

THE MASTER PLAN: FROM PARAMEDIC TO CLOUD AI ARCHITECT

Duration: 24 Weeks (6 Months)

Goal: Position as a "Cloud & AI Systems Architect" specializing in Secure, Mission-Critical Infrastructure.

Core Philosophy: Systems-First, Security-by-Design, Infrastructure as Code.





PHASE 1: CLOUD ARCHITECTURE FOUNDATION (WEEKS 1–6)

Goal: Build production-grade cloud architecture literacy. No "Hello World" tutorials—only enterprise patterns.

WEEK 1: AWS CORE ARCHITECTURE + NETWORKING (✓ IN PROGRESS)

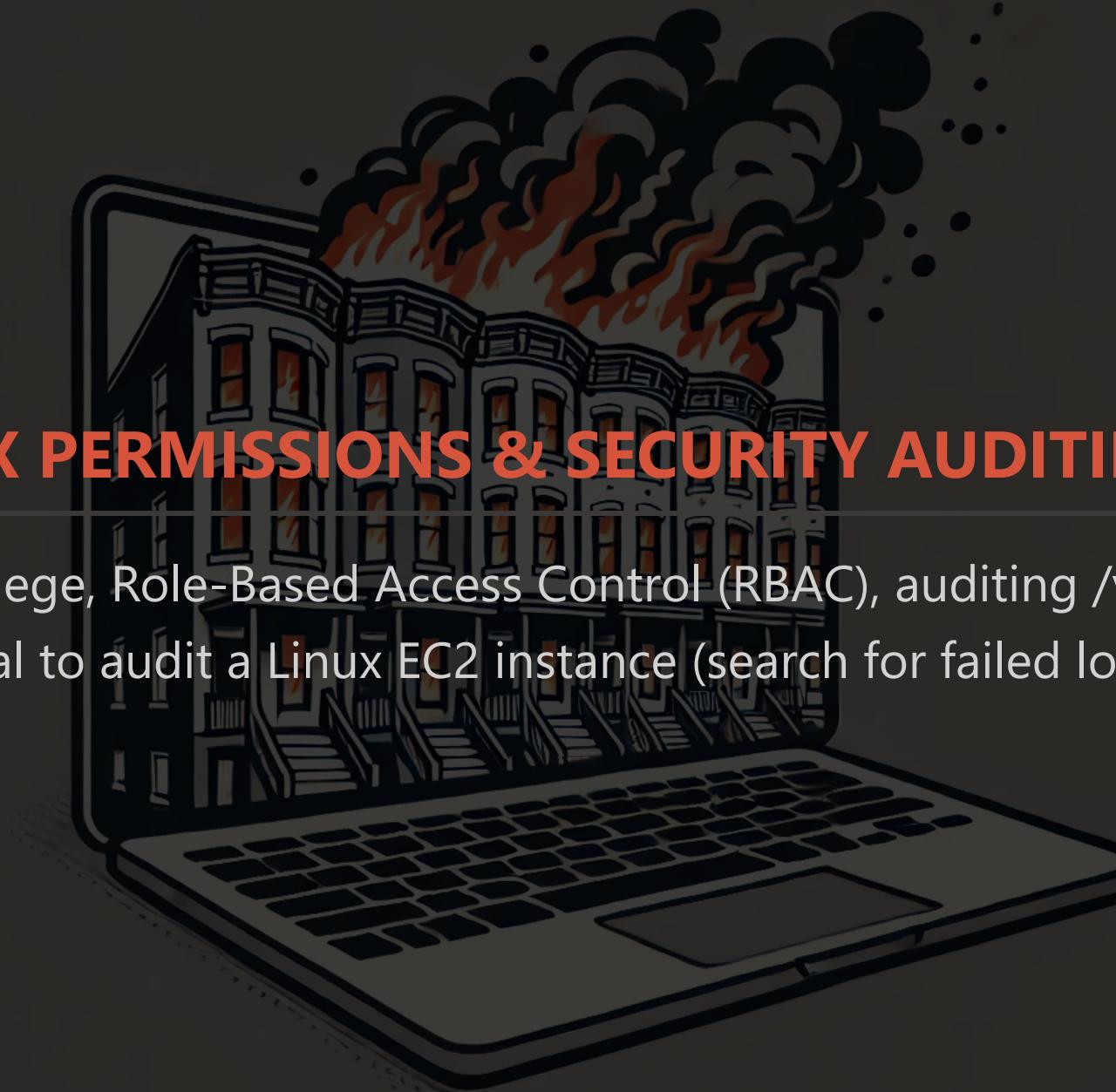
Concept: VPC design, CIDR planning, Subnet segmentation, NAT/IGW.

Lab: Rewrite a VPC Python script into a native Bash script using `aws-cli` (Python to Bash Migration).

WEEK 2: LINUX PERMISSIONS & SECURITY AUDITING

Concept: Least Privilege, Role-Based Access Control (RBAC), auditing /var/log.

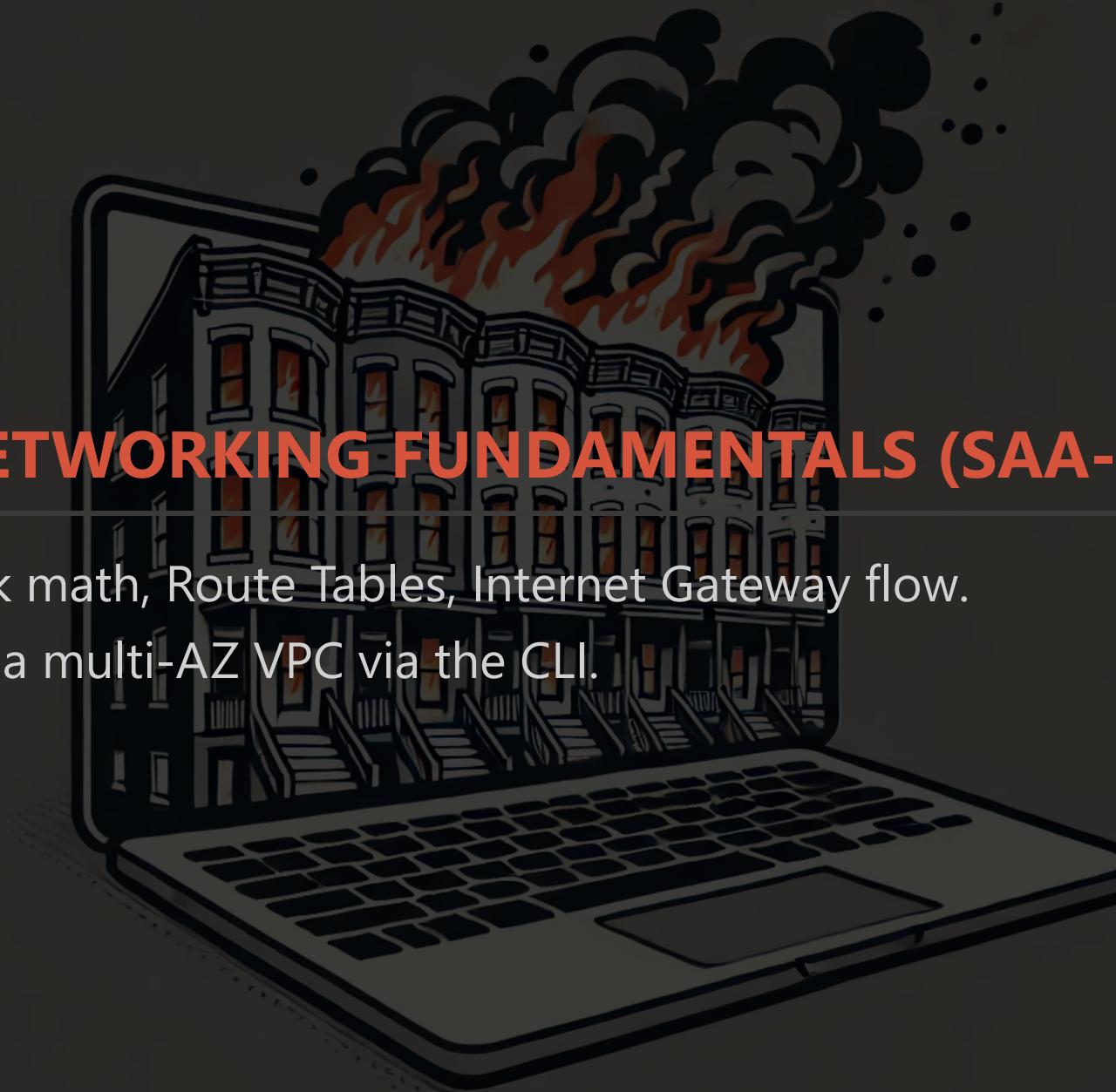
Lab: Use the terminal to audit a Linux EC2 instance (search for failed login attempts).



WEEKS 3-4: NETWORKING FUNDAMENTALS (SAA-C03 CORE)

Concept: CIDR Block math, Route Tables, Internet Gateway flow.

Lab: Manually build a multi-AZ VPC via the CLI.



WEEK 5: OBSERVABILITY + INCIDENT RESPONSE

Concept: CloudWatch, Structured Logging, Metrics, Alarms.

Lab: Build an automated "Watchdog" that detects server failures and triggers alerts.

WEEK 6: PHASE 1 CAPSTONE — THE PRODUCTION WEB PLATFORM

Project: Integrate Weeks 1–5 into a single deployable stack.

Deliverable: A secure, load-balanced web application with full logging and database backend.





PHASE 2: SECURE ARCHITECTURE DESIGN (WEEKS 5–10)

Goal: Master the "Design Secure Architectures" domain of the SAA-C03.

WEEKS 5-7: IDENTITY & ACCESS MANAGEMENT (IAM)

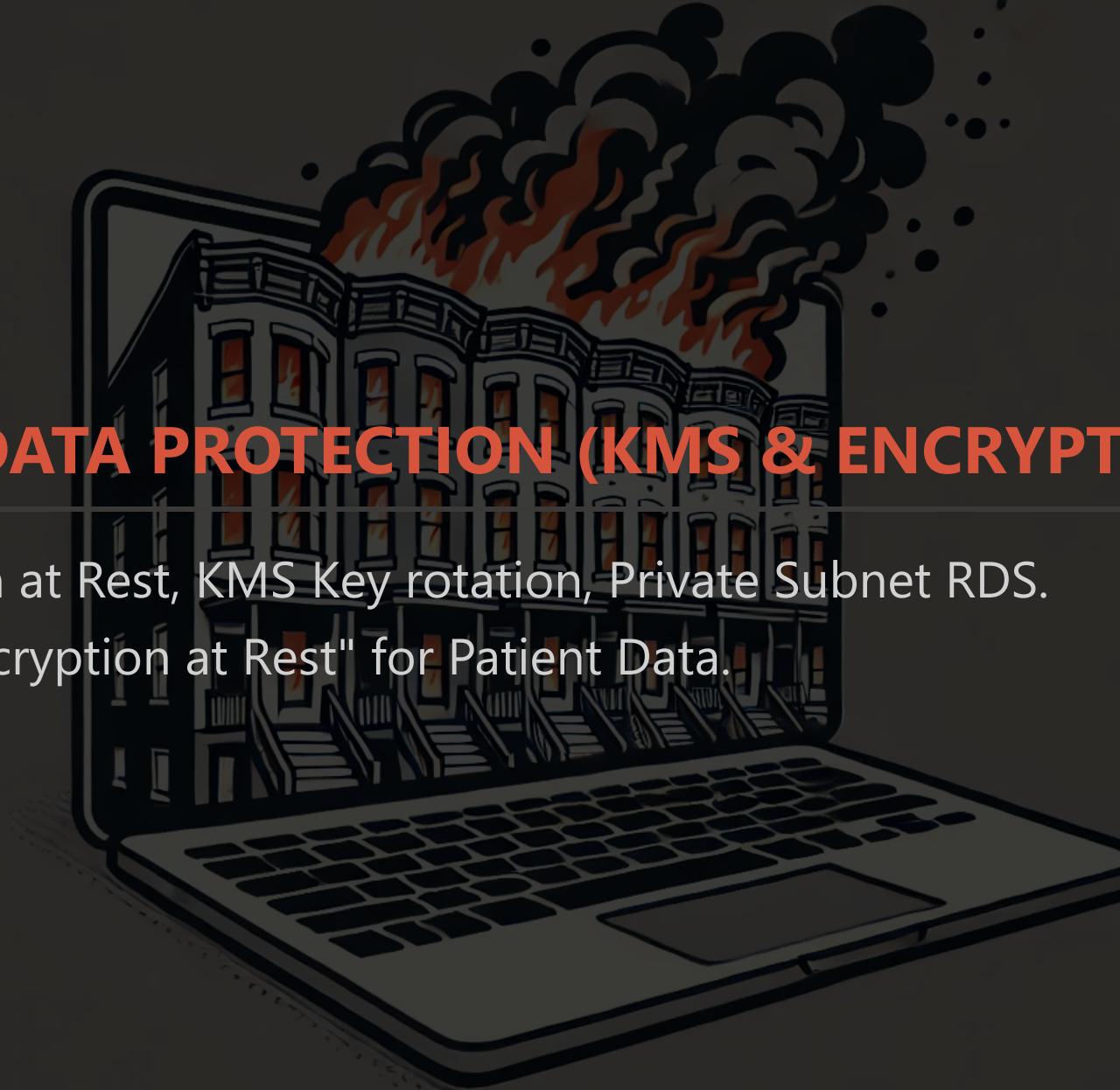
Concept: Least Privilege, IAM Roles vs Users, JSON Policies.

Lab: Build a "Least Privilege" environment (EC2 read-only S3 access).

WEEKS 8-10: DATA PROTECTION (KMS & ENCRYPTION)

Concept: Encryption at Rest, KMS Key rotation, Private Subnet RDS.

Lab: Implement "Encryption at Rest" for Patient Data.





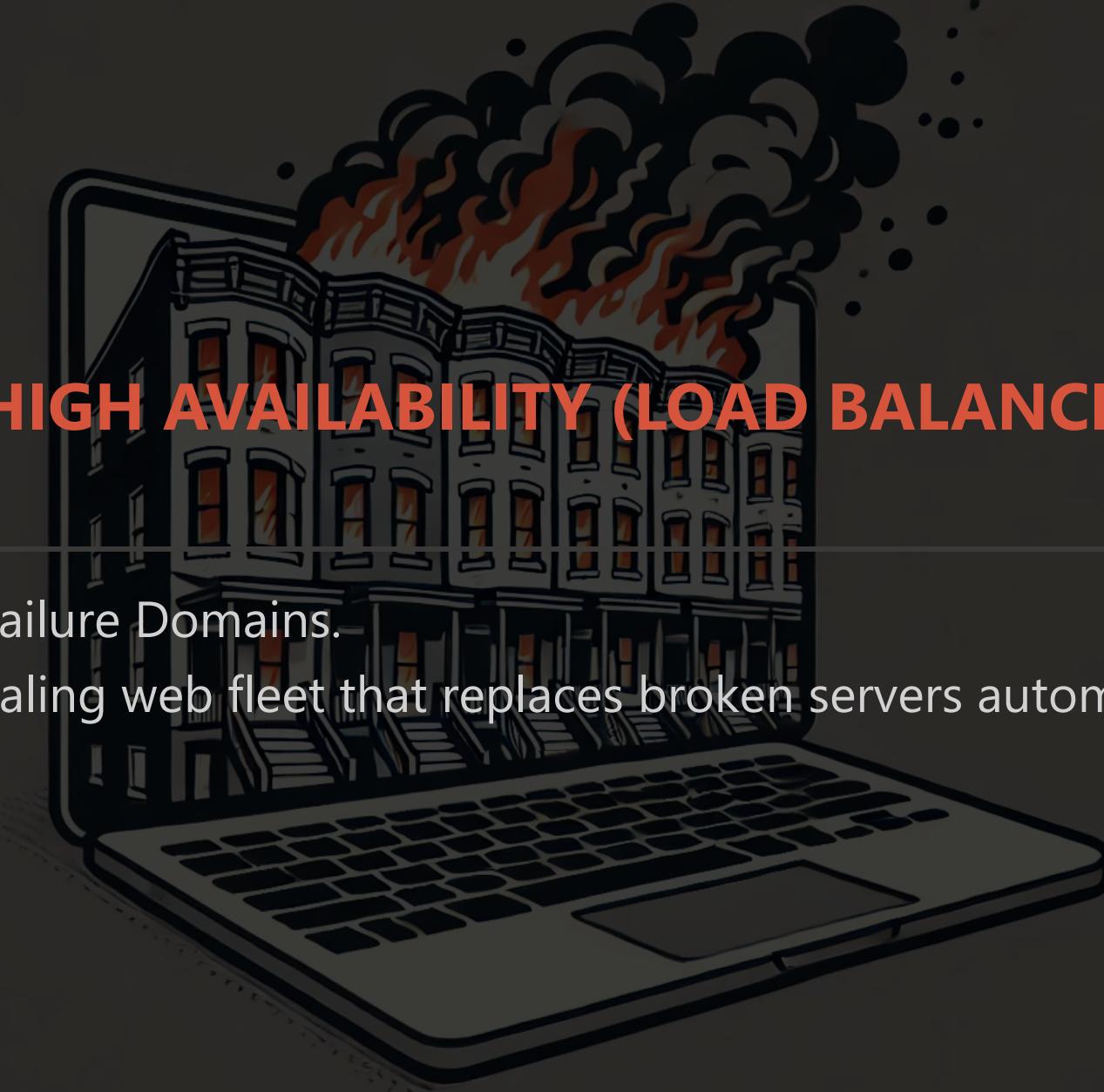
PHASE 3: RESILIENCE & SAA-C03 BLITZ (WEEKS 11–16)

Goal: Pass the Certification and understand "High Availability."

WEEKS 11-13: HIGH AVAILABILITY (LOAD BALANCING & AUTO-SCALING)

Concept: ALB, ASG, Failure Domains.

Lab: Deploy a self-healing web fleet that replaces broken servers automatically.

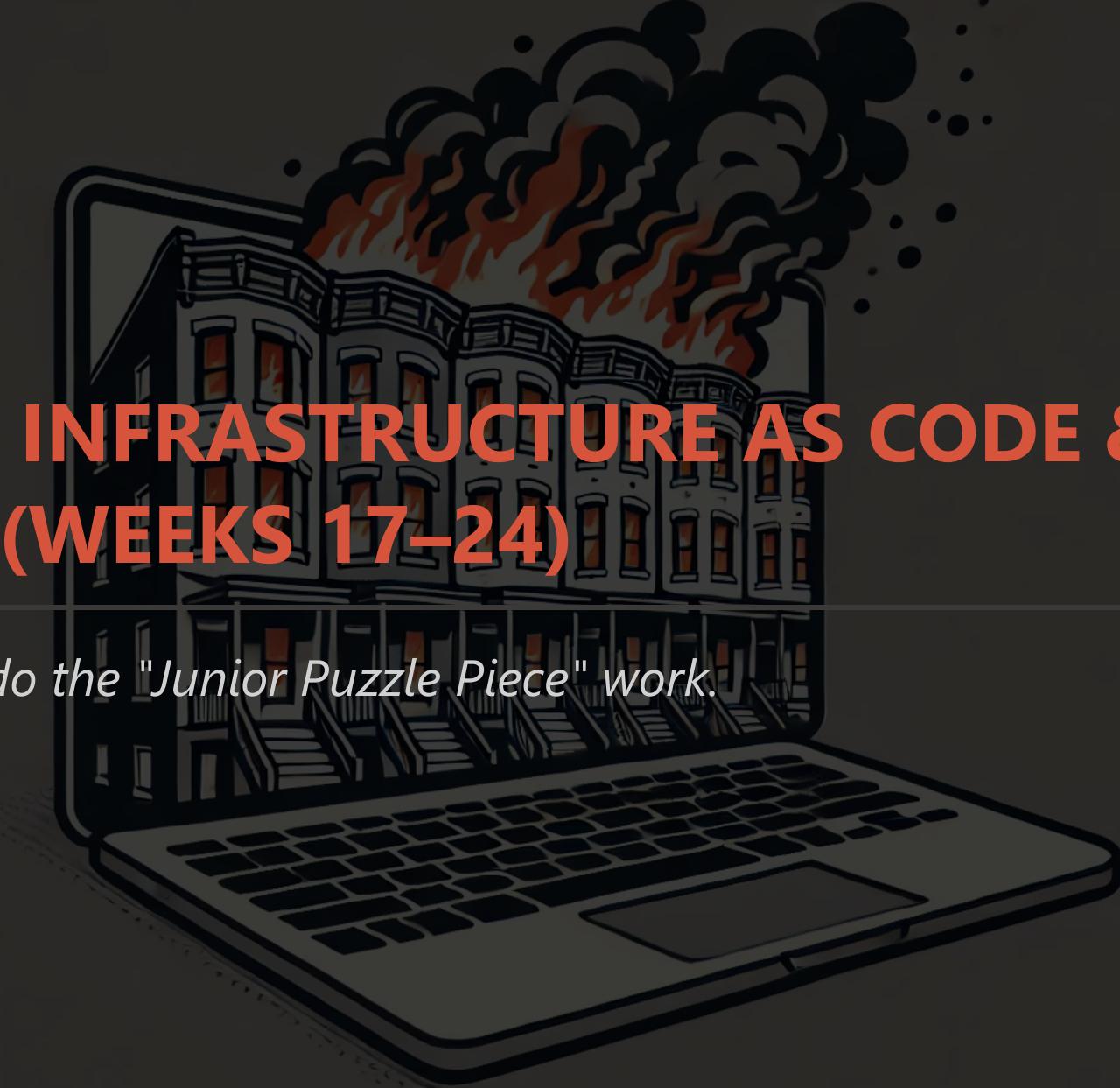


WEEKS 14-16: CERTIFICATION PREP

Activity: Intensive Practice Exams (Tutorials Dojo/Stephane Maarek).

Focus: Scenario Questions, Scoring 80%+ consistently.





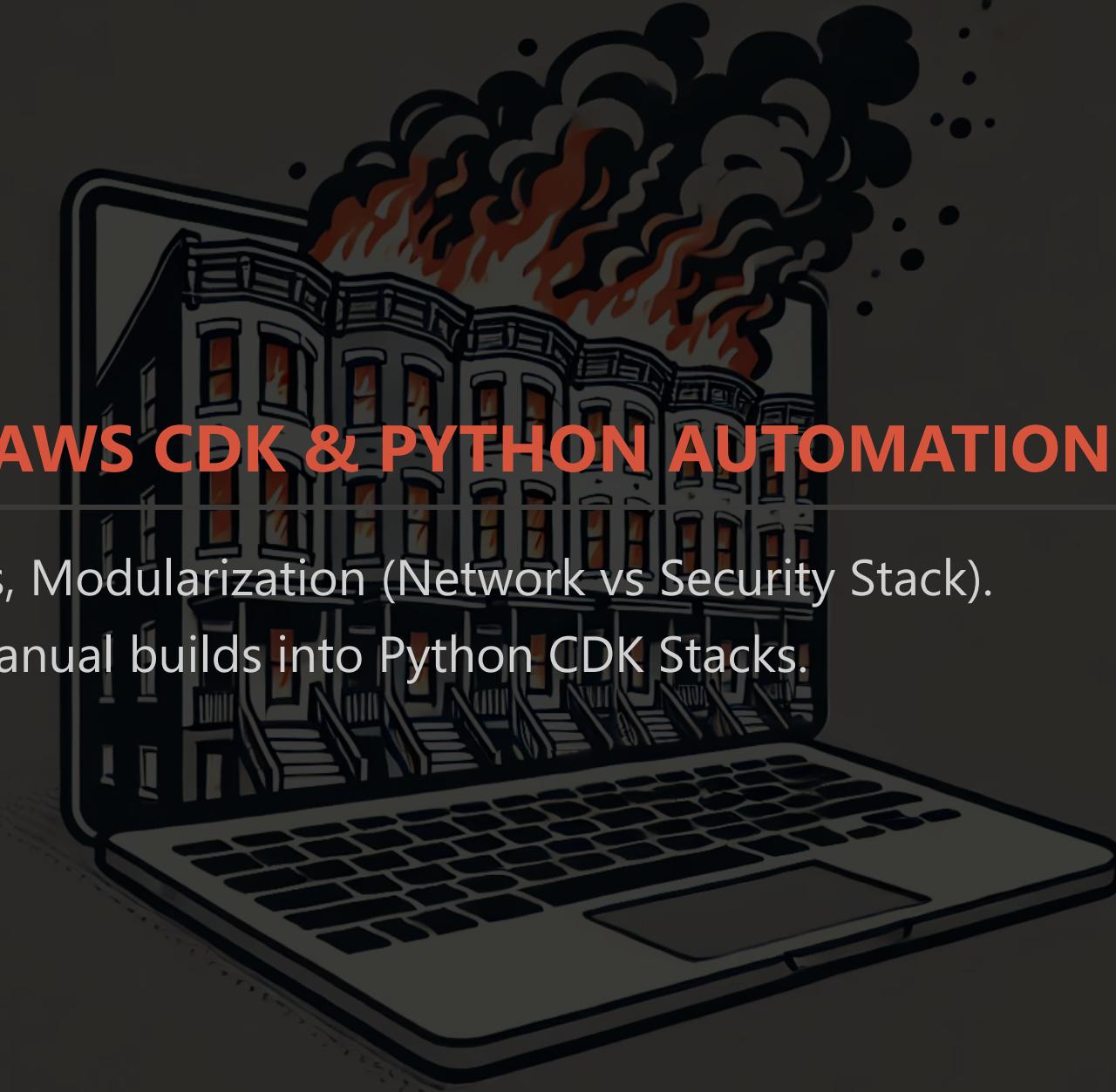
🚀 PHASE 4: INFRASTRUCTURE AS CODE & PORTFOLIO (WEEKS 17–24)

Goal: Prove you can do the "Junior Puzzle Piece" work.

WEEKS 17-20: AWS CDK & PYTHON AUTOMATION

Concept: CDK Stacks, Modularization (Network vs Security Stack).

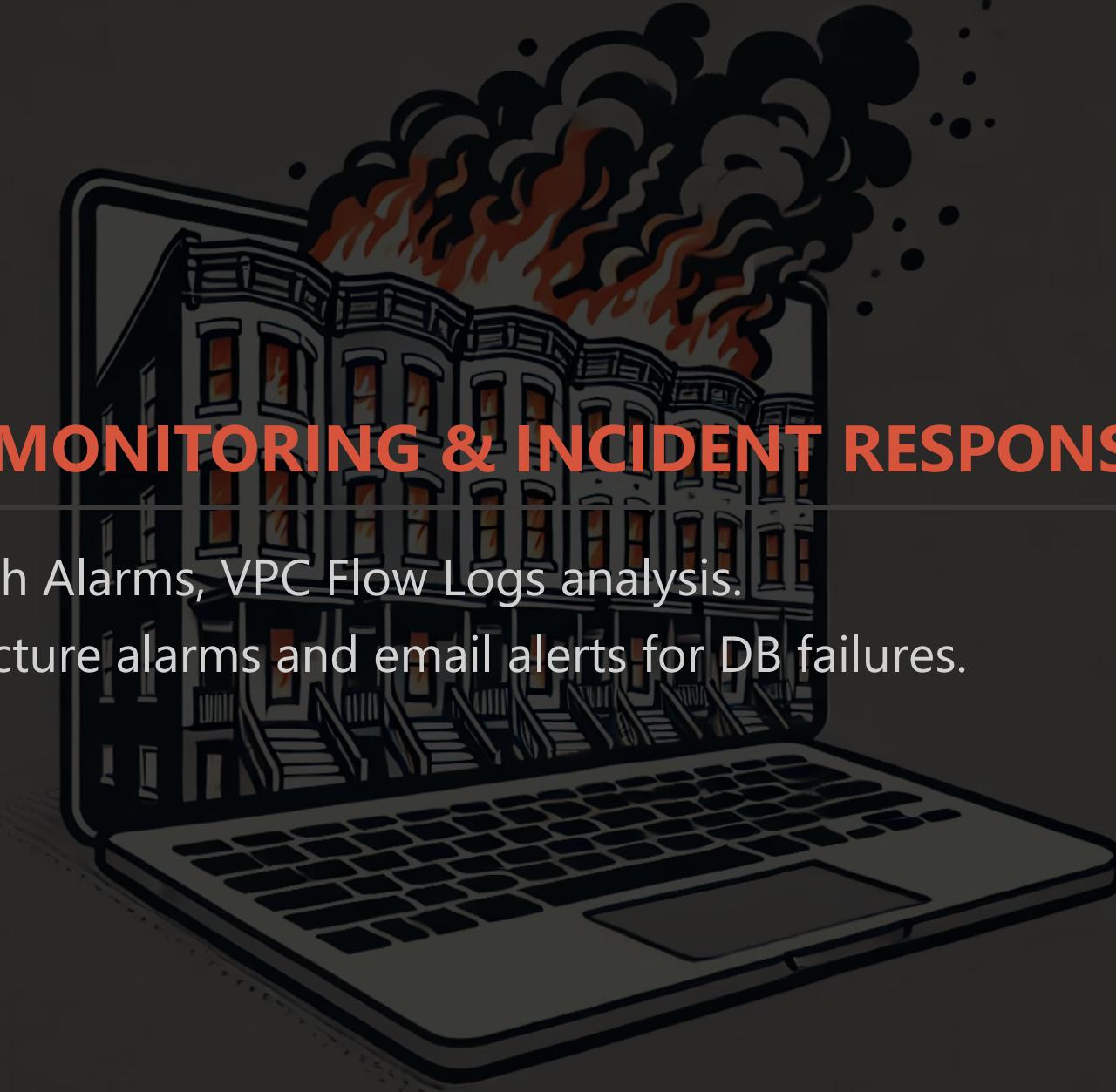
Lab: Convert your manual builds into Python CDK Stacks.



WEEKS 21-22: MONITORING & INCIDENT RESPONSE

Concept: CloudWatch Alarms, VPC Flow Logs analysis.

Lab: Set up infrastructure alarms and email alerts for DB failures.



WEEKS 23-24: THE "FINAL MIGRATION" PROJECT

Activity: Document a "Legacy to Cloud" migration for a medical distributor.

Deliverable: GitHub Repo with CDK code, README, and Architecture Diagrams.

YOUR BRANDING STRATEGY

"I don't just build clouds; I build safe, compliant, and resilient systems for critical environments."

You are not a Junior Developer.

You are a Cloud Systems Architect with a background in High-Stakes Operations.