Node js

which engine used for run Node js?

V8- Engine

which engine used for run javascript?

V8, spidermonkey, and JS core

where node js is used?

Network application

Distributed application

Responsive web application

Server side applications.

what is querystring?

This Module is basically used for formatting and parsing URL.

What is router in node js?

Routing refers to determining how an application responds to a client request to a particular endpoint, which is a URI (or path) and a specific HTTP request method (GET, POST, and so on).

How many methods in http?

There are several methods in http

GET, POST, PUT, DELETE, PATCH, HEAD, OPTIONS, TRACE

What is Server-Side rendering?

Server-side rendering means using a server to generate HTML from JavaScript modules in response to a URL request.

Difference between node and javascript?

Node js	Javascript
Node js is javascript runtime environment	Javascript is a computer programming language, is that used to build scripts for website
server side development makes use of node js	Front-end development makes use of javascript
HTML Tag cannot be added using Node js	Javascript is powerful enough to interact with the DOM and add HTML

why node js is single threaded ?

Node js was created explicity as an experiment in async processing.

The theory was that doing asycn processing on a single thread could provide more performance and scalability under typical web loads than the typical thread-based implementation.

Node js works on the single threaded model to ensure that there is support for asynchronous processing.

it makes high scalable and efficient for application to provide high performance and efficiency under massive amount of web load.

What is the framework that is used majorly in node js?

The most used frame work is Express.js for its ability to provide good scalability, flexibility and minimalism.

It's a layer built on the top of the Node js that helps manage servers and routes.

what is middleware in node.js ?

A middleware is simple function that has the ablity to handle incoming request and outbound response objects.

what are the global objects in node js?

Global objects are object with a scope that is accessible across all of the modules of the node js application.

Hence , this is done provide any function, stings or objects access across the application.

Which language is used to create JavaScript?

Java and C languages

What is REPL ? what purpose it is used for ?

REPL - Read, Eval, Print, Loop.

Node js comes with Bundled REPL environment. This allows for the easy creation of **Command Line Interface** application.

Consider following code snippet:

```
{
    console.time("loop");
    for (var i = 0; i < 1000000; i += 1){
        // Do nothing
    }
    console.timeEnd("loop");
}
```

The time required to run this code in Google Chrome is considerably more than the time required to run it in Node.js . Explain why this is so, even though both use the v8 JavaScript Engine.

Node js - declaring any variable outside of any function's scope binds it only to the module's own scope.

which therefore makes it much easier and faster to resolve.

Chrome browser - declaring the variable I outside of any function's scope makes it global and therefore binds it as a property of the window object.

As a result, running this code in a web browser requires repeatedly resolving the property i within the heavily populated window namespace in each iteration of the for loop.

What is "callback hell" ?

"Callback hell" refers to heavily nested callbacks that have become unwieldy or unreadable.

What is event loop?

Event loop in JavaScript is a mechanism through which the 'calls waiting for execution' in the callback queue/job queue can be put on the call stack.

What is a Module in Node.js?

Consider modules to be the same as JavaScript libraries. A set of functions you want to include in your application.

what is callback function?

A callback is a function passed as an argument to another function

This technique allows a function to call another function

A callback function can run after another function has finished

Modules in node js?

In Nodejs, there is 3 type of modules namely,

Core Modules, - Node.js comes with dozens of built-in modules. (Http,URL,path,fs,os)

Local Modules, - Putting all our code in a single file is not a good idea.

Third-Party Modules - using npm can install and import the module from packages

Difference between get and post

GET - request is comparatively less secure because the data is exposed in the URL bar.

POST - request is comparatively more secure because the data is not exposed in the URL bar.

Router in node.js

How many methods in http

Difference between node and javascript

https://youtu.be/7npkRw7gMRA?si=FagxG0STuUXRCbjh (https://youtu.be/7npkRw7gMRA?si=FagxG0STuUXRCbjh)