

Ultimate Prompt Library for Fullstack Developers (100+ Prompts)

1 Frontend Development Prompts

UI Components & Layouts 1. Generate a responsive React dashboard layout with sidebar, topbar, and main content area. 2. Create a Vue 3 component for a multi-step form with validation and progress indicator. 3. Build an Angular component for a sortable and filterable data table with pagination. 4. Create a dark-mode toggle for a React app using Context API and localStorage. 5. Generate a reusable modal component with dynamic content and animations in React.

Styling & Animations 6. Write CSS for a card with hover effects and shadow animations. 7. Animate a progress bar in React from 0% to 100% using CSS transitions. 8. Create smooth page transitions between routes in Vue 3 with animation hooks. 9. Generate a responsive grid layout using CSS Grid and Flexbox. 10. Create a sticky header with shrinking effect on scroll using pure CSS and JS.

Forms & Validation 11. Add client-side validation for email, password, and phone in React form using Yup. 12. Generate dynamic form fields in Vue based on JSON configuration. 13. Implement real-time validation feedback for Angular form controls. 14. Create a password strength meter for a React signup form. 15. Implement conditional form fields based on user input in Vue 3.

API Integration 16. Fetch paginated data from REST API and display in React table with error handling. 17. Implement Axios interceptors in Vue 3 to handle token refresh automatically. 18. Create a search component in Angular that calls backend API on input debounce. 19. Integrate a GraphQL API in React with Apollo Client for query and mutation. 20. Fetch and display images from Unsplash API in a responsive React gallery.

2 Backend Development Prompts

CRUD APIs 21. Generate Node.js Express API for user management with full CRUD and validation. 22. Create Spring Boot REST API for products with repository, service, and controller layers. 23. Build a Python Flask REST API for tasks with SQLite database integration. 24. Implement soft delete functionality for a Node.js API resource. 25. Create REST endpoints with proper HTTP status codes and error handling in Spring Boot.

Authentication & Authorization 26. Implement JWT authentication in Node.js with refresh token strategy. 27. Generate Spring Security code for role-based access control for admin and user. 28. Create OAuth2 login with Google in a Node.js application. 29. Implement password hashing and login rate-limiting for Express API. 30. Add middleware to check user roles before executing specific endpoints in Node.js.

Database & ORM 31. Generate Sequelize models for MySQL with one-to-many and many-to-many relations. 32. Write JPA entities for Spring Boot with @OneToMany and @ManyToOne relationships. 33. Create MongoDB schema for a blog with users, posts, and comments. 34. Write SQL queries for fetching top 10 active users in the last 30 days. 35. Optimize database query to reduce latency for large datasets.

Error Handling & Logging 36. Add centralized error handling middleware in Express. 37. Implement global exception handling in Spring Boot with @ControllerAdvice. 38. Add structured logging with Winston in Node.js for API requests. 39. Log API request and response payloads in Spring Boot for debugging. 40. Generate custom error messages for common database errors.

Performance & Optimization 41. Refactor callback-based Node.js code to async/await with error handling. 42. Suggest caching strategies for Spring Boot API responses using Redis. 43. Optimize REST API endpoint for bulk insert of 10,000 records in Node.js. 44. Convert synchronous file I/O to asynchronous in Node.js for better performance. 45. Profile Spring Boot application to detect memory leaks and slow queries.

3 SQL & Database Prompts

1. Write SQL query to fetch users who registered in the last 7 days.
 2. Select top 10 products with highest sales in last month using MySQL.
 3. Write SQL with inner join to combine orders and users table.
 4. Write query to find users with no orders in PostgreSQL.
 5. Generate query to update status of orders older than 30 days.
 6. Write SQL for a reporting dashboard with aggregate sales per month.
 7. Optimize query for fetching paginated results from large tables.
 8. Write a query to calculate percentage of active users in last 30 days.
 9. Generate a stored procedure to insert a new order and update stock.
 10. Write SQL to find products never purchased and delete them safely.
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4 DevOps & Deployment Prompts

Containerization 56. Generate Dockerfile for Node.js backend and React frontend fullstack app. 57. Write docker-compose.yml for PostgreSQL, Redis, and backend services. 58. Add multi-stage build to Dockerfile for smaller production image. 59. Generate Kubernetes deployment manifest for Node.js microservice. 60. Add readiness and liveness probes to Kubernetes manifest.

CI/CD Automation 61. Create GitHub Actions workflow for Node.js build, test, and deploy to AWS. 62. Write Jenkinsfile for Spring Boot CI/CD with automated testing. 63. Generate GitLab CI YAML for deploying Dockerized app to Kubernetes. 64. Automate database migration on deployment using Flyway in CI/CD pipeline. 65. Set up automated rollback in GitHub Actions if deployment fails.

Cloud Integration 66. Write Terraform code to provision AWS S3 bucket and IAM roles for backend. 67. Generate AWS Lambda function deployment with API Gateway trigger. 68. Create Kubernetes Secret and ConfigMap for storing environment variables. 69. Write AWS CDK script for deploying fullstack app with load balancer. 70. Integrate CloudWatch logging for Node.js backend on AWS.

5 Testing & QA Prompts

Unit Testing 71. Generate Jest tests for React component covering props and edge cases. 72. Write JUnit 5 tests for Spring Boot service methods. 73. Create Mocha tests for Node.js Express API endpoints. 74. Generate test cases for form validation in Vue 3 component. 75. Write unit tests for utility functions in JavaScript.

Integration Testing 76. Write integration tests for Node.js Express API using Supertest. 77. Generate Spring Boot integration tests using MockMvc. 78. Test GraphQL queries and mutations using Apollo Server testing utilities. 79. Automate end-to-end testing for React app using Cypress. 80. Create integration tests for payment gateway API in Node.js.

Test Data & Mocks 81. Generate mock data for 100 users with random names, emails, and passwords. 82. Create seed script for products and orders in MySQL. 83. Generate mock API response for testing frontend. 84. Create faker.js script for generating random test data. 85. Write JSON schema for validating API responses.

6 Productivity & Feature Development Prompts

Documentation & Explanation 86. Generate detailed API documentation for Node.js backend with examples. 87. Explain this React hook with pros, cons, and usage example. 88. Write step-by-step guide for integrating Stripe in fullstack app. 89. Document database schema with entity relationship and field descriptions. 90. Explain error handling strategies in Spring Boot with examples.

Refactoring & Best Practices 91. Refactor this JavaScript code for readability and performance. 92. Suggest security improvements for this Node.js API. 93. Convert REST API to GraphQL in Node.js. 94. Rewrite nested if-else code in React using cleaner patterns. 95. Optimize SQL queries and suggest indexes for performance.

Feature Prototyping 96. Generate full-stack chat system using React, Node.js, and Socket.IO. 97. Create image upload, resizing, and storage feature with React + Node.js + AWS S3. 98. Build real-time dashboard showing sales data from backend API. 99. Implement notifications system using WebSockets in fullstack app. 100. Design SaaS multi-tenancy architecture in Node.js with PostgreSQL.