# Core Areas to Prepare (Full Stack + DSA)

## 1. HTML, CSS, JavaScript

# Interview Topics:

- Semantic HTML
- Flexbox vs Grid
- Event Bubbling/Capturing
- Closures, Hoisting, this
- Debounce vs Throttle
- Promises vs async/await

### Sample Questions:

- What are the differences between == and === in JavaScript?
- How does the event loop work in JS?
- Explain how localStorage works.

# 2. React / Angular / Vue (whichever you use)

# Interview Topics:

- Component Lifecycle
- Props vs State
- Hooks (useEffect, useMemo, useCallback)
- Lifting State Up

- Conditional Rendering
- Virtual DOM

#### Sample Questions:

- How does useEffect differ from componentDidMount()?
- How do you optimize a React app for performance?
- What is memoization in React?

## 3. Node.js / Express

### Interview Topics:

- Middleware
- REST API creation
- JWT Authentication
- Error handling
- Async programming

### Sample Questions:

- How does middleware work in Express?
- What's the difference between PUT and PATCH?
- How do you handle errors in async code?

# 4. Database (MongoDB / MySQL / PostgreSQL)

# Interview Topics:

- Joins (SQL)
- Aggregation pipeline (MongoDB)
- Indexing
- Data modeling

## Sample Questions:

- What is normalization? Why do we need it?
- How do you design a schema for a social media app?
- How does indexing affect query performance?

## 5. DSA (Basic Level)

## Must-know Topics:

- Arrays, Strings
- HashMaps, Sets
- Sorting Algorithms
- Recursion + Backtracking
- Stack/Queue
- Binary Search

#### Sample DSA Questions:

- Reverse a string or linked list
- Find first non-repeating character in a string
- Longest Substring Without Repeating Characters

• Implement a stack using queues

# 6. System Design (Basic Round)

### Interview Topics:

- How to design login/signup system?
- How will you scale an image hosting website?
- Explain MVC architecture

# 7. Project-based Questions

#### They will ask:

- What was your role in the project?
- Tech stack used and why?
- Biggest challenge faced and how you solved it
- How did you handle state management?

#### 8. Behavioral Questions

- Why do you want to leave your current job?
- Where do you see yourself in 2 years?
- What are your salary expectations?
- How do you handle deadline pressure?