⊘Punishment Rule

If you miss a day:

Punishment Task: Solve 2 extra DSA problems + Write a blog post summarizing yesterday's missed topic.

Phase 1: Strong CS Foundations (Days 1-30)

- 1 Time & Space Complexity
- 2 Arrays: Basics + Problems
- 3 Strings: Basics + Problems
- 4 Recursion: Concepts
- 5 Recursion: Problems
- 6 Searching Algorithms
- 7 Sorting Algorithms
- 8 Linked Lists
- 9 Stacks and Queues
- 10 Trees

Day **Topic** 11 Binary Trees & BSTs 12 Graphs Graph Algorithms (BFS, DFS) 13 Hashing 14 15 **Dynamic Programming Basics** 16 OS: Processes, Threads OS: Scheduling Algorithms 17 18 **OS: Memory Management** 19 OS: Deadlock + Virtual Memory **DBMS: Relational Models** 20 21 **DBMS: Normalization & SQL Joins** 22 **DBMS: Transactions, Indexes** 23 DBMS: ER Diagrams + Query Practice 24 CN: OSI Model

CN: TCP/IP, Routing, DNS

25

- CN: HTTP, FTP, Networking
 - Commands
- 27 CN: Protocols + Practical Tools
- 28 SE: SDLC, Agile, Waterfall
- 29 SE: UML, Requirement Analysis
- 30 SE: Design Patterns Overview

Phase 2: Competitive + Low-Level Coding (Days 31-60)

- 31 C++ Basics: Syntax, Variables
- 32 C++: Functions, Scope, Recursion
- 33 C++: Arrays, Vectors
- 34 C++: Pointers
- 35 C++: Memory Management
- 36 C++: OOP Basics
- 37 C++: Inheritance, Polymorphism

- 38 STL Containers
- 39 STL Algorithms
- 40 CP: Greedy Algorithms
- 41 CP: Backtracking
- 42 CP: Two Pointers, Sliding Window
- 43 CP: Binary Search on Answer
- 44 CP: Graph Problems
- 45 CP: Dynamic Programming
- 46 CP: Bit Manipulation
- 47 CP: Segment Trees
- 48 CP: Fenwick Trees
- 49 CP: Practice Contest
- 50 CP: Practice Contest
- 51 CP: Codeforces A/B Problems
- 52 CP: Codeforces C Problems

53 CP: CodeChef Starters

54 CP: Leetcode Biweekly

55 CP: Practice Problems

56 CP: Weekly Contest Review

57 CP: Practice Contest

58 CP: Contest Analysis

59 CP: Solve Missed Problems

60 CP: Summary + Revision

Phase 3: Full Stack Development (Days 61–120)

- 61 HTML Basics
- 62 CSS Basics
- 63 CSS Flexbox & Grid
- JS Basics: Variables, Loops
- 65 JS: Functions, Scope

| Day | Topic |
|-----|-----------------------------------|
| 66 | JS: Arrays & Objects |
| 67 | JS: DOM Manipulation |
| 68 | JS: Events, Forms |
| 69 | JS: Async/Await, Fetch API |
| 70 | JS: ES6+, Callbacks, Promises |
| 71 | React Basics |
| 72 | React Hooks (useState, useEffect) |
| 73 | React Routing |
| 74 | React Forms + Validation |
| 75 | React Context API |
| 76 | Project: Todo App |
| 77 | Project: Blog App |
| 78 | Node.js Basics |
| 79 | Express.js Basics |
| 80 | MongoDB Basics |

| Day | Topic | |
|--|---------------------------------|--|
| 81 | Mongoose ODM | |
| 82 | Authentication (JWT, bcrypt) | |
| 83 | RESTful APIs | |
| 84 | Project: Auth System | |
| 85 | Project: Blog Backend | |
| 86 | CORS, Error Handling | |
| 87 | File Upload, Multer | |
| 88 | Email & Notification APIs | |
| 89 | Pagination & Filtering | |
| 90 | Fullstack: Connect Front + Back | |
| 91 | Fullstack Project Setup | |
| 92–120 Build a Capstone Full Stack App | | |

Phase 4: DevOps Engineering (Days 121–180)

Day Topic

121 Git & GitHub Basics

| Day | Topic |
|-----|-----------------------------|
| 122 | Git: Branching & Merging |
| 123 | Git: Conflict Resolution |
| 124 | Linux CLI Basics |
| 125 | Bash Scripting |
| 126 | Docker: Basics |
| 127 | Docker: Images, Containers |
| 128 | Docker: Volumes, Networking |
| 129 | Docker Compose |
| 130 | Kubernetes: Architecture |
| 131 | K8s: Pods, Deployments |
| 132 | K8s: Services, Ingress |
| 133 | K8s: ConfigMaps, Secrets |
| 134 | K8s: Helm Basics |
| 135 | Terraform: Basics |
| 136 | Terraform: AWS Integration |

| Day | Topic | |
|---|---------------------------|--|
| 137 | Terraform: Modules | |
| 138 | AWS: EC2, S3 | |
| 139 | AWS: IAM, RDS | |
| 140 | AWS: Lambda, CloudWatch | |
| 141 | CI/CD Basics | |
| 142 | GitHub Actions | |
| 143 | Jenkins Overview | |
| 144 | Docker + Jenkins Pipeline | |
| 145 | Kubernetes Deployment | |
| 146–180 DevOps Capstone Project with CI/CD Pipeline | | |

Phase 5: Projects + Open Source (Days 181–240)

Day Topic

181–210 Build 3 Major Capstone Projects

211–220 Refactor + Write Tests

221–230 Deploy All Projects (Netlify, Vercel, AWS)

231–235 Create GitHub Repositories with README

236–240 Contribute to Open Source (PRs + Issues)

Phase 6: Interview + Real World Prep (Days 241–300)

Day Topic

241–260 DSA Revise + Leetcode Daily

261–270 System Design: Basics to Advanced

271–280 Resume, LinkedIn, GitHub Optimization

281–290 Mock Interviews, HR Rounds

291–295 Participate in Hiring Challenges

296–300 Apply to Jobs + Reflect & Improve

Would you like me to create a downloadable version (PDF/Notion) or generate this into a Trello/Google Sheet for tracking?