

1. Multi-Tenant SaaS Billing & Subscription Management System

Description:

A SaaS platform supporting multiple companies (tenants), with subscription plans, billing cycles, invoices, and permissions.

Key Features:

- Multi-tenant architecture
- Stripe subscription billing
- RBAC (Admin → Manager → User)
- Automated invoices, usage-based billing

Tech Stack:

- Frontend: Next.js
- Backend: Node.js (NestJS)
- DB: PostgreSQL (schema-per-tenant or row-level security)
- Extras: Stripe API, Docker, Redis cache

Why it gets you hired:

Shows enterprise architecture, payments, roles, and multi-tenancy — rare skill.

2. Full E-Commerce Platform With Microservices Architecture

Description:

A real e-commerce system built with microservices (auth, order, cart, product, payments, delivery).

Key Features:

- Event-driven design (Kafka / RabbitMQ)
- API Gateway + Service Registry
- Inventory system
- Cart service with Redis
- Checkout & payments

Tech Stack:

- Frontend: React

- Backend: Go / Node.js microservices
- DB: MongoDB & PostgreSQL mix
- Messaging: Kafka
- DevOps: Docker, Kubernetes

Why it gets you hired:

Shows system design, microservices, and distributed systems.

3. HR Management System (HRMS) With Payroll Processing

Description:

Complete HR system with attendance, leave approval, payroll generation, taxation, and employee lifecycle.

Key Features:

- Attendance tracking (QR / geo)
- Leave workflow (Manager → HR)
- Monthly salary + tax deductions
- Employee onboarding/offboarding

Tech Stack:

- Frontend: Next.js
 - Backend: Django
 - DB: PostgreSQL
 - Extras: Cron jobs, PDF payslips
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4. DevOps Automated CI/CD Pipeline Template

Description:

A production-ready CI/CD setup for any application with fully automated builds, tests, deployments.

Pipeline Includes:

- GitHub Actions → Docker build → Unit tests
- Kubernetes deployment via Helm

- Canary deployments
- Monitoring via Prometheus + Grafana

Tech Stack:

- Tools: Docker, Kubernetes, Helm
- CI/CD: GitHub Actions
- Cloud: AWS or GCP

Why it gets you hired:

DevOps + backend + pipeline automation = instant job booster.

5. Real-Time Chat System With WebSockets

Description:

A Slack-like messaging platform supporting channels, DMs, media sharing, and presence indicators.

Key Features:

- Real-time messaging
- Typing indicators
- Channel permissions
- File uploads (S3)

Tech Stack:

- Frontend: React
 - Backend: Node.js (Socket.io)
 - DB: MongoDB
 - Extras: Redis Pub/Sub, JWT Auth
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6. Fleet Management & Vehicle Tracking System (IoT)

Description:

Tracks vehicles in real-time, logs routes, shows fuel consumption, and provides maintenance alerts.

Key Features:

- MQTT-based GPS ingestion
- Live map tracking
- Maintenance scheduler
- Driver analytics

Tech Stack:

- Frontend: Next.js + Mapbox
 - Backend: FastAPI
 - DB: PostgreSQL
 - Extras: MQTT broker, Grafana dashboards
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7. Event Booking Platform (Ticketmaster Clone)

Description:

Event listing + seat selection + booking + payments.

Key Features:

- Seat reservation + seat-lock mechanism
- Event publishing workflow
- Payments + ticket PDF
- Overbooking prevention with Redis

Tech Stack:

- Frontend: React
 - Backend: Node.js (Express)
 - DB: PostgreSQL
 - Extras: Stripe + Redis locking
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8. Online Banking System (Core Banking Simulation)

Description:

Simulates transactions, accounts, transfers, recurring payments, statements.

Key Features:

- Double-entry accounting
- Transaction ledger
- Daily settlement jobs
- Fraud detection rules (non-AI)

Tech Stack:

- Frontend: Vue.js
- Backend: Java Spring Boot
- DB: PostgreSQL
- Extras: Kafka event sourcing

Why it's strong:

Banking systems demonstrate real world reliability skills.

9. Inventory & POS (Point of Sale) Management System

Description:

Retail POS system with barcode integration, stock management, purchase history, supplier tracking.

Key Features:

- Barcode scanning
- Stock alerts
- Sales analytics
- Multi-store support

Tech Stack:

- Frontend: React
 - Backend: Laravel
 - DB: MySQL
 - Extras: Redis cache, CSV reports
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10. Project & Task Management Tool (Jira/Trello Clone)

Description:

A complete project management system with tasks, boards, timelines, sprints, priorities.

Key Features:

- Kanban board
- Sprint planning
- Drag-drop tasks
- Role-based permissions
- Activity logs

Tech Stack:

- Frontend: Next.js
 - Backend: Node.js (NestJS)
 - DB: PostgreSQL
 - Extras: WebSockets, Redis, Cron jobs
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11. Cloud Storage Platform (Mini Google Drive / Dropbox Clone)

Description:

A scalable cloud file storage system with folder management, sharing, and versioning.

Key Features:

- File upload/download
- Folder creation & sharing
- File version history
- Access control (public/private)
- Large file chunked uploads

Tech Stack:

- Frontend: Next.js
- Backend: Node.js (NestJS)
- Database: PostgreSQL

- Storage: AWS S3
- Extras: Pre-signed URLs, JWT Auth, Docker

Why recruiters love it:

Shows cloud + security + architecture skills.

12. URL Shortener Service (Bitly-Scale with Rate Limiting)

Description:

A production-grade URL shortener with analytics and distributed rate limiting.

Key Features:

- Custom slug support
- Link analytics (clicks, geo, device)
- Redis caching
- Rate limiting per API key
- QR code generation

Tech Stack:

- Backend: Go or Node.js
- DB: MongoDB or DynamoDB
- Extras: NGINX reverse proxy, Prometheus metrics

Why it's great:

You can explain scalability, caching, consistency — perfect for interviews.

13. Load Balancer + Reverse Proxy Implementation (Nginx-like)

Description:

Build your own load balancer that distributes traffic to multiple backend servers.

Key Features:

- Round-robin, Least Connections
- Health checks
- Hot reload of configuration

- Traffic logging

Tech Stack:

- Language: Go or Rust
- Extras: Docker, distributed system concepts

Why it gets you hired:

Shows deep systems knowledge — rare for freshers.

14. Kubernetes Cluster Monitoring Dashboard

Description:

A unified dashboard showing pod health, deployments, CPU, memory, logs, and alerts.

Key Features:

- K8s API integration
- Pod health & metrics
- Real-time event viewer
- YAML validator
- Cluster-wide alerts

Tech Stack:

- Frontend: Next.js
 - Backend: FastAPI
 - DevOps: Kubernetes, Prometheus, Grafana
 - Extras: RBAC for access control
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15. Secure Authentication System (OAuth2 + JWT + MFA)

Description:

Enterprise-grade authentication platform supporting OAuth, MFA, and secure sessions.

Key Features:

- OAuth login (Google/GitHub)

- Email & TOTP-based MFA
- IP/device-based sessions
- Role-Based Access Control
- Refresh token rotation

Tech Stack:

- Backend: Node.js (NestJS)
- DB: PostgreSQL
- Extras: Redis for sessions, JWT blacklist

Why recruiters like it:

Shows deep understanding of real-world auth systems.

16. Expense Reimbursement System (Corporate Workflow Engine)

Description:

An internal system where employees submit claims → managers approve → finance processes.

Key Features:

- Multi-step workflow
- Receipt PDF upload
- Manager & finance dashboard
- Real-time notifications
- Audit log

Tech Stack:

- Frontend: React
 - Backend: Django REST
 - DB: PostgreSQL
 - Extras: Cron scheduler, Email alerts
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17. Multi-Vendor Marketplace (Etsy/Meesho Clone)

Description:

Buyers, sellers, products, stores — all in one platform.

Key Features:

- Seller onboarding
- Product uploads
- Order lifecycle
- Payout system
- Reviews & ratings

Tech Stack:

- Frontend: Next.js
 - Backend: Laravel or Node.js
 - DB: MySQL
 - Extras: Stripe connect, S3 uploads
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18. Hospital Management System (Appointment + Billing + Pharmacy)**Description:**

A complete HMS covering patient registration, doctors, pharmacy, lab reports and billing.

Key Features:

- Appointment booking
- Electronic health records
- Pharmacy stock & billing
- Lab test reporting
- Multiple user roles (Admin/Doctor/Pharmacist)

Tech Stack:

- Frontend: Vue.js
- Backend: Spring Boot
- DB: PostgreSQL

- Extras: PDF discharge summary generation
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19. Travel Booking Platform (Flights + Hotels + Packages)

Description:

A travel aggregator platform integrating flights, hotels, vacation packages, and bookings.

Key Features:

- Search + filters
- Live seat availability
- Multi-step checkout
- Booking history
- Email ticketing

Tech Stack:

- Frontend: Next.js
 - Backend: FastAPI
 - DB: PostgreSQL
 - Extras: Amadeus API, Redis cache
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20. Complete Learning Management System (LMS)

Description:

A platform for courses, video lessons, quizzes, assignments, grading, and certifications.

Key Features:

- Course creation
- Video streaming
- Quiz & gradebook
- Assignment submission
- Certificate generator

Tech Stack:

- Frontend: React
 - Backend: Node.js (Express)
 - DB: MongoDB
 - Extras: Video CDN, JWT auth, Admin panel
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21. Distributed Task Queue System (Celery / BullMQ Clone)

Description:

A scalable background job processing system that handles millions of tasks asynchronously.

Key Features:

- Job scheduling (delayed/repeated)
- Worker scaling
- Dead letter queue
- Retry + backoff policies
- Job dashboard (status, logs, errors)

Tech Stack:

- Backend: Node.js (BullMQ) or Python (Celery-style)
- DB: Redis
- Extras: Docker, Metrics dashboard

Why it's valuable:

Shows deep understanding of queues, async processing, distributed systems.

22. Full DevOps Monitoring & Alerting System

Description:

Build your own monitoring stack for apps, containers, and servers.

Key Features:

- Node, CPU, memory tracking
- Log management
- Alert rules (CPU > 90%, service down)

- Real-time dashboards
- Notification system (Email/Slack)

Tech Stack:

- Backend: Go / Python
- Tools: Prometheus + Grafana
- Extras: Alertmanager, Docker/K8s

Why it stands out:

Companies LOVE DevOps experience.

23. API Rate Limiter as a Service (SaaS)

Description:

A plug-and-play rate limiting service that developers integrate into their apps.

Key Features:

- IP-based & Token-based rate limiting
- Burst + refill algorithm
- Dashboard with usage analytics
- API keys & usage billing
- Global distribution for low latency

Tech Stack:

- Backend: Go (high performance)
 - DB: Redis
 - Extras: JWT, NGINX reverse proxy
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24. Social Media Management Platform (Hootsuite-like)

Description:

A centralized system to schedule, publish, and analyze posts across multiple platforms.

Key Features:

- Post scheduler

- Calendar view
- Multi-account support
- Engagement analytics
- Team collaboration

Tech Stack:

- Frontend: React
 - Backend: Node.js
 - DB: MongoDB
 - Extras: Meta, X, LinkedIn APIs
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25. Banking Payment Gateway Simulator (UPI/Stripe Clone)

Description:

A secure payment engine that handles transactions, settlements, and refunds.

Key Features:

- Virtual wallet
- KYC workflow
- Transaction ledger
- Refunds & disputes
- Daily settlement

Tech Stack:

- Backend: Java Spring Boot
- DB: PostgreSQL
- Extras: Kafka, Redis caching

Why it's strong:

Shows fintech-level system design.

26. Cloud-Based Logging Platform (Mini Datadog / Splunk)

Description:

Centralized log ingestion, indexing, and searching.

Key Features:

- Real-time log ingestion
- Search queries (filters, regex)
- Alert rules
- Log retention policies
- Tag-based grouping

Tech Stack:

- Backend: Go / Python
 - DB: Elasticsearch
 - Frontend: Next.js
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27. Job Portal System (Naukri / Indeed Clone)

Description:

Modern job portal with candidate & recruiter dashboards.

Key Features:

- Resume upload
- Job search + filters
- Employer posting system
- Application tracking
- Bookmarking jobs

Tech Stack:

- Frontend: Next.js
 - Backend: Django REST
 - DB: PostgreSQL
 - Extras: Cloud storage for CVs
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28. Multi-Restaurant Food Delivery System (Swiggy/Zomato-like)

Description:

A full delivery ecosystem supporting restaurants, riders, and customers.

Key Features:

- Real-time order tracking
- Restaurant dashboard
- Delivery partner app
- Cart, checkout, payments
- Live order status updates

Tech Stack:

- Frontend: React + React Native
 - Backend: Node.js (NestJS)
 - DB: MongoDB
 - Extras: Socket.io, Stripe
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29. Warehouse Automation & Inventory Sync System

Description:

A warehouse management system with stock movements, restocking rules, and supplier management.

Key Features:

- Inbound/outbound stock logs
- Multiple warehouse support
- Stock reorder automation
- Supplier catalog
- Barcode scanning

Tech Stack:

- Frontend: Vue.js
- Backend: Spring Boot

- DB: PostgreSQL
 - Extras: Redis caching
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30. Online Test & Assessment Platform (HackerRank-like)

Description:

A coding challenge and assessment platform for interviews.

Key Features:

- Code editor with language support
- Timer + test evaluation
- MCQ + Coding + Subjective
- Admin dashboard
- Leaderboards

Tech Stack:

- Frontend: Next.js
 - Backend: Node.js
 - DB: PostgreSQL
 - Extras: Docker sandbox for compiling code
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31. Distributed Cache System (Mini Redis Clone)

Description:

Build a high-performance distributed caching system similar to Redis with support for TTL, pub/sub, and replication.

Key Features:

- Key-value storage
- Expiry (TTL) support
- Master–slave replication
- Pub/Sub channels
- LRU eviction

Tech Stack:

- Language: Go or Rust
- Extras: TCP protocol implementation, Docker

Why it's great:

Shows deep backend + distributed systems knowledge.

32. Container Orchestration Engine (Mini Kubernetes)**Description:**

A small orchestration system that schedules containers on worker nodes.

Key Features:

- Deploy/stop containers
- Auto-restart on failure
- Node health checks
- Simple scheduler
- Resource allocation

Tech Stack:

- Language: Go
- Containers: Docker Engine API

Why it lands jobs:

Recruiters love systems-level understanding.

33. Full Financial Accounting System (ERP Module)**Description:**

A complete accounting suite for small businesses.

Features:

- Chart of accounts
- Journal entries
- Debit-credit double entry
- Financial statements

- Ledger + Trial Balance

Tech Stack:

- Frontend: React
- Backend: Django
- DB: PostgreSQL

Why it's strong:

Finance + backend + database-heavy = excellent project.

34. Cybersecurity Vulnerability Scanner (Nmap-style)

Description:

Security tool that scans ports, finds vulnerabilities, and generates security reports.

Key Features:

- Port scanning
- Service detection
- Basic vulnerability checks (non-AI)
- HTML/PDF report
- OS fingerprinting

Tech Stack:

- Language: Python or Go
 - Networking: Sockets
 - Extras: Nmap-like CLI
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35. Cloud Cost Monitoring Dashboard (AWS Billing Analyzer)

Description:

Analyze AWS billing data and visualize cost by service, region, and usage style.

Key Features:

- Cost explorer
- Daily/monthly breakdown

- Budget alerts
- Resource tagging cost segmentation

Tech Stack:

- Backend: Node.js
- DB: PostgreSQL
- Cloud: AWS Cost Explorer API
- Frontend: Next.js + Charts

Why recruiters LOVE it:

Shows real-world cloud experience.

36. Real-Time Multiplayer Game Backend (WebSockets)

Description:

Build a game server that handles rooms, matchmaking, and real-time events.

Key Features:

- Matchmaking logic
- Game rooms
- State sync
- Leaderboards
- Anti-cheat verification

Tech Stack:

- Backend: Node.js / Go
- Frontend: Phaser.js
- DB: Redis + PostgreSQL

Why it stands out:

Game networking is HARD — impressive skill.

37. Vehicle Parking Management System (Smart Parking)

Description:

A digital parking platform for malls, tech parks, and apartments.

Key Features:

- Slot booking
- QR-based entry
- Payment integration
- Parking history & logs
- Admin dashboard

Tech Stack:

- Frontend: Vue.js
 - Backend: Spring Boot
 - DB: MySQL
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38. Blockchain-Based Document Verification System**Description:**

Store document hashes on blockchain to verify authenticity.

Key Features:

- Hash generation
- Immutable verification
- Document timestamping
- Multi-user roles (User/Admin)
- Audit log

Tech Stack:

- Blockchain: Ethereum (Solidity)
- Backend: Node.js
- Frontend: React

Why it helps:

Shows Web3 fundamentals + backend.

39. High-Performance Image CDN (Content Delivery System)

Description:

A custom CDN that optimizes, caches, and delivers images at scale.

Key Features:

- Image resizing/compression
- Global caching
- Lazy loading
- CDN token-based security
- Analytics dashboard

Tech Stack:

- Backend: Node.js / Go
- Storage: AWS S3
- CDN layer: Cloudflare / custom caching

Why it's impressive:

Performance engineering + distributed caching.

40. Appointment & Queue Management System (Hospitals/Salons)

Description:

A platform for appointment booking + smart queue algorithm.

Key Features:

- Appointment booking
- Queue prediction (non-AI, rule-based)
- Staff dashboard
- Email/SMS reminders
- Daily schedule planner

Tech Stack:

- Frontend: Next.js
- Backend: Django REST
- DB: PostgreSQL

- Extras: Twilio SMS

41. Payment Reconciliation System (Finance-Grade)

Description:

A system that compares transaction logs between banks, payment gateways, and merchants to identify mismatches.

Key Features:

- Import bank + gateway statements
- Auto reconciliation engine
- Detect mismatched, missing, duplicate transactions
- Daily settlement reports
- Role-based dashboards (Finance/Admin)

Tech Stack:

- Backend: Java Spring Boot
- DB: PostgreSQL
- Frontend: React
- Extras: Cron jobs, CSV import/export, Audit logs

Why recruiters love it:

Shows fintech-level accuracy & reliability handling.

42. Distributed File Synchronization System (Dropbox Sync Engine)

Description:

A background agent that syncs files across devices reliably.

Key Features:

- Delta sync (upload only changed parts)
- Conflict resolution
- Background sync service
- Event-based file watching
- Version control

Tech Stack:

- Language: Go or Rust
- Storage: S3
- Extras: gRPC communication, Local caching

Why it stands out:

Implementing sync logic = real engineering skill.

43. Online Auction/Bidding Platform (Ebay Model)**Description:**

A real-time auction system where users bid on products with live updates.

Key Features:

- Live bidding (WebSockets)
- Auto-bidding rules
- Auction timers
- Bid history
- Admin product management

Tech Stack:

- Frontend: Next.js
 - Backend: Node.js (NestJS)
 - DB: PostgreSQL
 - Extras: Socket.io, Redis for events
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44. API Gateway + Authentication Layer (Custom Kong API Gateway)**Description:**

Your own API gateway to manage authentication, routing, and rate limiting for microservices.

Key Features:

- JWT verification
- Service routing

- Rate limiting
- API keys & roles
- Request logs

Tech Stack:

- Language: Go
- Reverse Proxy: NGINX core concepts
- Extras: Docker, gRPC support

Why recruiters like it:

Demonstrates system design, security, backend depth.

45. Multi-Currency Expense Management Platform

Description:

A corporate expense tool supporting multiple currencies and exchange rate syncing.

Key Features:

- Currency conversion using live rates
- Expense categories
- PDF receipt uploads
- Department-wise budgets
- Manager approval workflow

Tech Stack:

- Frontend: React
 - Backend: Django
 - DB: PostgreSQL
 - Extras: Currency exchange API integration
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46. High Scalability Notification Service (Email/SMS/Push)

Description:

Centralized notification microservice capable of sending millions of messages.

Key Features:

- SMTP + SMS + Push support
- Queue-based sending (Kafka/RabbitMQ)
- Template system
- Rate limiting
- Delivery tracking

Tech Stack:

- Backend: Node.js (NestJS)
- Queue: Kafka or RabbitMQ
- DB: PostgreSQL
- Extras: Docker, Prometheus metrics

Why it's great:

Production-grade, real enterprise requirement.

47. Document Management System (DMS) for Enterprises

Description:

Secure internal document system for company departments.

Key Features:

- Document upload + versioning
- Tagging + folder structure
- User roles & permissions
- Activity logs + audit trails
- Document sharing via links

Tech Stack:

- Frontend: Vue.js
- Backend: Spring Boot
- DB: PostgreSQL
- Storage: S3 buckets

48. Event-Driven Order Processing System (Microservices)

Description:

A microservice-based order processing pipeline for e-commerce.

Key Features:

- Services: Order, Inventory, Payment, Shipping
- Event-driven flow with Kafka
- Idempotent event handlers
- Saga pattern for transaction integrity
- Observability dashboard

Tech Stack:

- Backend: Go or Node.js
- Queue: Kafka
- DB: MongoDB + PostgreSQL
- Extras: Jaeger tracing

Why companies love it:

This is EXACTLY how real e-commerce systems work.

49. Secure Password Manager (Local Encryption + Sync)

Description:

A password vault that encrypts all data on the client side (like Bitwarden).

Key Features:

- AES-256 client-side encryption
- Shared vaults
- Autofill browser extension
- Vault sync across devices
- Zero-knowledge architecture

Tech Stack:

- Frontend: React
 - Backend: FastAPI
 - DB: PostgreSQL
 - Extras: Browser extension (Manifest v3)
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50. Retail POS with Offline Mode (Supermarket POS)

Description:

A Point-of-Sale system that works offline and syncs automatically when back online.

Key Features:

- Product scanning
- Offline cart storage
- Sync engine for offline → online
- Invoice generation
- GST/VAT support

Tech Stack:

- Frontend: React / PWA
- Backend: Node.js
- DB: IndexedDB (client) + PostgreSQL (server)
- Extras: Service workers, Barcode API