Assignment - 2

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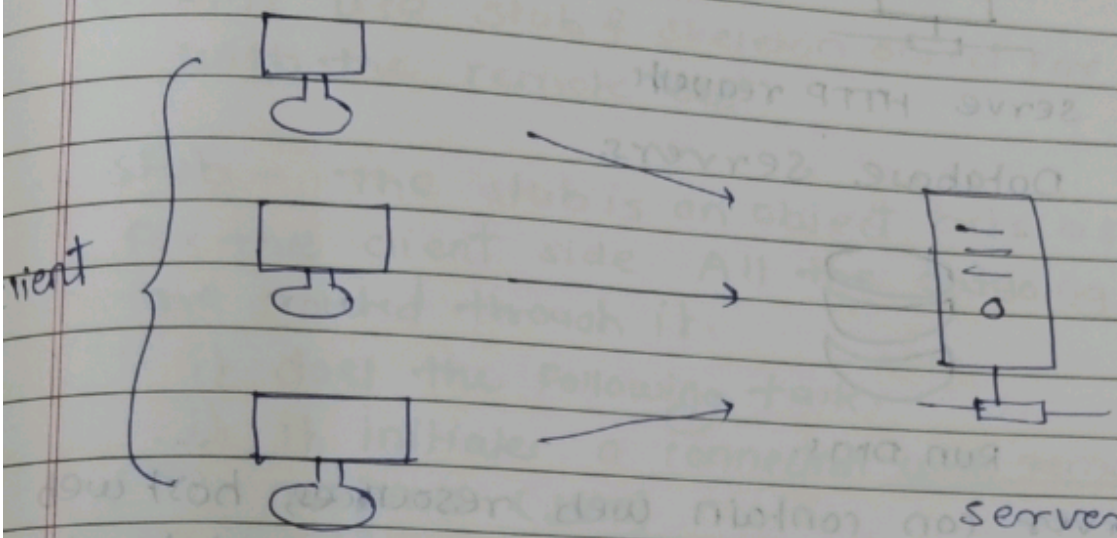
1 explain client & server model.

- The web is service that allow computers to share and exchange data.
  such as : Emailing, online gaming, FTP.
- The web is referred to as client - server communication.



client — client can be a machine or a program.
Foreg. - laptop, desktop mobile.

- A client program is a program that allow the user to make requests.
- A client, whether it is a machine or a program is an appliance and a way to make reauests through the web.

server — we can run multiple servers on one single mach

- A server is a computer program NOT A Device
- high performance computers are called servers because they run server-programs.
- Server provide functionality & serve other programs called client.

- A single server can serve multiple clients at th same time.

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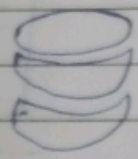
there are several type of servers

1) web servers like Apache ~~Serve~~
   Web server
   Apache

serve HTTP request

2) Database servers.



Run DMS.

- A server can contain web resources, host web applications, stores user & program data etc
- it is used to serve hundreds or thousands of client
- A server is always listening for requests, and as soon as it receives one, responds with a message
- A client server model is just one way for the computers to communicate via the web.
- A client-server model is based on a centralized structure

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4.2 Explain Java RMI -

→ ① The RMI (Remote method invocation) is an API that provides a macanism to create distributed application in java. The RMI allows an object to invoke methods on an object running in another JVM.

② RMI use stub & skeleton object for communication with the remote obj.

Stub - The stub is an object acts as a gateway for the client side. All the outgoing requests are routed through it.

it does the following task.

i) it initiates a connection with remote virtual machine (JVM)

ii) it writes and transmits the parameters to the remote virtual machine & wait for the result.

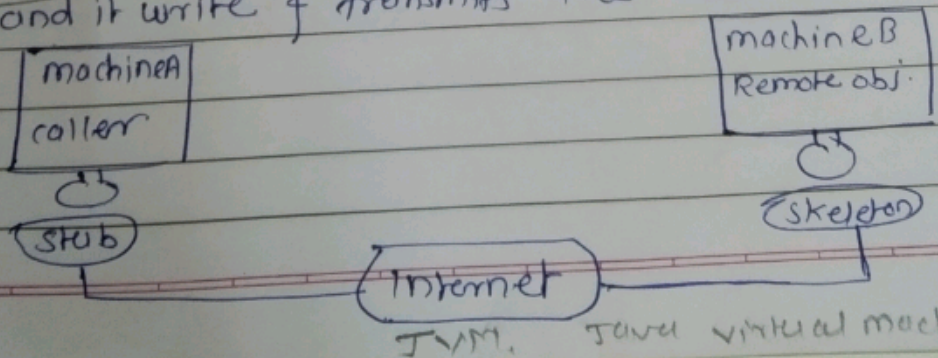
iii) it reads the return value or exception & it finally returns the value to the caller

Skeleton - The skeleton is an object, acts as a gateway for the server side object. All the incoming requests are routed through it.

it does following task.

1) it read the parameter for the remote method

2) it invoke the method on the actual remote and it write & transmits the result to the caller



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Q.4. Explain CORBA Architecture.

→ A collection of system Label service for handling low level application services like life of two system client and object implementation.

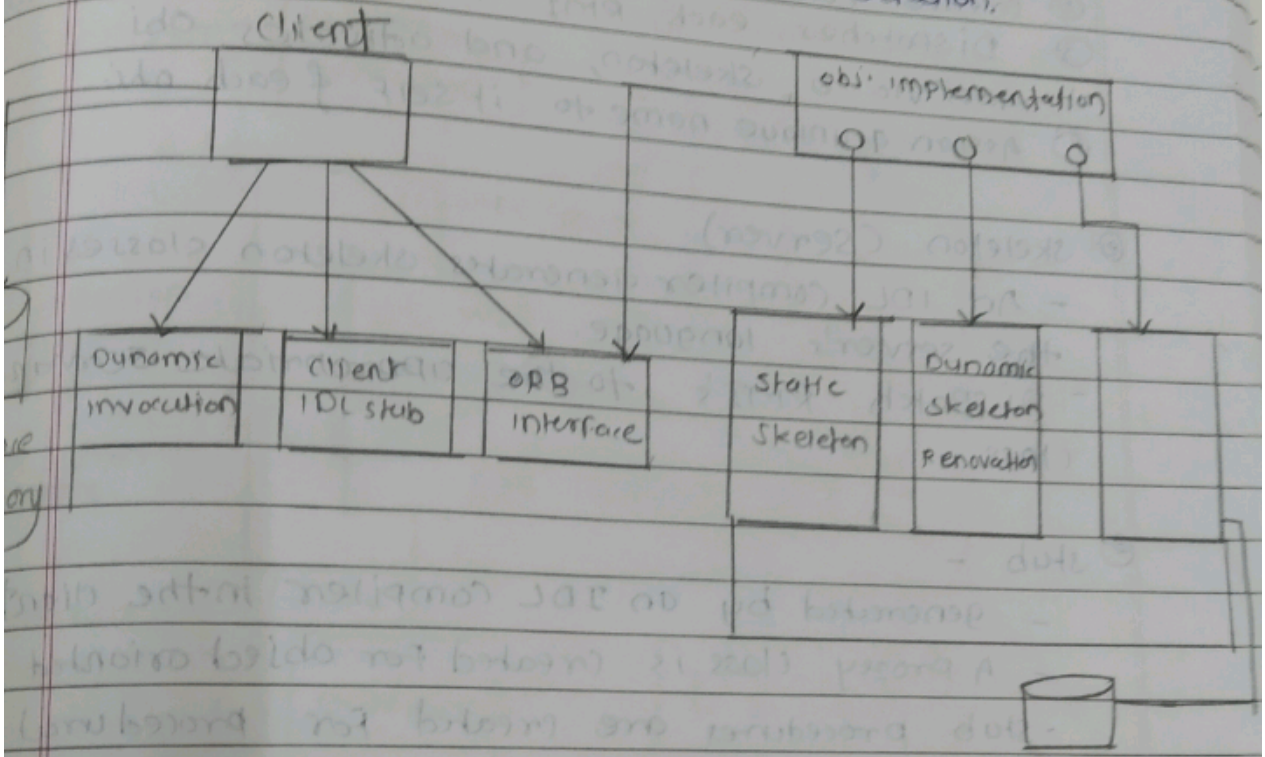

Fig. CORBA

working ~~Eatt~~ Flow of CORBA.

- ORB core –
  1. it carries out the request Replay protocol bet^n client & server.
  2. it provide operations that enable process to be started and stopped.
  3. it provides operations to convert bet^n remote obj references and string.

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⑥ Object Adapter - (Server) -
① Bridges the gap bet^n CORBA objects and the programing language interfaces of the slave class
② Create remote object references for the corba o
③ Dispatches each RMI to the appropriate serv class via a skeleton, and activates obj.
④ Assign a unique name to it self of each obj.

⑦ Skeleton (Server)
- An IDL compiler generates skeleton classes in the server's language.
- Dispatch RMI's to the appropriate servant class.

⑧ Stub -
- generated by an IDL compiler in the client lan
- A proxy class is created for object oriented langu
- stub procedures are created for procedural langu

⑨ Implementation Repository -
Activates registerd server on demand and locat servers that are currently running.

⑩ Interface repository.
it provide info. about registered ideal interface to the clients of servers that require it
optional for static invocation; required for dynamic invocation