

Assignment - 3

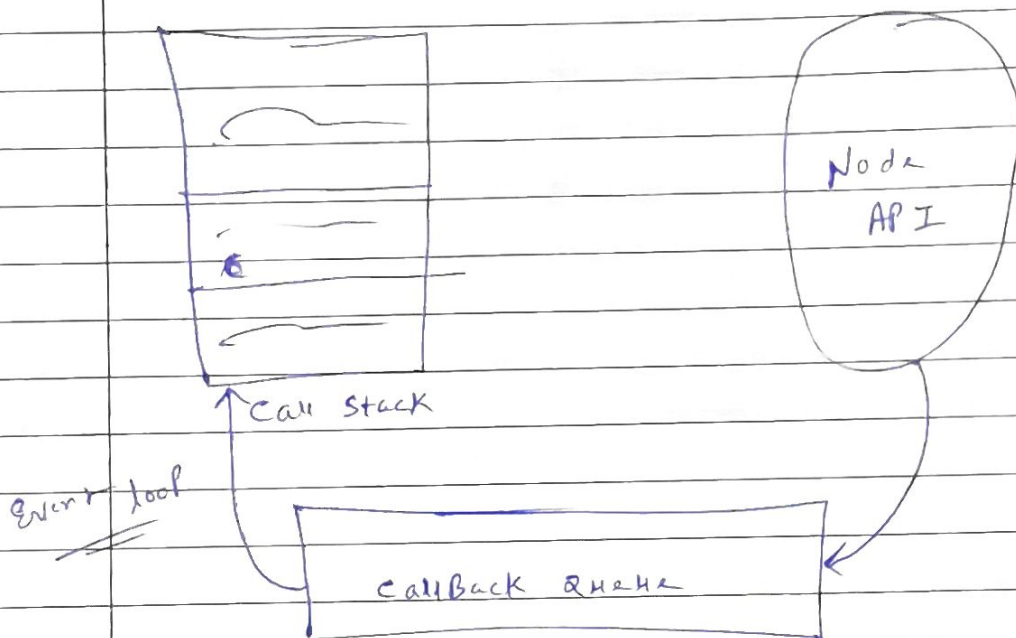
Q1) Explaining the architecture of node.js.

Ans → There are mainly three things in architecture of node.js

(i) Call Stack

(ii) Node API

(iii) Callback Queue



Firstly Execute Synchronous type of code
Execute Synchronous code go to Call Stack
and execute firstly and then next asynchronous
code execute those code whose turn first
go to firstly in queue and then go to call stack
first method called Event loop and then
execute asynchronous code.

Q 2

Explain the feature of node.js like non-blocking, asynchronous, single threaded.

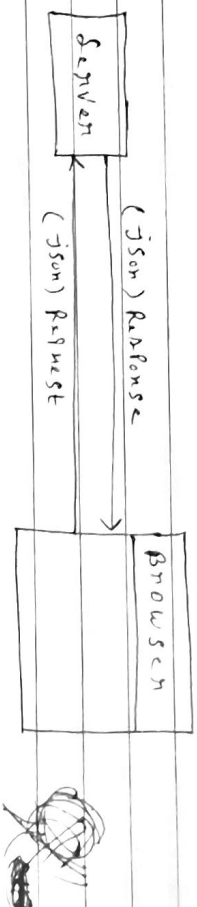
Ans → non blocking: It refers to the program that does not block the execution of further operations. non-blocking methods are executed asynchronously. asynchronously means that the program may not necessarily execute line by line.

Synchronous → That the code runs in the sequence it is defined. In a synchronous program, when a function is called and has returned some value, only then will the next line be executed.

Single threaded → Node.js runs javascript code in a single thread, which means that your code can only do one task at a time.

Q 4 Nowadays how data is transferred between server and client? (Explain about json)

Ans →



JSON can be used in web applications for data transfer. Consider the following block diagram of the simple client-server architecture. Assume that the client is a browser that sends an HTTP request to the server, and the server serves the request and responds as expected. This is visualized as in the above diagrams.



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Why should we use let in place of var in our JavaScript Programs?

Ans →

The let statement is used to declare a local variable in JavaScript. It is similar to the var keyword, but it has some restriction in scoping in comparison of the var keyword. The let keyword can enhance our code readability and decrease the chance of programming error.

