









Strategies for Developing Resilient Client-side Applications

*Explore site reliability engineering practices and learn key Google Cloud Platform (GCP) services such as CSR, Cloud Build, Container Registry, GKE, and Cloud Operations to implement DevOps Key Features.Learn GCP services for version control, building code, creating artifacts, and deploying secured containerized applicationsExplore Cloud Operations features such as Metrics Explorer, Logs Explorer, and debug logpointsPrepare for the certification exam using practice questions and mock testsBook Description DevOps is a set of practices that help remove barriers between developers and system administrators, and is implemented by Google through site reliability engineering (SRE). With the help of this book, you'll explore the evolution of DevOps and SRE, before delving into SRE technical practices such as SLA, SLO, SLI, and error budgets that are critical to building reliable software faster and balance new feature deployment with system reliability. You'll then explore SRE cultural practices such as incident management and being on-call, and learn the building blocks to form SRE teams. The second part of the book focuses on Google Cloud services to implement DevOps via continuous integration and continuous delivery (CI/CD). You'll learn how to add source code via Cloud Source Repositories, build code to create deployment artifacts via Cloud Build, and push it to Container Registry. Moving on, you'll understand the need for container orchestration via Kubernetes, comprehend Kubernetes essentials, apply via Google Kubernetes Engine (GKE), and secure the GKE cluster. Finally, you'll explore Cloud Operations to monitor, alert, debug, trace, and profile deployed applications. By the end of this SRE book, you'll be well-versed with the key concepts necessary for gaining Professional Cloud DevOps Engineer certification with the help of mock tests. What you will learnCategorize user journeys and explore different ways to measure SLIsExplore the four golden signals for monitoring a user-facing systemUnderstand psychological safety along with other SRE cultural practicesCreate containers with build triggers and manual invocationsDelve into Kubernetes workloads and potential deployment strategiesSecure GKE clusters via private clusters, Binary Authorization, and shielded GKE nodesGet to grips with monitoring, Metrics Explorer, uptime checks, and alertingDiscover how logs are ingested via the Cloud Logging APIWho this book is for This book is for cloud system administrators and network engineers interested in resolving cloud-based operational issues. IT professionals looking to enhance their careers in administering Google Cloud services and users who want to learn about applying SRE principles and implementing DevOps in GCP will also benefit from this book. Basic knowledge of cloud computing, GCP services, and CI/CD and hands-on experience with Unix/Linux infrastructure is recommended. You'll also find this book useful if you're interested in achieving Professional Cloud DevOps Engineer certification.*

*A comprehensive guide with basic to advanced SRE practices and hands-on examples. KEY FEATURES  Demonstrates how to execute site reliability engineering along with fundamental concepts.  Illustrates real-world examples and successful techniques to put SRE into production.  Introduces you to DevOps, advanced techniques of SRE, and popular tools in use. DESCRIPTION Hands-on Site Reliability Engineering (SRE) brings you a tailor-made guide to learn and practice the essential activities for the smooth functioning of enterprise systems, right from designing to the deployment of enterprise software programs and extending to scalable use with complete efficiency and reliability. The book explores the fundamentals around SRE and related terms, concepts, and techniques that are used by SRE teams and experts. It discusses the essential elements of an IT system, including microservices, application architectures, types of software deployment, and concepts like load balancing. It explains the best techniques in delivering timely software releases using containerization and CI/CD pipeline. This book covers how to track and monitor application performance using Grafana, Prometheus, and Kibana along with how to extend monitoring more effectively by building full-stack observability into the system. The book also talks about chaos engineering, types of system failures, design for high-availability, DevSecOps and AIOps. WHAT YOU WILL LEARN  Learn the best techniques and practices for building and running reliable software.  Explore observability and popular methods for effective monitoring of applications.  Workaround SLIs, SLOs, Error Budgets, and Error Budget Policies to manage failures.  Learn to practice continuous software delivery using blue/green and canary deployments.  Explore chaos engineering, SRE best practices, DevSecOps and AIOps. WHO THIS BOOK IS FOR This book caters to experienced IT professionals, application developers, software engineers, and all those who are looking to develop SRE capabilities at the individual or team level. TABLE OF CONTENTS 1. Understand the World of IT 2. Introduction to DevOps 3. Introduction to SRE 4. Identify and Eliminate Toil 5. Release Engineering 6. Incident Management 7. IT Monitoring 8. Observability 9. Key SRE KPIs: SLAs, SLOs, SLIs, and Error Budgets 10. Chaos Engineering 11. DevSecOps and AIOps 12. Culture of Site Reliability Engineering*

*Non Programmer's Guide*