Node JS

What is nodejs ?

Node js is a javascript run time environment built on chrome’s V8 engine that allows us to run the javascript on the server side.It’s designed for building scalable and faster applications especially those handle a lot of I/O operations because of its non-blocking and event-driven model.

What is an Event-Drive-Architecture?

EDA is a design pattern where the flow of applications is driven by events,an event can be any action or change in a system,like a user input or a system update.In EDA event producers generates an events and event consumers react to them,typically in a asynchronous, non blocking way. This makes system more scalable, responsive and flexible.

What is non-blocking i/o operations?

It allows a program to initiate the I/O tasks (like raeding a file,making a request and querying a database) and continue exhecuting other tasks without waiting for the before task to complete.This makes the application more efficient and scalable,espesically in the environment where the many I/O operations occurs concurantally,such as web server or real time systems .

What are the built-in node modules ?

Node js comes with several built-in modules that provides core functionality without needing to install external packages

http : Used to create HTTP servers and handles request and response,making it possible to build web servers directly in node js .

fs(file Sytem) : Provides functions to interact with the file system,like reading writings and deleting the files,both syncrounously and asynchronously.

Path : Helps handles and manuplates the file path,making easier to work with different files locations and formats.

Events : enabling working with the events in a event driven style,it includes the Eventemmiter class which allows creating,emmiting and handling a custom events.

Os : provides information for a operating system like memory usage,CPU information, and platform details, useful for system level operations.