

Google Cloud Platform Essentials



**BUILDING RESILIENT, SCALABLE, AND
COST-EFFICIENT CLOUD SOLUTIONS ON GCP**



COMPUTE



STORAGE



NETWORKING



SECURITY



KUBERNETES



SERVERLESS



AI / ML



MONITORING



COST
OPTIMIZATION



PRACTICAL
EXAMPLES
REAL-WORLD
BEST PRACTICES

UPDATED FOR
TODAY'S GCP

— STEVE T. —

Google Cloud Platform Essentials

Building Resilient, Scalable, and Cost-Efficient Cloud Solutions on GCP

Steve T.

This book is available at <https://leanpub.com/googlecloudplatformessentials>

This version was published on 2026-06-19



This is a [Leanpub](#) book. Leanpub empowers authors and publishers with the Lean Publishing process. [Lean Publishing](#) is the act of publishing an in-progress ebook using lightweight tools and many iterations to get reader feedback, pivot until you have the right book and build traction once you do.

© 2026 Steve T.

Contents

Google Cloud Platform Essentials	1
Building Resilient, Scalable, and Cost-Efficient Cloud Solutions on GCP	1
Table of Contents	2
Introduction: Why Google Cloud?	6
The Cloud Computing Landscape in 2026	6
Where GCP Fits: Market Position and Differentiators	6
How to Use This Book	6
Chapter 1: Getting Started with Google Cloud	7
Creating Your First Account and Project	7
The gcloud CLI: Your Command-Line Workbench	7
Billing, Free Tier, and Budgets	8
Deployment Strategy: Regions, Zones, and Machine Types	9
Hands-On: Your First Compute Engine VM	9
Chapter 2: Cloud Architecture Principles	11
The Well-Architected Framework: Six Pillars	11
Core Architectural Principles	12
Design for Failure and Resilience	13
Scalability and Elasticity Patterns	13
Security by Design	14
Sustainability as an Architectural Goal	15
Review Questions	15
Chapter 3: Networking Fundamentals on GCP	16
VPC Networks, Subnets, and IP Addressing	16
Firewall Rules and Network Policies	16
Cloud NAT and Outbound Connectivity	17
HA VPN and Cloud Interconnect: Hybrid Connectivity	18
Cloud Armor: DDoS Protection and Web Application Firewall	18

CONTENTS

Service Perimeters and Load Balancing	19
Review Questions	20
Chapter 4: Compute Services	21
Compute Engine: VMs and Instance Groups	21
App Engine: Platform-as-a-Service	21
Cloud Run: Serverless Containers	22
Choosing the Right Compute Service	22
Migration Patterns to GCP	23
Review Questions	23
Chapter 5: Storage Solutions	24
Cloud Storage: Buckets, Objects, and Storage Classes	24
Persistent Disk: Standard, SSD, Balanced, and Extreme	24
Filestore: Managed NFS for Shared Workloads	25
Data Transfer and Migration Tools	25
Review Questions	25
Chapter 6: Databases on Google Cloud	26
Cloud SQL: MySQL, PostgreSQL, and SQL Server	26
Cloud Spanner: Globally Distributed Relational Database	26
Cloud Bigtable: Wide-Column for Analytics and IoT	27
Firestore and Memorystore: NoSQL and Caching	27
AlloyDB for PostgreSQL	27
Choosing the Right Database	28
Review Questions	28
Chapter 7: Security, Identity, and IAM	29
Google's Shared Responsibility Model	29
IAM Roles, Policies, and the Resource Hierarchy	29
Cloud KMS and Secret Manager	30
Organization Policies and Access Context Manager	30
Compliance and Certifications	31
Review Questions	31
Chapter 8: DevOps and CI/CD on GCP	32
Artifact Registry and Container Images	32
Cloud Build: CI/CD Pipelines and Triggers	32
Infrastructure as Code with Terraform	32
Deployment Manager and GitOps Workflows	33

CONTENTS

Secure CI/CD: Attestation and Supply Chain Security	33
Review Questions	33
Chapter 9: Kubernetes and Containers with GKE	34
Google Kubernetes Engine Architecture	34
Autopilot vs. Standard Clusters	34
Node Pools, Autoscaling, and Compute Classes	35
Workload Identity and Cluster Security	35
Observability, Backups, and Upgrades	36
Multi-Cluster Management with Fleets	37
Review Questions	37
Chapter 10: Serverless Computing on GCP	38
Cloud Functions 2nd Generation	38
Eventarc: Event-Driven Architectures	38
Cloud Run Services and Jobs	39
Serverless vs. Containers vs. VMs: Making the Call	39
Real-World Serverless Patterns	40
Review Questions	40
Chapter 11: AI, Machine Learning, and Data Analytics	41
Vertex AI: The Unified ML Platform	41
AutoML for No-Code Model Building	41
BigQuery ML and SQL-Based Machine Learning	42
Pre-Trained APIs	42
MLOps with Vertex AI Pipelines	42
Review Questions	42
Chapter 12: Monitoring, Logging, and Observability	43
Cloud Monitoring: Metrics, Dashboards, and Alerts	43
Cloud Logging: Centralized Log Management	43
Cloud Trace: Distributed Tracing	44
SLOs, SLIs, and Error Budgets	44
Managed Service for Prometheus and OpenTelemetry	44
Review Questions	45
Chapter 13: Cost Optimization and FinOps	46
Understanding GCP Pricing Models	46
Committed Use Discounts and Savings Plans	46
Spot VMs for Fault-Tolerant Workloads	47

Rightsizing, Storage Tiering, and Budgets	47
Real-World Cost Optimization Case Studies	48
Review Questions	49
Chapter 14: Real-World Use Cases and Architecture Patterns	50
E-Commerce Platform: Scalable and Resilient	50
Healthcare Data Pipeline: HIPAA Compliance	50
Media Streaming: Global Content Delivery	51
IoT Data Ingestion: High-Throughput Analytics	52
Disaster Recovery: Multi-Region Architectures	53
Case Study Questions for Certification Preparation	53
Review Questions	53
Conclusion: The Future of Google Cloud	55
Where GCP Is Headed	55
Skills, Certifications, and Career Development	55
Building Your Cloud Journey	55
Final Thoughts	55
References	56

Google Cloud Platform Essentials

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Building Resilient, Scalable, and Cost-Efficient Cloud Solutions on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Table of Contents

Introduction: Why Google Cloud?

- The Cloud Computing Landscape in 2026
- Where GCP Fits: Market Position and Differentiators
- How to Use This Book

Chapter 1: Getting Started with Google Cloud

- Creating Your First Account and Project
- The GCP Console, Cloud Shell, and gcloud CLI
- Billing, Free Tier, and Budgets
- Deployment Strategy: Regions, Zones, and Machine Types
- Hands-On: Your First Compute Engine VM

Chapter 2: Cloud Architecture Principles

- The Well-Architected Framework: Six Pillars
- Core Architectural Principles
- Design for Failure and Resilience
- Scalability and Elasticity Patterns
- Security by Design
- Sustainability as an Architectural Goal

Chapter 3: Networking Fundamentals on GCP

- VPC Networks, Subnets, and IP Addressing
- Firewall Rules and Network Policies
- Cloud NAT and Outbound Connectivity
- HA VPN and Cloud Interconnect
- Cloud Armor: DDoS Protection and WAF
- Service Perimeters and Load Balancing

Chapter 4: Compute Services

- Compute Engine: VMs, Machine Types, and Instance Groups

- App Engine: Platform-as-a-Service
- Cloud Run: Serverless Containers
- Choosing the Right Compute Service
- Migration Patterns to GCP

Chapter 5: Storage Solutions

- Cloud Storage: Buckets, Objects, and Storage Classes
- Persistent Disk: Standard, SSD, Balanced, and Extreme
- Filestore: Managed NFS for Shared Workloads
- Lifecycle Management and Data Tiering
- Data Transfer and Migration Tools

Chapter 6: Databases on Google Cloud

- Cloud SQL: MySQL, PostgreSQL, and SQL Server
- Cloud Spanner: Globally Distributed Relational Database
- Cloud Bigtable: Wide-Column for Analytics and IoT
- Firestore and Memorystore: NoSQL and Caching
- AlloyDB for PostgreSQL
- Choosing the Right Database

Chapter 7: Security, Identity, and IAM

- Google's Shared Responsibility Model
- IAM Roles, Policies, and the Resource Hierarchy
- Service Accounts: Best Practices and Pitfalls
- Cloud KMS and Secret Manager
- Organization Policies and Access Context Manager
- Compliance and Certifications

Chapter 8: DevOps and CI/CD on GCP

- Artifact Registry and Container Images
- Cloud Build: CI/CD Pipelines and Triggers
- Infrastructure as Code with Terraform
- Deployment Manager and GitOps Workflows
- Secure CI/CD: Attestation and Supply Chain Security

Chapter 9: Kubernetes and Containers with GKE

- Google Kubernetes Engine Architecture
- Autopilot vs. Standard Clusters
- Node Pools, Autoscaling, and Compute Classes
- Workload Identity and Cluster Security
- Observability, Backups, and Upgrades
- Multi-Cluster Management with Fleets

Chapter 10: Serverless Computing on GCP

- Cloud Functions 2nd Generation
- Eventarc: Event-Driven Architectures
- Cloud Run Services and Jobs
- Serverless vs. Containers vs. VMs
- Real-World Serverless Patterns

Chapter 11: AI, Machine Learning, and Data Analytics

- Vertex AI: The Unified ML Platform
- AutoML for No-Code Model Building
- BigQuery ML and SQL-Based Machine Learning
- Pre-Trained APIs
- MLOps with Vertex AI Pipelines

Chapter 12: Monitoring, Logging, and Observability

- Cloud Monitoring: Metrics, Dashboards, and Alerts
- Cloud Logging: Centralized Log Management
- Cloud Trace: Distributed Tracing
- SLOs, SLIs, and Error Budgets
- Managed Service for Prometheus and OpenTelemetry

Chapter 13: Cost Optimization and FinOps

- Understanding GCP Pricing Models
- Committed Use Discounts and Savings Plans
- Spot VMs for Fault-Tolerant Workloads

- Rightsizing, Storage Tiering, and Budgets
- Real-World Cost Optimization Case Studies

Chapter 14: Real-World Use Cases and Architecture Patterns

- E-Commerce Platform: Scalable and Resilient
- Healthcare Data Pipeline: HIPAA Compliance
- Media Streaming: Global Content Delivery
- IoT Data Ingestion: High-Throughput Analytics
- Disaster Recovery: Multi-Region Architectures
- Case Study Questions for Certification Preparation

Conclusion: The Future of Google Cloud

- Where GCP Is Headed
- Skills, Certifications, and Career Development
- Final Thoughts

References

- Numbered list with full titles, URLs, and access dates

Introduction: Why Google Cloud?

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The Cloud Computing Landscape in 2026

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Where GCP Fits: Market Position and Differentiators

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

How to Use This Book

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 1: Getting Started with Google Cloud

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Creating Your First Account and Project

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Project Structure and Naming

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The Google Cloud Console

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The gcloud CLI: Your Command-Line Workbench

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Installation and Authentication

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Shell: Your Browser-Based Terminal

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Essential gcloud Commands

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Understanding gcloud Output Formats

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Billing, Free Tier, and Budgets

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The Free Trial

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Always Free Tier

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Setting Up Budgets and Alerts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing Models: Pay-as-You-Go, Committed Use, and Spot

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Deployment Strategy: Regions, Zones, and Machine Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Regions and Zones

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Why Region and Zone Selection Matters

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Machine Types and CPU Architectures

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Hands-On: Your First Compute Engine VM

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 1: Set Up Your Project

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 2: Enable Required APIs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 3: Create a VM Instance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 4: Create a Firewall Rule

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 5: Get the External IP and Test

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 6: SSH into Your VM and Install a Web Server

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Step 7: Clean Up

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

What You Just Learned

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 2: Cloud Architecture Principles

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The Well-Architected Framework: Six Pillars

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

1. Operational Excellence

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

2. Security, Privacy, and Compliance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

3. Reliability

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

4. Cost Optimization

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

5. Performance Efficiency

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cross-Pillar Perspectives

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Core Architectural Principles

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Design for Change

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Document Your Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Simplify Your Design and Use Fully Managed Services

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Decouple Your Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Use a Stateless Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Design for Failure and Resilience

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Multi-Zone Deployment

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Multi-Region Deployment

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Autoscaling and Elasticity

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Circuit Breakers and Retry Policies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Scalability and Elasticity Patterns

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Horizontal vs. Vertical Scaling

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Stateless Frontends with Stateful Backends

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Caching Strategies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Global Traffic Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Security by Design

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Defense in Depth

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Least Privilege Access

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Encryption Everywhere

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Audit and Logging

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Sustainability as an Architectural Goal

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 3: Networking Fundamentals on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

VPC Networks, Subnets, and IP Addressing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Auto-Mode vs. Custom-Mode VPC Networks

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Subnet Configuration

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Private Google Access and Internal IP Addresses

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Firewall Rules and Network Policies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

How GCP Firewalls Work

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Rule Components

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Best Practices for Firewall Rules

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Network Policies in GKE

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud NAT and Outbound Connectivity

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

How Cloud NAT Works

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Configuration

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud NAT Rules

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

HA VPN and Cloud Interconnect: Hybrid Connectivity

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

HA VPN (High Availability Virtual Private Network)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Interconnect

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

HA VPN over Cloud Interconnect

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

MTU Considerations

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Armor: DDoS Protection and Web Application Firewall

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Layer 3/Layer 4 DDoS Protection

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Layer 7 WAF and OWASP Protection

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Adaptive Protection

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Security Policy Configuration

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Service Perimeters and Load Balancing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Private Google Access

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Service Perimeters and VPC Service Controls

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Regional and Global Load Balancing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 4: Compute Services

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Compute Engine: VMs and Instance Groups

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Machine Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Zonal vs. Regional Resources

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Managed Instance Groups

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Live Migration and Maintenance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

App Engine: Platform-as-a-Service

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Standard vs. Flexible Environment

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

When to Use App Engine

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Run: Serverless Containers

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Features

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Free Tier

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Run vs. App Engine

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Choosing the Right Compute Service

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Migration Patterns to GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 5: Storage Solutions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Storage: Buckets, Objects, and Storage Classes

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Storage Classes

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Lifecycle Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Object Versioning

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Access Controls

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Persistent Disk: Standard, SSD, Balanced, and Extreme

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Disk Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Size and Performance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Snapshots and Backups

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Regional Persistent Disk

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Filestore: Managed NFS for Shared Workloads

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Data Transfer and Migration Tools

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 6: Databases on Google Cloud

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud SQL: MySQL, PostgreSQL, and SQL Server

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Features

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

When to Use Cloud SQL

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Spanner: Globally Distributed Relational Database

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Features

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Spanner vs. Cloud SQL

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

When to Use Spanner

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Bigtable: Wide-Column for Analytics and IoT

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Features

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

When to Use Bigtable

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Firestore and Memorystore: NoSQL and Caching

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Firestore

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Memorystore

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

AlloyDB for PostgreSQL

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Choosing the Right Database

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 7: Security, Identity, and IAM

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Google's Shared Responsibility Model

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

IAM Roles, Policies, and the Resource Hierarchy

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

The Resource Hierarchy

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

IAM Roles

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

IAM Policies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Service Accounts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Privilege Limitation and Downscoping

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Escalation, Disclosure, and Non-Repudiation Defenses

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud KMS and Secret Manager

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Key Management Service (KMS)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Secret Manager

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Organization Policies and Access Context Manager

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Organization Policies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Access Context Manager and Service Perimeters

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Compliance and Certifications

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 8: DevOps and CI/CD on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Artifact Registry and Container Images

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Build: CI/CD Pipelines and Triggers

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Build Triggers

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Build Configuration

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing and Free Tier

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Infrastructure as Code with Terraform

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Setting Up Terraform on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Terraform State Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Terraform Best Practices on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Deployment Manager and GitOps Workflows

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

GitOps with Cloud Build

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Secure CI/CD: Attestation and Supply Chain Security

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 9: Kubernetes and Containers with GKE

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Google Kubernetes Engine Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Control Plane Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Node Pools and Compute Classes

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Autopilot vs. Standard Clusters

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

GKE Autopilot

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

GKE Standard

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cost Comparison

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Node Pools, Autoscaling, and Compute Classes

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Node Pool Configuration

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Horizontal Pod Autoscaler (HPA)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cluster Autoscaler

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Compute Classes (Autopilot)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Workload Identity and Cluster Security

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Workload Identity

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cluster Security Best Practices

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Observability, Backups, and Upgrades

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Monitoring

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Security Posture Dashboard

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Backups with Backup for GKE

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cluster Upgrades

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Multi-Cluster Management with Fleets

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 10: Serverless Computing on GCP

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Functions 2nd Generation

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Improvements in 2nd Gen

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Function Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Eventarc: Event-Driven Architectures

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

How Eventarc Works

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Eventarc Triggers

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Use Cases for Eventarc

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Run Services and Jobs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Run Services

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Run Jobs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Serverless vs. Containers vs. VMs: Making the Call

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Decision Framework

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Real-World Serverless Patterns

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Event-Driven Data Processing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

API Gateway with Cloud Run

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Batch Processing with Cloud Run Jobs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 11: AI, Machine Learning, and Data Analytics

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Vertex AI: The Unified ML Platform

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Core Components

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Generative AI with Gemini and PaLM

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

AutoML for No-Code Model Building

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Supported Data Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

AutoML vs. Custom Training

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

BigQuery ML and SQL-Based Machine Learning

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Supported Model Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pre-Trained APIs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

MLOps with Vertex AI Pipelines

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 12: Monitoring, Logging, and Observability

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Monitoring: Metrics, Dashboards, and Alerts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Concepts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Burn Rate Alerting for SLOs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Pricing Changes (October 2025)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Logging: Centralized Log Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Log Types

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Log Routing and Sinks

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Log Retention and Cost Management

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cloud Trace: Distributed Tracing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

SLOs, SLIs, and Error Budgets

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Error Budget Policies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Managed Service for Prometheus and OpenTelemetry

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Google Cloud Managed Service for Prometheus

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

OpenTelemetry

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 13: Cost Optimization and FinOps

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Understanding GCP Pricing Models

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Per-Second Billing

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Sustained Use Discounts (SUDs)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Committed Use Discounts and Savings Plans

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Resource-Based CUDs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Compute Flexible CUDs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

New Multiprice CUD Model (September 2025)

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Strategic CUD Deployment

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Spot VMs for Fault-Tolerant Workloads

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

When to Use Spot VMs

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Spot VMs in GKE

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Rightsizing, Storage Tiering, and Budgets

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Rightsizing Instances

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Storage Tiering

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Budgets, Alerts, and Cost Allocation

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cost Allocation with Labels

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cost Explorer and Billing Exports

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Real-World Cost Optimization Case Studies

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

E-Commerce Platform: 45 Percent Reduction

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Media Streaming: 60 Percent Savings with Multi-Layered Discounts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Takeaway: The Optimal Discount Strategy

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Chapter 14: Real-World Use Cases and Architecture Patterns

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

E-Commerce Platform: Scalable and Resilient

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Requirements

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Design Decisions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cost Optimization

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Healthcare Data Pipeline: HIPAA Compliance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Requirements

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Security and Compliance

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Data Processing Pipeline

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Media Streaming: Global Content Delivery

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Requirements

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Design Decisions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Performance Optimization

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

IoT Data Ingestion: High-Throughput Analytics

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Requirements

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Key Design Decisions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Scalability Considerations

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Disaster Recovery: Multi-Region Architectures

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Requirements

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Architecture

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Recovery Strategy

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Cost Considerations

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Case Study Questions for Certification Preparation

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Review Questions

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Conclusion: The Future of Google Cloud

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Where GCP Is Headed

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Skills, Certifications, and Career Development

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Building Your Cloud Journey

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

Final Thoughts

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.

References

This content is not available in the sample book. The book can be purchased on Leanpub at <https://leanpub.com/googlecloudplatformessentials>.