are defined by **--> Interfaces**
Q)_____ is a store of recently used data objects **--> Cache**
Q)Thin clients are not good for following areas **--> CAD/CAM applications**
Q)Which product is commercial implementation for Thin Client? **--> WinFrame**
Q)_____ service accepts and store the details of services that are available on network. **--> Discovery**
Q)Integration of Mobile devices and Non mobile devices are which type of networks **--> Spontaneous**
Q)Process /Channel that exhibits arbitrary behavior at arbitrary times is _____ failure **--> Byzantine**
Q)_____ user may inject spurious messages , or tamper with messages. **--> Malicious**
Q)Logical Time event ordering in Distributed System for Synchronization is proposed by **--> Lamport**
Q)Failure which occurred in cases when a process or channel fail to do is a _____ Failure **--> Omission**
Q)Fail-stop Failure in Distributed System will affects which component **--> Process**
Q)A running program that travels from one to another computer carrying out task on behalf of someone is a **--> Mobile agent**
Q)Redundancy offers **--> Reliability**
Q)The delay between start of message s transmission from one to another process is **--> Latency**
Q)The variation in time taken to deliver a series of messages is **--> Jitter**
Q)The difference between computer clock to the perfect reference clock is **--> Clock-drift rate**
Q)The following is an example for Mobile Code **--> Applet**
Q)Which of the following Model is/are related to Fundamental Model? **--> All**
Q)___ is the total amount of information that can be transmitted in given time over a channel**--> Bandwidth**
Q)Reliable communication make ensures the following characteristics. **--> Validity and Integrity**
Q)The beneficiaries of Access Rights is determined by _____ authority. (**--> Principal**
Q)The time to execute each step of process has known in advance in ___Distributed Systems. **--> Synchronous**
Q)Correctness, reliability and security in Distributed System will affect ___ characteristics. **--> Dependability**
Q)Objects in the Distributed Systems are protected from enemies are implemented with **--> Access Rights**
Q)_____ is the science of keeping messages secure and reliable without any attacks. **--> Cryptography**
Q)The class of failure ,where a process completes send but the message is not placed at outgoing buffer **-->**

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Send-Omission
Q)If a Process's local clock exceeds the bounds on clock drift rate from real time is **--> Clock**
Q)Agreement in Pepper land problem is an example for **--> Concurrency control**
Q)Clock Drift rates are _____ in Asynchronous Distributed Systems. **--> Arbitrary**
Q)A crash failure may affect **--> Process**
Q)Timing Failures are applicable in _____ Distributed Systems. **--> Synchronous**
Q)Easy Integration with local services is possible with _____ networks **--> Spontaneous**
Q)The most computational resources in the Distributed System is/are **--> All**
Q)Each message transmitted over a channel is received within known bounded time **--> Synchronous**
Q)A message's transmission takes longer than the stated bound will affects **--> Channel**
Q)Which of the following is/are vulnerable for threat in Distributed Systems **--> Mobile Code and Mobile Agent**
Q)_____ is used to send mail between computers**--> SMTP**
Q)_____ is used for communication between web browsers and web servers **--> HTTP**
Q)The java API provides datagram communication by means of two classes datagram packet and _____**--> datagram socket**
Q)_____ allows directories on a remote computer to be transferred from one computer to another **--> FTP**
Q)_____ provides access by means of a terminal session to a remote computer **--> Telnet**
Q)_____ allows an object to invoke a method in an object in a remote process **--> RMI**
Q)_____ allows a client to call a procedure in a remote server **--> RPC**
Q)For _____ messages must arrive uncorrupted and without duplication **--> integrity**
Q)Sockets originate from**--> BSD UNIX**
Q)Each computer has a large number _____ of possible port numbers for use by local process for receiving messages **--> 2^{16}**
Q)___ type represents the length followed by characters in order **--> string**
Q)_____ type represents the values are specified by the order declared **--> enumerated**

Q)_____ is another issue that can be addressed in the design of automatically generated marshalling procedures **--> compactness**
Q)_____ type represents the order of declaration of the components **--> struct**
Q)_____ type represents the length followed by elements in order **--> sequence**
Q)Java interface to TCP streams is provided in the classes server socket and ____ **--> socket**
Q)UNIX use _____ character coding **--> ASCII**
Q)An agreed standard for the representation of data structures and primitive values is called as_____**--> external data representation**
Q)_____ is the process of taking a collection of data items and assembling them into a form suitable for transmission in a message.**--> Marshalling**
Q)_____ which defines a textual format for representing structured data **--> XML**
Q)The _____ protocol is based on the exchange of the messages : request-reply-acknowledge reply**--> RRA**
Q)The _____ message contains the requested from the reply message being acknowledged**--> Acknowledge reply**
Q)_____ document must have a single root element that encloses all the other elements **--> XML**
Q)The ___ protocol is useful for most client-server exchanges because it is based on the request reply protocol **-> RR**
Q)In _____ protocol, a single request message is sent by the client to the server **--> R**
Q)____ represents type tag followed by the selected member **--> UNION**

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Q)XML documents may refer to activity of flattening an object or a connected set of objects into a serial form that is suitable for storing a disk**--> namespaces**

Q)_____ refers to the activity of flattering an object or a connected set of object into a serial form that is suitable for string on disk **--> serialization**

Q)is the ability to a enquire about the properties of a class, such as the names and types of its instance variables and methods **--> reflection**

Q)_____ is a markup language that was defined by the world wide web construction for general use on the web **--> XML**

Q)If multicast is built on top of _____ **--> IP**

Q)A multicast group is specified by a _____ internet address **--> class D**

Q)_____ is the HTTP method that requests the resource whose URL is given as argument **--> GET**

Q)_____ is the HTTP method requests that the data supplied in the request is stored with the given URL as identifiers**--> PUT**

Q)_____ is an operation that sends a single message from one process to each of the members of the group of process **--> multicast**

Q)_____ is a protocol that specifies the messages included in a request-reply exchange **--> HTTP**

Q)_____ is the HTTP method that the server sends back the request message **--> TRACE**

Q)_____ is the HTTP method that the server deletes the resource identified by the given URL **--> DELETE**

Q)_____ is the HTTP method that the server supplies the client with a list of methods it allows to be applied to the given URL **--> OPTOINS**

Q)_____ is the HTTP method specifies the URL of a resource that can deal with the data supplied with the request **--> POST**

Q)The length of the port number is _____ bits **--> 16**

Q)_____ is a mechanism which balances the speed between the sender and receiver process **--> flow control**

Q)The server uses the ____ system call to accept a connection requested by a client and obtain a new socket for communication with that client **--> accept**

Q)The client process uses the _____ operation to create a stream socket and then uses the connect system call to request a connection **--> socket**

Q)The length of IPV4 address is ____ bits **--> 32**

Q)Multicast permanent groups exist even when there are no members, there address are assigned by the internet authority from the range 224.0.1 to _____ **--> 224.0.0.255**

Q)Java API provides a datagram interface to IP multicast through the class _____ **--> multicast socket**

Q)Java API allows the TTL to be set for a multicast socket by means of _____ method **--> Set time to live**

Q)Socket address consists of an internet address and a _____ number**--> local port**

Q)The server first uses the socket operation to create a stream socket and the _____ operation to bind its socket to the servers socket address **--> Bind**

Q)........................ provide a clean way to deal with error conditions without complicating the code.**--> exception**

Q)A block of code may be defined to an exception whenever particular unexpected conditions or errors arise .... **--> throw**

Q)The object whose method is invoked is sometimes called the target and sometimes the ....**--> Receiver**

Q)....................................... provides a definition of the signatures of asset of methods without specifying their implementation. **--> interface**

Q)...........is a chain of related method invocations, each of which eventually returns.**--> Action**

Q)........................ model, which allows client programs to call procedures in server programs running in

separate processes and generally in different computers from the client**--> RPC**

Q).............................. is an extension of local method invocation that allows an object living in one process to invoke the methods of an object living in another process. **--> RMI**

Q)Software that provides a programming model above the basic building blocks of processes and message passing is called .... **--> middleware**

Q)The request reply protocol can be implemented over either UDP or ....**--> TCP**

Q)................................. is designed to allow objects implemented in different languages to invoke one another. **--> IDL**

Q)The remote reference module in each process has a ....that records the correspondence between local object references in that process and remote object references **--> remote object table**

Q)A.................is an instance of a class which provides the body of a remote object **--> servant**

Q)In ....retransmissions are used, whether to filter out duplicate requests at the server ` **--> duplicate filtering**

Q)In...retransmit the request message until either a reply is received or the server is assumed to have failed **--> retry request message**

Q)In ....we can keep a history of result messages to enable lost results to be retransmitted without re-executing the operations of the server **--> retramission of results**

Q)When an object is no longer accessible recovers the space and makes it available for allocation to other bject is called as .... **--> garbage collection**

Q)Every remote object has a .... that specifies which of its methods can be invoked remotely **--> remote interface**

Q)When a invocation crosses a boundary of a process or computer, ...is used and the remote reference of the object must be available to the invoker. **--> RMI**

Q)..is one that can be performed repeatedly with the same effect as if it had been performed exactly once. **--> idempotent operation**

Q)A ....Module is responsible for translating between local and remote object references and for creating remote object references. **--> remote reference**

Q)A.................helps clients to locate remote objects from their remote object references **--> location service**

Q)The granting of the use of a resource for a period of time is called a................ **--> lease**

Q)A....................................in a distributed system is a separate service that maintains a table containing mappings from textual names to remote object references **--> binder**

Q)Processes that start server processes to host remote objects are called .... **--> activators**

Q)An object that is guaranteed to live between activation of processes is called a ....**--> persistant object**

Q)Each method of the proxy marshals a reference to the......................................object **--> target**

Q)A server has one dispatcher and ....for each class representing a remote object **--> skeleton**

Q)A............................method on marshals the arguments in the request message and invokes the corresponding method in the servant **--> skeleton**

Q)The ....section is responsible for creating and initializing at least one of the servants to be hosted by the server **--> initialization**

Q)The term................................method is sometimes used to refer to a method that creates servants and a factory object **--> factory**

Q)Remote interfaces are defined by extending an interface called remote provided in ....package **-**

-> java.rmi

Q)The server program is a simplified version of a white board server that implements the two interfaces shape and .... **--> shape list servant**

Q)Each time the user finishes drawing a graphical object it will invoke the method..................in the server, passing on the new graphical object as argument **--> new shape**

Q)..is an object that declares that it will generate notifications of particular types of event **--> publisher**

Q)..is an object that allows other objects to subscribe to its events and generate notifications **--> event generator**

Q)...................................is passed by value to remote event listeners**--> remote event**

Q)A procedure definition specifies a procedure signature and a........... **--> procedure number**

Q)sun RPC runs a local binding service called the ....at a well known port number on each computer **--> port mapper**

Q)Objects that represent events are called...**--> notifications**

Q)A.....................................is an object that has subscribed to some type of events in another Object**--> subscriber**

Q)The main purpose of an ....is to de couple an object of interest from its subscribers **--> observer**

Q)An............................occurs at an object of interest as the result of the completion of a method execution **--> event**

Q)A.................................procedure is like a skeleton method in that it unmarshalls the arguments in the request message **--> server stub**

Q)..method compares remote object references **--> equals**

Q)..................method gives the contents of the remote object references as a string **--> tostring**

Q)Clients sets a security manager and then looks up a remote object reference for the remote object using the ....operation of RMI registry **--> lookup**

Q)The term ....is used to refer to a servers action of notifying clients about an event**--> callback**

Q)The ....method returns an integer callback id referring to the registration **--> register**

Q)When the client is finished it should call..............................to inform the server it no longer requires callbacks **--> deregister**

Q)....................................is used to pass information in request messages about the method to be invoked **--> reflection**