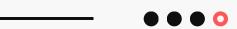
ENTRY LEVEL MERN QUESTIONS

Kaylin khanal





Synchronous JS vs asynchronous

promises, async wait, setTimeout,
api/network calls

Event loop

callstack, single thread vs multi thread concept, callback queue, data structures, web apis

Hoisting

var keyword, ES6, var vs const vs let, scope, initialization, functions hoisting, global vs block scope

Closures

Encapsulation in JS, nested functions, scope of nested functions

BASIC JS QUESTIONS

Functions

arrow functions, function declaration, and executions, higher-order functions (map, filter reduce), callback functions, IIFE, anonymous functions, for in vs for of, for each vs map

Array and Objects

data structures, Array and objects count, deletion, push, pop, looping, replacing values

Others

debouncing, throttling, basic differences between javascript and typescript, Classes, constructor, this keyword, bind and apply method in Javascript

02



About react

what is react? who built? why popular? alternatives?

React fundamentals

JSX, Css, State, refs and props, basic hooks like useEffect and useState

Data flow

sending data from child component to parent component and vice versa, props drilling

Managing global state

Context API, Redux, reducers, state vs global state, actions, payload, initial state, dispatching an action, useDispatch, useSelector, use of Redux middlewares like persist and logger

• React ecosystem

Popular libraries. next.js vs gatsby vs createreact app difference? routing libraries, webpack, design libraries like antd or material, chart libraries like chartjs, or D3.

BASIC REACT QUESTIONS

Others

DOM vs virtual DOM, performance issues scenarios, useCallback vs useMemo hooks, useRefs, lazy loading, code splitting, infinite scrolling, pagination, Class vs functional components, lifecycle methods in react class based components and use of methods like componentDidMount, componentDidUpdate, and shouldComponentUpdate and how useEffect in functional component handles these effects.

Practice Some Live Tasks

Build a simple counter using useState
Build a simple counter using redux
Build a todo app using react and state and perform CRUD operation using only react
Given a list of array, display it in a list, and delete the item from that list that gets clicked



Server basics

http, express, js vs nodejs, is node js singlethreaded? Where can nodejs be used? examples of asynchronous tasks, REPL, backend validation, error handling, module.exports use, Authentications and encryptions. Folder structure, routing, middlewares, MVC achitecture

Asynchronicity

is node.js asynchronous? What are callbacks? async-await? promises?

APIs

HTTP methods: GET, PUT, DELETE, POST, and PATCH, request, response, params, body ,query string, form data, statusCodes

noSql databases

what is collection? schema? what is noSql format? mongoose? basic mongoose queries to edit, create, find, delete, populate, aggregation, query operators, \$set vs \$push

BASIC NODE.JS QUESTIONS

SQL databases

examples of popular SQL databases. What is an ER diagram, primary key, foreign key? What are joins? queries for selection, update, filter, order, deletion(drop)?

Other

Inner working of nodejs, file handling, streams and buffers, real-time communication (web sockets, socket io, emit, connect, disconnect, sockets, etc.), dotenv, Top companies using nodejs, security concerns(sql injection, dDos attack etc.)