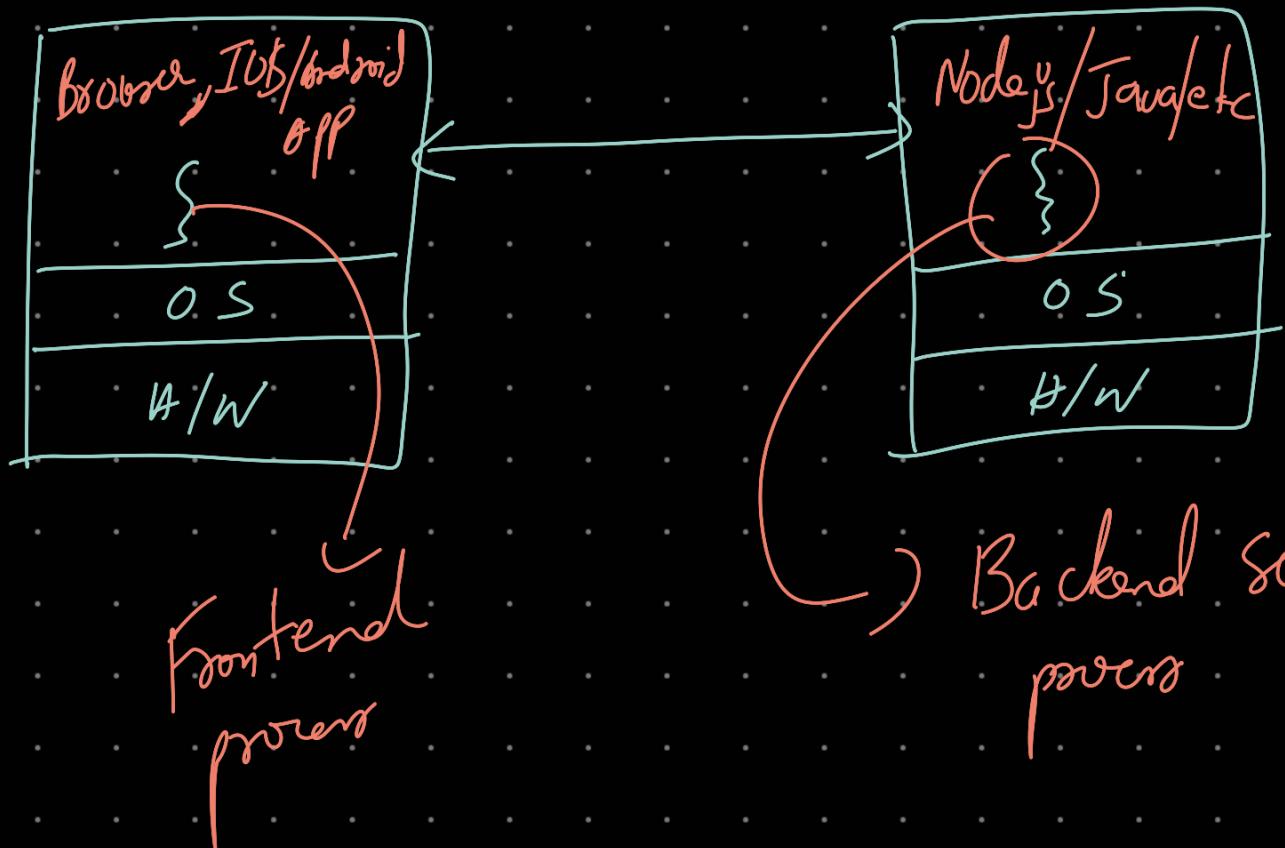


# Journey of Request to Backend



① What is Request

↳ Unit of work defined  
by some protocol on top of  
TCP or UDP

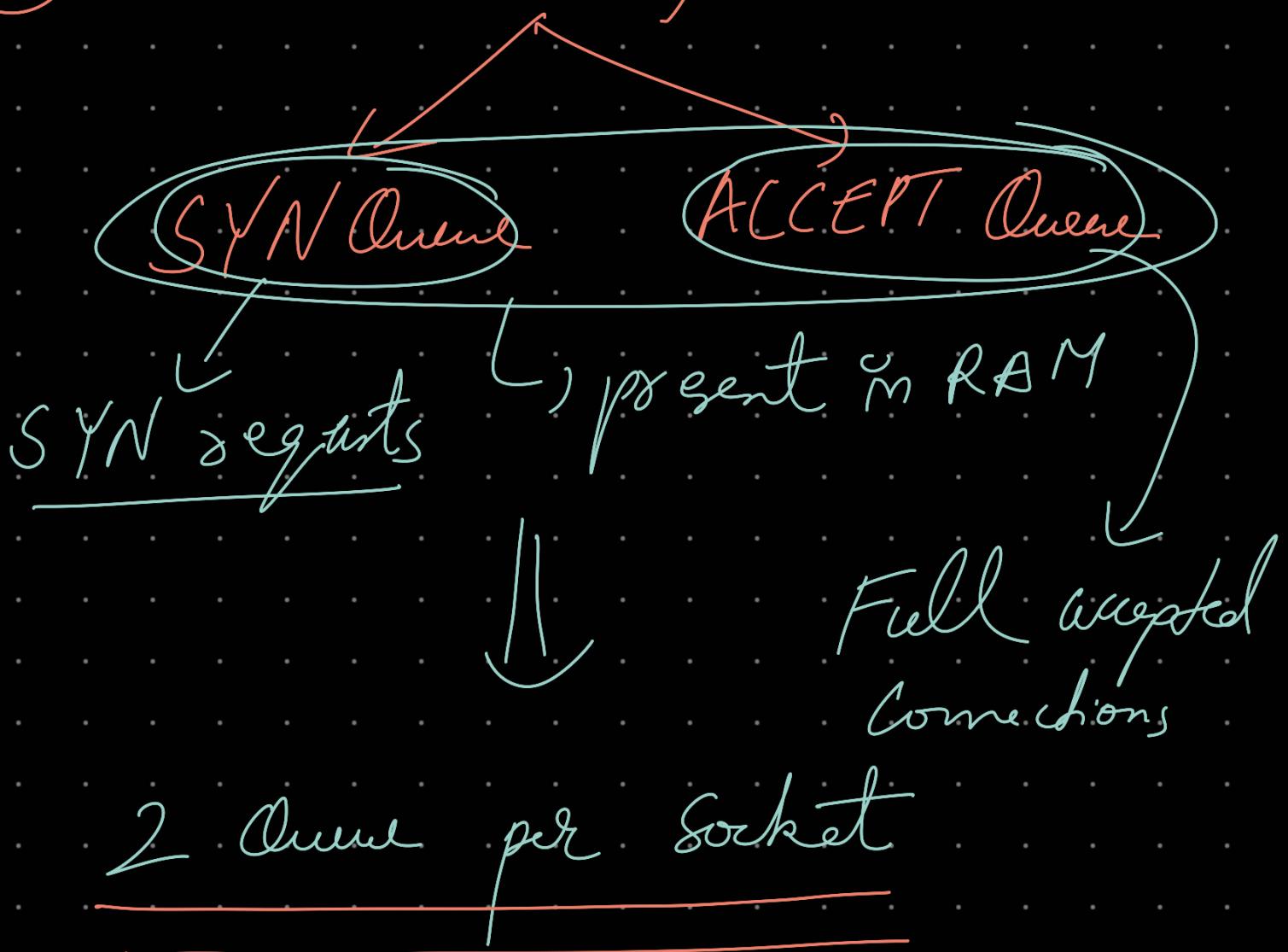
② What is Connection b/w

Frontend and Backend means?

↳ Connection essentially mean  
Both Machine will reserve  
resources like RAM, CPU

↳ Done by Operating system  
Kernel running in both frontend  
and Backend Machine

③ On Backend, Kernel creates





↓ Returns ACK packet  
to client

3-way handshake

Full fledged connection is  
made in Accept Queue

④ Our Backend application/process

calls `accept()`

↳ underneath a system  
call of OS



Kernel gives pointer to our process  
of the connection

⑤ Size of accept Queue → can be determined by our code using system call

⑥ This socket can be used by multiple processes

⑦ Because of TLS, req is encrypted  
↓  
Decrypted by OS in Transport layer code

⑧ Decrypted data address in RAM is returned to our Backend Application/process

⑨ Then our code is run  
↓

Lot's of Abstraction is still there

i.e. Node process abstract also



Generally as Application developer  
we work at this level



Let say a user got call which  
queries some Database process

could be in some Machine  
as that of Backend process

or  
Different Machine



Now, our Backend becomes client and  
DBMS becomes Server : Some steps repeat

Then all steps goes in Backward

write to socket

OS takes

Send to Client from  
NIC hardware