Devops Best Practices From Real Life Customer Experiences

Design, build, and operate scalable and reliable Kubernetes infrastructure for production Key Features Implement industry best practices to build and manage production-grade Kubernetes infrastructure Learn how to architect scalable Kubernetes clusters, harden container security, and fine-tune resource management Understand, manage, and operate complex business workloads confidently Book Description Although out-of-the-box solutions can help you to get a cluster up and running quickly, running a Kubernetes cluster that is optimized for production workloads is a challenge, especially for users with basic or intermediate knowledge. With detailed coverage of cloud industry standards and best practices for achieving scalability, availability, operational excellence, and cost optimization, this Kubernetes book is a blueprint for managing applications and services in production. You'll discover the most common way to deploy and operate Kubernetes clusters, which is to use a public cloud-managed service from AWS, Azure, or Google Cloud Platform (GCP). This book explores Amazon Elastic Kubernetes Service (Amazon EKS), the AWS-managed version of Kubernetes, for working through practical exercises. As you get to grips with implementation details specific to AWS and EKS, you'll understand the design concepts, implementation best practices, and configuration applicable to other cloud-managed services. Throughout the book, you'll also discover standard and cloud-agnostic tools, such as Terraform and Ansible, for provisioning and configuring infrastructure. By the end of this book, you'll be able to leverage Kubernetes to operate and manage your production environments confidently. What you will learn Explore different infrastructure architectures for Kubernetes deployment Implement optimal open source and commercial storage management solutions Apply best practices for provisioning and configuring Kubernetes clusters, including infrastructure as code (IaC) and configuration as code (CAC) Configure the cluster networking plugin and core networking components to get the best out of them Secure your Kubernetes environment using the latest tools and best practices Deploy core observability stacks, such as monitoring and logging, to fine-tune your infrastructure Who this book is for This book is for cloud infrastructure experts, DevOps engineers, site reliability engineers, and engineering managers looking to design and operate Kubernetes infrastructure for production. Basic knowledge of Kubernetes, Terraform, Ansible, Linux, and AWS is needed to get the most out of this book.

Getting your models into production is the fundamental challenge of machine learning. MLOps offers a set of proven principles aimed at solving this problem in a reliable and automated way. This insightful guide takes you through what MLOps is (and how it differs from DevOps) and shows you how to put it into practice to operationalize your machine learning models. Current and aspiring machine learning engineers--or anyone familiar with data science and Python--will build a foundation in MLOps tools and methods (along with AutoML and monitoring and logging), then learn how to implement them in AWS, Microsoft Azure, and Google Cloud. The faster you deliver a machine learning system that works, the faster you can focus on the business problems you're trying to crack. This book gives you a head start. You'll discover how to: Apply DevOps best practices to machine learning Build production machine learning systems and maintain them Monitor, instrument, load-test, and operationalize machine learning

systems Choose the correct MLOps tools for a given machine learning task Run machine learning models on a variety of platforms and devices, including mobile phones and specialized hardware

The overwhelming majority of a software system's lifespan is spent in use, not in design or implementation. So, why does conventional wisdom insist that software engineers focus primarily on the design and development of large-scale computing systems? In this collection of essays and articles, key members of Google's Site Reliability Team explain how and why their commitment to the entire lifecycle has enabled the company to successfully build, deploy, monitor, and maintain some of the largest software systems in the world. You'll learn the principles and practices that enable Google engineers to make systems more scalable, reliable, and efficient—lessons directly applicable to your organization. This book is divided into four sections: Introduction—Learn what site reliability engineering is and why it differs from conventional IT industry practices Principles—Examine the patterns, behaviors, and areas of concern that influence the work of a site reliability engineer (SRE) Practices—Understand the theory and practice of an SRE's day-to-day work: building and operating large distributed computing systems Management—Explore Google's best practices for training, communication, and meetings that your organization can use Learn Azure's cloud capabilities with the help of this introductory guide to employing Azure for your cloud infrastructure needs. Key Features Get a clear overview of Azure's capabilities and benefits, and learn how to get started efficiently Develop the ability to opt for cloud architecture and design that best fits your organization Leverage Azure opportunities for cost savings and optimization Book Description Microsoft Azure is a powerful cloud computing platform that offers a multitude of services and capabilities for organizations of any size moving to a cloud strategy. Azure Strategy and Implementation Guide Third Edition encapsulates the entire spectrum of measures involved in Azure deployment that includes understanding Azure fundamentals, choosing a suitable cloud architecture, building on design principles, becoming familiar with Azure DevOps, and learning best practices for optimization and management. The book begins by introducing you to the Azure cloud platform and demonstrating the substantial scope of digital transformation and innovation that can be achieved by leveraging Azure's capabilities. The guide further acquaints you with practical insights on application modernization, Azure Infrastructure as a Service (IaaS) deployment, infrastructure management, key application architectures, best practices of Azure DevOps, and Azure automation. By the end of this book, you will be proficient in driving Azure operations right from the planning and cloud migration stage to cost management and troubleshooting. What you will learn Deploy and run Azure infrastructure services Carry out detailed planning for migrating applications to the cloud with Azure Move underlying code class structure into a serverless model Use a gateway to isolate your services and applications Define roles and responsibilities in DevOps Implement release & deployment coordination and automation Who this book is for Azure Strategy and Implementation Guide Third Edition is designed to benefit Azure architects, cloud solution architects, Azure developers, Azure administrators, and anyone who wants to develop an expertise in operating and administering the Azure cloud. A basic familiarity with operating systems and databases will help you grasp the concepts covered in this book.

This BOOK highlights some basic knowledge of artificial intelligence formal constructed programming languages (like C, C++, Java, PHP, Python, JavaScript and XML) designed to interact with the hardware in a more powerful way and to communicate instructions to a machine, particularly an electronic device which is capable of receiving information (data) in a particular form and of performing a sequence of operations in accordance with a predetermined but variable set of procedural instructions (program) to produce a result in the form of information or signals. If you read this book in a public place (on a commuter train, at the beach, or on the dance floor at the Restaurants, for example), you can read proudly, with a chip on your shoulder and with your head held high. C, C++, Java, PHP, Python and JavaScript are hot stuff, and you're cool because you're reading about it. If you are just learning what kind of animals C, C++, Java, PHP, Python and JavaScript are, this BOOK will make an excellent companion to any tutorial and serve as a source of knowledge to your specific questions. And, by reading this BOOK, you'll have a broad, basic knowledge of C, C++, Java, Python, JavaScript [scripting language used in millions of Web pages such as Internet Explorer, Firefox, Chrome, Opera, and Safari] and PHP. This book is for all programmers, whether you are a novice or an experienced pro. The beginner will find its carefully paced discussions and many examples especially helpful. Of course those who have already familiar with programming are likely to derive more benefits from this book. After completing this book you will find yourself at a moderate level of expertise in C, C++, Java, PHP, Python and JavaScript programming from where you can take yourself to next levels.

Successfully architect a Drupal 8 website that scales to meet project requirements of any size and scope. Starting with a one-chapter review of Drupal basics, you'll dive into deeper topics including software development processes, architecting a Drupal site, scaling Drupal, working effectively with themes, and more. In addition to a thorough discussion of custom module development and how to develop modules as building blocks, you'll also review many common ways of integrating Drupal with other 3rd party systems. Building and maintaining an enterprise-ready Drupal website presents a unique set of challenges and complexities. From development processes and content management to deployments, version control and more, all aspects of Drupal development are impacted when two or more developers are on a project. If you are involved in a Drupal project that requires frequent updates and long-term support from a team of developers, system administrators, and end-users, Enterprise Drupal 8 Development is for you. Whether you're an experienced Drupal developer looking to expand your skills, a systems administrator managing a Drupal project, or a PHP developer new to Drupal, Enterprise Drupal 8 Development will give you the knowledge and inspiration you need to manage large and complex projects. What You'll Learn Architect Drupal for development teams and apply best practices for large Drupal projects Integrate 3rd party applications with Drupal Manage content, code, and configuration across multiple staging environments Build a consistent user experience for administrators and content creators Who This Book Is For The primary audience is intermediate to advanced Drupal developers who are working on large-scale Drupal projects and advanced PHP developers new to Drupal The secondary audience is IT Professionals such as Systems Administrators managing Drupal projects

Azure DevOps is a cloud service-providing development and collaboration tool with version control, reporting, requirements management, project management, automated builds, lab management, testing, and release management capabilities.

The practical implications of technical debt for the entire software lifecycle; with examples and case studies. Technical debt in software is incurred when developers take shortcuts and make ill-advised technical decisions in the initial phases of a project, only to be confronted with the need for costly and labor-intensive workarounds later. This book offers advice on how to avoid technical debt, how to locate its sources, and how to remove it. It focuses on the practical implications of technical debt for the entire software life cycle, with examples and case studies from companies that range from Boeing to Twitter. Technical debt is normal; it is part of most iterative development processes. But if debt is ignored, over time it may become unmanageably complex, requiring developers to spend all of their effort fixing bugs, with no time to add new features--and after all, new features are what customers really value. The authors explain how to monitor technical debt, how to measure it, and how and when to pay it down. Broadening the conventional definition of technical debt, they cover requirements debt, implementation debt, testing debt, architecture debt, documentation debt, deployment debt, and social debt. They intersperse technical discussions with "Voice of the Practitioner" sidebars that detail real-world experiences with a variety of technical debt issues.

Today's high-speed and rapidly changing development environments demand equally high-speed security practices. Still, achieving security remains a human endeavor, a core part of designing, generating and verifying software. Dr. James Ransome and Brook S.E. Schoenfield have built upon their previous works to explain that security starts with people; ultimately, humans generate software security. People collectively act through a particular and distinct set of methodologies, processes, and technologies that the authors have brought together into a newly designed, holistic, generic software development lifecycle facilitating software security at Agile, DevOps speed. —Eric. S. Yuan, Founder and CEO, Zoom Video Communications, Inc. It is essential that we embrace a mantra that ensures security is baked in throughout any development process. Ransome and Schoenfield leverage their abundance of experience and knowledge to clearly define why and how we need to build this new model around an understanding that the human element is the ultimate key to success. —Jennifer Sunshine Steffens, CEO of IOActive Both practical and strategic, Building in Security at Agile Speed is an invaluable resource for change leaders committed to building secure software solutions in a world characterized by increasing threats and uncertainty. Ransome and Schoenfield brilliantly demonstrate why creating robust software is a result of not only technical, but deeply human elements of agile ways of working. —Jorgen Hesselberg, author of Unlocking Agility and Cofounder of Comparative Agility The proliferation of open source components and distributed software services makes the principles detailed in Building in Security at Agile Speed more relevant than ever. Incorporating the principles and detailed guidance in this book into your SDLC is a must for all software developers and IT organizations. —George K Tsantes, CEO of Cyberphos, former partner at Accenture and Principal at EY Detailing the people, processes, and technical aspects of software security, Building in Security at Agile Speed emphasizes that the people element remains critical because software is developed, managed, and exploited by humans. This book presents a step-by-step process

for software security that is relevant to today's technical, operational, business, and development environments with a focus on what humans can do to control and manage the process in the form of best practices and metrics.

For decades, technology and business leaders have struggled to balance agility, reliability, automation and security, and the consequences of failure are always significant. The effective management of technology is critical for business competitiveness. High-performing organizations are 2.5 times more likely to exceed profitability, market share, and productivity goals. The Agile & DevOps handbook shows leaders how to create the cultural norms and the technical best practices necessary to maximize organizational learning, increase employee satisfaction, win in the marketplace, enhance Customer / business delight and capture new business.The book has been written in such a way that the concepts are explained in detail, giving adequate emphasis on real-life examples. All the tools you need to an in-depth Agile and DevOps Self-Assessment Maturity model. Featuring 500 PLUS new and updated case-based questions, organized into seven core areas of process design, this Self-Assessment will help you identify areas in which DevOps improvements can be made.The real-time examples are discussed in detail from simple to complex taking into consideration the requirement of IT consultants. Various sample projects are included in the book and are written in simple language so as to give IT consultants the basic idea of developing projects in Agile & DevOps. The examples given in book are user-focused and have been highly updated including topics, figures, strategies, best practices and real-life examples, demos and case studies.You will explore DevOps process maturity frameworks and progression models with checklist templates for each phase of DevOps. This Self-aAssessment empowers people to do just that - whether their title is entrepreneur, Coach, Leader, manager, consultant, (Vice-) President, CEO, CTO, COO, CIO etc... - They are the people who rule the future. They are the peoplerson who asks the right questions to make DevOps investments work better. KEY FEATURES - The book is divided into the following sections: -600 PLUS Real-time Agile & DevOps interview questions and answers-Numerous Tricky Real-time Agile & DevOps Case Studies and Demos-Agile & DevOps all-Inclusive Self-Assessment Checklist for Maturity Model featuring 400 PLUS new and updated case-based questions-The state of agility-Different Agile frameworks (extreme programming, SCRUM, Kanban, crystal methodologies, SAFe, dynamic software development methods, feature driven development, lean software development)-Common Agile Product Development & Test Automation Myths-Dictionary of Tools & techniques of Agile and DevOps-Different Types of Agile Certifications - Tips & Tricks-Estimation techniques used in Agile and DevOps-DevOps, Lean, ITSM, Agile value stream examples-DevOps Implementation - Approach & Guidelines-Change Management Process - DevOps-Quality Management Process - DevOps-Get to know what are continuous integration, continuous delivery, and continuous deployment-DevOps - Continuous Business Planning-DevOps - Continuous Integration & Continuous Testing-DevOps - Continuous Deployment & Release Management-DevOps - Continuous Release & Deployment Automation-DevOps - Continuous Testing-DevOps - Continuous Monitoring-DevOps - Continuous Customer Feedback And Optimization-DevOps - DevOps "Continuous Delivery" With In-Built "Quality Assurance"-Continuous Improvement - Agile and DevOps-Agile & DevOps main goal and challenges-Integrate recent advances in DevOps and process design strategies into practice according to best practice guidelines-Diagnose Agile & DevOps projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices-Technical best practices

THE DEFINITIVE BOOK ON HOW THE TECHNOLOGY BEHIND BLOCKCHAIN AND DEVOPS IS CHANGING THE WORLD. 'Blockchain Revolution is a highly readable introduction to a bamboozling but increasingly important field' - GuardianBlockchain is the ingeniously simple technology that powers Bitcoin. But it is much more than that, too. It is a public ledger to which everyone has access, but which no single

person controls. It allows for companies and individuals to collaborate with an unprecedented degree of trust and transparency. It is cryptographically secure, but fundamentally open. And soon it will be everywhere. In the year 2017, Bitcoin touched a market capitalization of over 100 billion dollars. In the year 2014, one Bitcoin could buy about 500 dollars, just three years later one Bitcoin buys 5,000 dollars. The Initial Coin offering is becoming the preferred method of raising money. Many countries like Dubai have announced their own crypto currency called emCash.Bitcoin, Ethereum, Blockchain are the most difficult technologies to understand. That's why most people including technology folks cannot understand the future direction of these technologies. The only way to understand anything complex is by going back to the basics.This is what we do in this book. We explain every byte of the Bitcoin blockchain DevOps that is downloaded on your computer. only by going back to your roots can you understand anything complex.This book is a one-stop guide that would be the ultimate handbook to get on overview of Blockchain and DevOps, the technology behind it and different use cases where this could be applied.The book would be most suitable for business leaders and architects to understand the capabilities and utilize these frameworks and help them to choose the right one for respective business need.The examples given in book are user-focused and have been highly updated including topics, figures, strategies, best practices and real-life examples, demos and case studies.This book promises to be a very good starting point for beginners and an asset for those having insight towards Blockchain, Agile, DevOps, Testing Automation and Technical best practices.The book features more on practical approach with more examples covering topics from simple to complex one, addressing many of the core concepts and advance topics also. Brilliantly researched and highly accessible, this is the essential text on the next major paradigm shift. Read it, or be left behind.The book is divided into the following sections: -Numerous Tricky Real-time Blockchain & DevOps Case Studies and Demos-Blockchain for Telecom industry-Blockchain for Telecommunication, media & entertainment industry-Blockchain for Life sciences organizations-Blockchain for Travel and Transportation Industry-Blockchain for Insurance and for CPG Industry-Asset Management with Blockchain-IoT with Blockchain -SAP blockchain service-Blockchain in Government organizations-Blockchain technology in law enforcement to combat cyber criminology-Getting started with Blockchain App Development-DevOps all-Inclusive Self-Assessment Checklist for Maturity Model featuring 100 PLUS new and updated case-based questions-Dictionary of Tools & techniques of DevOps-DevOps, Lean, ITSM, Agile value stream examples-DevOps Implementation - Approach & Guidelines-Change Management Process - DevOps-Quality Management Process - DevOps-Get to know what are continuous integration, continuous delivery, and continuous deployment-DevOps - Continuous Business Planning-DevOps - Continuous Integration & Continuous Testing-DevOps - Continuous Deployment & Release Management-DevOps - Continuous Release & Deployment Automation-DevOps - Continuous Testing-DevOps - Continuous Monitoring-DevOps - Continuous Customer Feedback And Optimization-DevOps - DevOps "Continuous Delivery" With In-Built "Quality Assurance"
A step-by-step guide to implementing Continuous Integration and Continuous Delivery for Mobile, Hybrid, and Web applications KEY FEATURES - This book covers all these practices that can be utilized in real-life scenarios with sample applications written in Java, Android, iOS, Node.js, Angular, Ionic Cordova, Xamarin, Python, and PHP. - This book provides detailed insight into Microsoft Azure Cloud, especially Platform as a Service Model - Azure App Services. - This book utilizes the Multi-Stage Pipeline Feature of Azure DevOps. Step by Step implementation of Continuous Practices of DevOps makes it easy to understand even for beginners of DevOps practices. DESCRIPTION This book will cover an approach that includes the understanding of DevOps, Assessment of AS-IS state, DevOps Practices Implementation and measurement of success. The main objective is to demonstrate Continuous Practices of DevOps Culture using Microsoft Azure DevOps and Microsoft Azure Cloud across different types of applications such as Mobile apps, Hybrid Mobile App, and Web applications. The main

idea is to have a uniform approach across different types of applications such as Mobile apps, Hybrid Mobile App, and Web applications. It is important to have a uniform approach of DevOps Practices implementation in an application written in different programming languages such as Java, Android, iOS, Node.js, Angular, Ionic Cordova, Xamarin, Python, and PHP. WHAT WILL YOU LEARN - Learn to create a Multi-Stage (CICD) Pipeline for sample applications - Configure Unit Test Execution and Code Coverage Reports in Azure DevOps for sample applications - Create and configure Cloud resources using Platform as a Service Model - Azure App Services for Web Applications and deploy Web Applications to Azure App Services using Pipeline - Understand how to distribute Mobile App Packages (APK and IPA) to App Center WHO THIS BOOK IS FOR This book is suitable for DevOps Consultants, DevOps Evangelists, DevOps Engineers, Technical Specialists, Technical Architects, Cloud Experts, and Beginners. TABLE OF CONTENTS 1. Overview of DevOps Practices 2. DevOps Assessment – Measure the "AS-IS" Maturity 3. DevOps Practices Implementation for Android App – Azure DevOps Pipelines 4. DevOps Practices Implementation for iOS App – Azure DevOps Pipelines 5. DevOps Practices Implementation for Native Apps using App Center 6. DevOps Practices Implementation for Java App – Azure DevOps Pipelines 7. DevOps Practices Implementation for Node.js Apps – Azure DevOps Pipelines 8. DevOps Practices Implementation for Angular App – Azure DevOps Pipelines 9. DevOps Practices Implementation for Python and, PHP – Azure DevOps Pipelines 10. DevOps Practices Implementation for Hybrid Mobile App (Ionic and Xamarin) – Azure DevOps Pipeline 11. Azure DevOps Best Practices 12. Measure Benefits of DevOps Practices Implementations

Explore the high-in demand core DevOps strategies with powerful DevOps tools such as Ansible, Jenkins, and Chef Key Features ?Get acquainted with methodologies and tools of the DevOps framework ?Perform continuous integration, delivery, deployment, and monitoring using DevOps tools ?Explore popular tools such as Git, Jenkins, Maven, Gerrit, Nexus, Selenium, and so on ?Embedded with assessments that will help you revise the concepts you have learned in this book Book Description DevOps is the most widely used software engineering culture and practice that aim sat software development and operation. Continuous integration is a cornerstone technique of DevOps that merges software code updates from developers into a shared central mainline. This book takes a practical approach and covers the tools and strategies of DevOps. It starts with familiarizing you with DevOps framework and then shows how toper form continuous delivery, integration, and deployment with DevOps. You will explore DevOps process maturity frameworks and progression models with checklist templates for each phase of DevOps. You will also be familiar with agile terminology, methodology, and the benefits accrued by an organization by adopting it. You will also get acquainted with popular tools such as Git, Jenkins ,Maven, Gerrit, Nexus, Selenium, and so on.You will learn configuration, automation, and the implementation of infrastructure automation (Infrastructure as Code) with tools such as Chef and Ansible. This book is ideal for engineers, architects, and developers, who wish to learn the core strategies of DevOps. What you will learn ?Get familiar with life cycle models, maturity states, progression and best practices of DevOps frameworks ?Learn to set up Jenkins and integrate it with Git ?Know how to build jobs and perform testing with Jenkins ?Implement infrastructure automation (Infrastructure as Code) with tools such as Chef and Ansible ?Understand continuous monitoring process with tools such as Splunk and Nagios ?Learn how Splunk improves the code quality Who this book is for This book is for engineers, architects, and developers, who wish to learn the core strategies of DevOps. Enhance DevOps workflows by integrating the functionalities of Docker, Kubernetes, Spinnaker, Ansible, Terraform, Flux CD, CaaS, and more with the help of practical examples and expert tips Key Features Get up and running with containerization-as-a-service and infrastructure automation in the public cloud Learn container security techniques and secret management with Cloud KMS, Anchore Grype, and Grafeas Kritis Leverage the combination of DevOps, GitOps, and automation to continuously ship a package of software Book

Description Containers have entirely changed how developers and end-users see applications as a whole. With this book, you'll learn all about containers, their architecture and benefits, and how to implement them within your development lifecycle. You'll discover how you can transition from the traditional world of virtual machines and adopt modern ways of using DevOps to ship a package of software continuously. Starting with a quick refresher on the core concepts of containers, you'll move on to study the architectural concepts to implement modern ways of application development. You'll cover topics around Docker, Kubernetes, Ansible, Terraform, Packer, and other similar tools that will help you to build a base. As you advance, the book covers the core elements of cloud integration (AWS ECS, GKE, and other CaaS services), continuous integration, and continuous delivery (GitHub actions, Jenkins, and Spinnaker) to help you understand the essence of container management and delivery. The later sections of the book will take you through container pipeline security and GitOps (Flux CD and Terraform). By the end of this DevOps book, you'll have learned best practices for automating your development lifecycle and making the most of containers, infrastructure automation, and CaaS, and be ready to develop applications using modern tools and techniques. What you will learn Become well-versed with AWS ECS, Google Cloud Run, and Knative Discover how to build and manage secure Docker images efficiently Understand continuous integration with Jenkins on Kubernetes and GitHub actions Get to grips with using Spinnaker for continuous deployment/delivery Manage immutable infrastructure on the cloud with Packer, Terraform, and Ansible Explore the world of GitOps with GitHub actions, Terraform, and Flux CD Who this book is for If you are a software engineer, system administrator, or operations engineer looking to step into the world of DevOps within public cloud platforms, this book is for you. Existing DevOps engineers will also find this book useful as it covers best practices, tips, and tricks to implement DevOps with a cloud-native mindset. Although no containerization experience is necessary, a basic understanding of the software development life cycle and delivery will help you get the most out of the book.

Much has changed in technology over the past decade. Data is hot, the cloud is ubiquitous, and many organizations need some form of automation. Throughout these transformations, Python has become one of the most popular languages in the world. This practical resource shows you how to use Python for everyday Linux systems administration tasks with today's most useful DevOps tools, including Docker, Kubernetes, and Terraform. Learning how to interact and automate with Linux is essential for millions of professionals. Python makes it much easier. With this book, you'll learn how to develop software and solve problems using containers, as well as how to monitor, instrument, load-test, and operationalize your software. Looking for effective ways to "get stuff done" in Python? This is your guide. Python foundations, including a brief introduction to the language How to automate text, write command-line tools, and automate the filesystem Linux utilities, package management, build systems, monitoring and instrumentation, and automated testing Cloud computing, infrastructure as code, Kubernetes, and serverless Machine learning operations and data engineering from a DevOps perspective Building, deploying, and operationalizing a machine learning project

This book constitutes the refereed proceedings of the 20th International Conference on Product-Focused Software Process Improvement, PROFES 2019, held in Barcelona, Spain, in November 2019. The 24 revised full papers 4 industry papers, and 11 short papers presented were carefully reviewed and selected from 104 submissions. The papers cover a broad range of topics related to professional software development and process improvement driven by product and service quality needs. They are organized in topical sections on testing, software development, technical debt, estimations, continuous delivery, agile, project management, microservices, and continuous experimentation. This book also includes papers from the co-located events: 10 project papers, 8 workshop papers, and 4 tutorial summaries. Simplify your DevOps roles with DevOps tools and techniques Key Features Learn to utilize business resources effectively to increase

productivity and collaboration Leverage the ultimate open source DevOps tools to achieve continuous integration and continuous delivery (CI/CD) Ensure faster time-to-market by reducing overall lead time and deployment downtime Book Description The implementation of DevOps processes requires the efficient use of various tools, and the choice of these tools is crucial for the sustainability of projects and collaboration between development (Dev) and operations (Ops). This book presents the different patterns and tools that you can use to provision and configure an infrastructure in the cloud. You'll begin by understanding DevOps culture, the application of DevOps in cloud infrastructure, provisioning with Terraform, configuration with Ansible, and image building with Packer. You'll then be taken through source code versioning with Git and the construction of a DevOps CI/CD pipeline using Jenkins, GitLab CI, and Azure Pipelines. This DevOps handbook will also guide you in containerizing and deploying your applications with Docker and Kubernetes. You'll learn how to reduce deployment downtime with blue-green deployment and the feature flags technique, and study DevOps practices for open source projects. Finally, you'll grasp some best practices for reducing the overall application lead time to ensure faster time to market. By the end of this book, you'll have built a solid foundation in DevOps, and developed the skills necessary to enhance a traditional software delivery process using modern software delivery tools and techniques What you will learn Become well versed with DevOps culture and its practices Use Terraform and Packer for cloud infrastructure provisioning Implement Ansible for infrastructure configuration Use basic Git commands and understand the Git flow process Build a DevOps pipeline with Jenkins, Azure Pipelines, and GitLab CI Containerize your applications with Docker and Kubernetes Check application quality with SonarQube and Postman Protect DevOps processes and applications using DevSecOps tools Who this book is for If you are a developer or a system administrator interested in understanding continuous integration, continuous delivery, and containerization with DevOps tools and techniques, this book is for you.

Many organizations are facing the uphill battle of modernizing their legacy IT infrastructure. Most have evolved over the years by taking lessons from traditional or legacy manufacturing: creating a production process that puts the emphasis on the process instead of the people performing the tasks, allowing the organization to treat people like resources to try to achieve high-quality outcomes. But those practices and ideas are failing modern IT, where collaboration and creativeness are required to achieve high-performing, high-quality success. Mirco Hering, a thought leader in managing IT within legacy organizations, lays out a roadmap to success for IT managers, showing them how to create the right ecosystem, how to empower people to bring their best to work every day, and how to put the right technology in the driver's seat to propel their organization to success. But just having the right methods and tools will not magically transform an organization; the cultural change that is the hardest is also the most impactful. Using principles from Agile, Lean, and DevOps as well as first-hand examples from the enterprise world, Hering addresses the different challenges that legacy organizations face as they transform into modern IT departments.

The Practice of Cloud System Administration, Volume 2, focuses on 'distributed' or 'cloud' computing and brings a DevOps/SRE sensibility to the practice of system administration. Unsatisfied with books that cover either design or operations in isolation, the authors created this authoritative reference centered on a comprehensive approach. Case studies and examples from Google, Etsy, Twitter, Facebook, Netflix, Amazon, and other industry giants are explained in practical ways that are useful to all enterprises. The new companion to the best-selling first volume, The Practice of System and Network Administration, Second Edition, this guide offers expert coverage of the following and many other crucial topics: Designing and building modern web and distributed systems: Fundamentals of large system design; Understand the new software engineering implications of cloud administration; Make systems that are resilient to failure and grow and scale dynamically;

Implement DevOps principles and cultural changes; IaaS/PaaS/SaaS and virtual platform selection; Operating and running systems using the latest DevOps/SRE strategies: Upgrade production systems with zero down-time; What and how to automate, how to decide what not to automate; On-call best practices that improve uptime; Why distributed systems require fundamentally different system administration techniques; Identify and resolve resiliency problems before they surprise you; Assessing and evaluating your team's operational effectiveness; Manage the scientific process of continuous improvement; A forty-page, pain-free assessment system you can start using today"--Publisher's description.

Bring the best out of DevOps and build, deploy, and maintain applications on AWS About This Book Work through practical examples and gain DevOps best practices to successfully deploy applications on AWS Successfully provision and operate distributed application systems and your AWS infrastructure using DevOps Perform Continuous Integration and deployment and fine-tune the way you deliver on AWS Who This Book Is For This book is for system administrators and developers who manage AWS infrastructure and environments and are planning to implement DevOps in their organizations. Those aiming for the AWS Certified DevOps Engineer certification will also find this book useful. Prior experience of operating and managing AWS environments is expected. What You Will Learn Design and deploy infrastructure as code within your AWS Virtual Private Cloud Implement Continuous Integration using AWS Services Configure EC2 instances using SaltStack Implement Continuous Deployment using Jenkins and the AWS CLI Collect important metrics and log data to gain more insight into infrastructure and applications Troubleshooting popular issues with some less known techniques using the AWS platform In Detail Knowing how to adopt DevOps in your organization is becoming an increasingly important skill for developers, whether you work for a start-up, an SMB, or an enterprise. This book will help you to drastically reduce the amount of time spent on development and increase the reliability of your software deployments on AWS using popular DevOps methods of automation. To start, you will get familiar with the concept of IaC and will learn to design, deploy, and maintain AWS infrastructure. Further on, you'll see how to design and deploy a Continuous Integration platform on AWS using either open source or AWS provided tools/services. Following on from the delivery part of the process, you will learn how to deploy a newly created, tested, and verified artefact to the AWS infrastructure without manual intervention. You will then find out what to consider in order to make the implementation of Configuration Management easier and more effective. Toward the end of the book, you will learn some tricks and tips to optimize and secure your AWS environment. By the end of the book, you will have mastered the art of implementing DevOps practices onto AWS. Style and approach This book is packed full of real-world examples demonstrating use cases that help you deploy DevOps best practices on AWS.

In 2016, Google's Site Reliability Engineering book ignited an industry discussion on what it means to run production services today—and why reliability considerations are fundamental to service design. Now, Google engineers who worked on that bestseller introduce The Site Reliability Workbook, a hands-on companion that uses concrete examples to show you how to put SRE principles and practices to work in your environment. This new workbook not only combines practical examples from Google's experiences, but also provides case studies from Google's Cloud Platform customers who underwent this journey. Evernote, The Home Depot, The New York Times, and other companies outline hard-won experiences of what worked for them and what didn't. Dive into this workbook and learn how to flesh out your own SRE practice, no matter what size your company is. You'll learn: How to run reliable services in environments you don't completely control—like cloud Practical applications of how to create, monitor, and run your services via Service Level Objectives How to convert existing ops teams to SRE—including how to dig out of operational overload Methods for starting SRE from either greenfield or brownfield

Scale gracefully and maintain outstanding performance with your AWS-based infrastructure using DevOps principles About This Book Implement DevOps principles to take full advantage of the AWS stack and services Take expert look at solving problems faced by real developers and operation teams and learn to overcome them Learn from expert insights of the author who has worked with Silicon Valley's most high-profile companies Who This Book Is For This book is for developers, DevOps engineers and teams who want to build and use AWS for their software infrastructure. Basic computer science knowledge is required for this book. What You Will Learn Find out what it means to practice DevOps and what its principles are Build repeatable infrastructures using templates and configuration management Deploy multiple times a day by implementing continuous integration and continuous deployment pipelines Use the latest technologies, including containers and serverless computing, to scale your infrastructure Collect metrics and logs and implement an alerting strategy Make your system robust and secure In Detail The DevOps movement has transformed the way modern tech companies work. AWS which has been on the forefront of the Cloud computing revolution has also been a key contributor of this DevOps movement creating a huge range of managed services that help you implement the DevOps principles. In this book, you'll see how the most successful tech start-ups launch and scale their services on AWS and how you can too. Written by a lead member of Mediums DevOps team, this book explains how to treat infrastructure as code, meaning you can bring resources online and offline as necessary with the code as easily as you control your software. You will also build a continuous integration and continuous deployment pipeline to keep your app up to date. You'll find out how to scale your applications to offer maximum performance to users anywhere in the world, even when traffic spikes with the latest technologies, such as containers and serverless computing. You will also take a deep dive into monitoring and alerting to make sure your users have the best experience when using your service. Finally, you'll get to grips with ensuring the security of your platform and data. Style and approach This is a practical, hands-on, comprehensive guide to AWS, helping readers understand AWS in a step by step manner.

A step-by-step guide to implementing Continuous Integration and Continuous Delivery for Mobile, Hybrid, and Web applications KEY FEATURES a- This book covers all these practices that can be utilized in real-life scenarios with sample applications written in Java, Android, iOS, Node.js, Angular, Ionic Cordova, Xamarin, Python, and PHP. a- This book provides detailed insight into Microsoft Azure Cloud, especially Platform as a Service Model - Azure App Services. a- This book utilizes the Multi-Stage Pipeline Feature of Azure DevOps. Step by Step implementation of Continuous Practices of DevOps makes it easy to understand even for beginners of DevOps practices. DESCRIPTION This book will cover an approach that includes the understanding of DevOps, Assessment of AS-IS state, DevOps Practices Implementation and measurement of success. The main objective is to demonstrate Continuous Practices of DevOps Culture using Microsoft Azure DevOps and Microsoft Azure Cloud across different types of applications such as Mobile apps, Hybrid Mobile App, and Web applications. The main idea is to have a uniform approach across different types of applications such as Mobile apps, Hybrid Mobile App, and Web applications. It is important to have a uniform approach of DevOps Practices implementation in an application written in different programming languages such as Java, Android, iOS, Node.js, Angular, Ionic Cordova, Xamarin, Python, and PHP. WHAT WILL YOU LEARN a- Learn to create a Multi-Stage (CICD) Pipeline for sample applications a- Configure Unit Test Execution and Code Coverage Reports in Azure DevOps for sample applications a- Create and configure Cloud resources using Platform as a Service Model - Azure App Services for Web Applications and deploy Web Applications to Azure App Services using Pipeline a- Understand how to distribute Mobile App Packages (APK and IPA) to App Center WHO THIS BOOK IS FOR This book is suitable for DevOps Consultants, DevOps Evangelists, DevOps Engineers, Technical Specialists, Technical Architects, Cloud Experts, and Beginners. TABLE OF CONTENTS 1. Overview of DevOps

Practices 2. DevOps Assessment - Measure the "e;AS-IS"e; Maturity 3. DevOps Practices Implementation for Android App - Azure DevOps Pipelines 4. DevOps Practices Implementation for iOS App - Azure DevOps Pipelines 5. DevOps Practices Implementation for Native Apps using App Center 6. DevOps Practices Implementation for Java App - Azure DevOps Pipelines 7. DevOps Practices Implementation for Node.js Apps - Azure DevOps Pipelines 8. DevOps Practices Implementation for Angular App - Azure DevOps Pipelines 9. DevOps Practices Implementation for Python and, PHP - Azure DevOps Pipelines 10. DevOps Practices Implementation for Hybrid Mobile App (Ionic and Xamarin) - Azure DevOps Pipeline 11. Azure DevOps Best Practices 12. Measure Benefits of DevOps Practices Implementations AUTHOR BIO Mitesh is a DevOps engineer. He is in love with the DevOps culture and concept. Continuous improvement is his motto in life with existing imperfection. Mitesh has worked on multiple DevOps practices implementation initiatives. His primary focus is on the improvement of the existing culture of an organization or a project using Continuous Integration and Continuous Delivery. He believes that attitude and dedication are some of the biggest virtues that can improve professional as well as personal life! He has good experience in DevOps consulting, and he enjoys talking about DevOps and CULTURE transformation using existing practices and improving them with open source or commercial tools. Mitesh always believes that DevOps is a cultural transformation, and it is facilitated by People, Processes, and Tools. DevOps transformation is a tools agnostic approach. He loves to give training and share knowledge with the community. He has a keen knowledge of programming, and he is aware of different languages/frameworks/platforms such as Java, Android, iOS, NodeJS, Angular. His main objective is to get enough information related to the project in a way that it is helpful in creating an end to end automation pipeline. In his leisure time, he likes to walk in Garden, to click photographs, and to do cycling. He prefers to spend time in peaceful places. His favorite tool / services for DevOps Practices implementation is Azure DevOps and Jenkins in commercial and open sources categories respectively. Make code deployments completely safe and change your application in production in real time with LaunchDarkly using percentage-based rollouts, kill switches, and A/B and multi-variant testing Key Features Learn how to work with LaunchDarkly to turn features on and off within your production applications Explore the ways in which feature management can change how software is built and how teams work Master every aspect of LaunchDarkly's functionality to test in production and learn from your users Book Description Over the past few years, DevOps has become the de facto approach for designing, building, and delivering software. Feature management is now extending the DevOps methodology to allow applications to change on demand and run experiments to validate the success of new features. If you want to make feature management happen, LaunchDarkly is the tool for you. This book explains how feature management is key to building modern software systems. Starting with the basics of LaunchDarkly and configuring simple feature flags to turn features on and off, you'll learn how simple functionality can be applied in more powerful ways with percentage-based rollouts, experimentation, and switches. You'll see how feature management can change the way teams work and how large projects, including migrations, are planned. Finally, you'll discover various uses of every part of the tool to gain mastery of LaunchDarkly. This includes tips and tricks for experimentation, identifying groups and segments of users, and investigating and debugging issues with specific users and feature flag evaluations. By the end of the book, you'll have gained a comprehensive understanding of LaunchDarkly, along with knowledge of the adoption of trunk-based development workflows and methods, multi-variant testing, and managing infrastructure changes and migrations. What you will learn Get to grips with the basics of LaunchDarkly and feature flags Roll out a feature to a percentage or group of users Find out how to experiment with multi-variant and A/B testing Discover how to adopt a trunk-based development workflow Explore methods to manage infrastructure changes and migrations Gain an in-depth understanding of all aspects of the LaunchDarkly tool Who this book is for This book is for developers, quality assurance

engineers and DevOps engineers. This includes individuals who want to decouple the deployment of code from the release of a feature, run experiments in production, or understand how to change processes to build and deploy software. Software engineers will also benefit from learning how feature management can be used to improve products and processes. A basic understanding of software is all that you need to get started with this book as it covers the basics before moving on to more advanced topics.

Increase profitability, elevate work culture, and exceed productivity goals through DevOps practices. More than ever, the effective management of technology is critical for business competitiveness. For decades, technology leaders have struggled to balance agility, reliability, and security. The consequences of failure have never been greater?whether it's the healthcare.gov debacle, cardholder data breaches, or missing the boat with Big Data in the cloud. And yet, high performers using DevOps principles, such as Google, Amazon, Facebook, Etsy, and Netflix, are routinely and reliably deploying code into production hundreds, or even thousands, of times per day. Following in the footsteps of The Phoenix Project, The DevOps Handbook shows leaders how to replicate these incredible outcomes, by showing how to integrate Product Management, Development, QA, IT Operations, and Information Security to elevate your company and win in the marketplace.

"If you're a developer trying to figure out why your application is not responding at 3 am, you need this book! This is now my go-to book when diagnosing production issues. It has saved me hours in troubleshooting complicated operations problems." –Trotter Cashion, cofounder, Mashion DevOps can help developers, QAs, and admins work together to solve Linux server problems far more rapidly, significantly improving IT performance, availability, and efficiency. To gain these benefits, however, team members need common troubleshooting skills and practices. In DevOps Troubleshooting: Linux Server Best Practices , award-winning Linux expert Kyle Rankin brings together all the standardized, repeatable techniques your team needs to stop finger-pointing, collaborate effectively, and quickly solve virtually any Linux server problem. Rankin walks you through using DevOps techniques to troubleshoot everything from boot failures and corrupt disks to lost email and downed websites. You'll master indispensable skills for diagnosing high-load systems and network problems in production environments. Rankin shows how to Master DevOps' approach to troubleshooting and proven Linux server problem-solving principles Diagnose slow servers and applications by identifying CPU, RAM, and Disk I/O bottlenecks Understand healthy boots, so you can identify failure points and fix them Solve full or corrupt disk issues that prevent disk writes Track down the sources of network problems Troubleshoot DNS, email, and other network services Isolate and diagnose Apache and Nginx Web server failures and slowdowns Solve problems with MySQL and Postgres database servers and queries Identify hardware failures–even notoriously elusive intermittent failures Learn, understand, and apply people-, process-, and technology-related practices to make OpenShift and DevOps adoption a success within your organization.

Automate core security tasks by embedding security controls and processes early in the DevOps workflow through DevSecOps. You will not only learn the various stages in the DevOps pipeline through examples of solutions developed and deployed using .NET Core, but also go through open source SDKs and toolkits that will help you to incorporate automation, security, and compliance. The book starts with an outline of modern software engineering principles and gives you an overview of DevOps in .NET Core. It further explains automation in DevOps for product development along with security principles to improve product quality. Next, you will learn how to improve your product quality and avoid

code issues such as SQL injection prevention, cross-site scripting, and many more. Moving forward, you will go through the steps necessary to make security, compliance, audit, and UX automated to increase the efficiency of your organization. You'll see demonstrations of the CI phase of DevOps, on-premise and hosted, along with code analysis methods to verify product quality. Finally, you will learn network security in Docker and containers followed by compliance and security standards. After reading DevSecOps for .NET Core, you will be able to understand how automation, security, and compliance works in all the stages of the DevOps pipeline while showcasing real-world examples of solutions developed and deployed using .NET Core 3. What You Will Learn Implement security for the .NET Core runtime for cross-functional workloads Work with code style and review guidelines to improve the security, performance, and maintenance of components Add to DevOps pipelines to scan code for security vulnerabilities Deploy software on a secure infrastructure, on Docker, Kubernetes, and cloud environments Who This Book Is For Software engineers and developers who develop and maintain a secure code repository.

Winner of the Shingo Publication Award Accelerate your organization to win in the marketplace. How can we apply technology to drive business value? For years, we've been told that the performance of software delivery teams doesn't matter?that it can't provide a competitive advantage to our companies. Through four years of groundbreaking research to include data collected from the State of DevOps reports conducted with Puppet, Dr. Nicole Forsgren, Jez Humble, and Gene Kim set out to find a way to measure software delivery performance?and what drives it?using rigorous statistical methods. This book presents both the findings and the science behind that research, making the information accessible for readers to apply in their own organizations. Readers will discover how to measure the performance of their teams, and what capabilities they should invest in to drive higher performance. This book is ideal for management at every level.

Readers discover exciting opportunities and challenges in technology today with Schwalbe's INFORMATION TECHNOLOGY PROJECT MANAGEMENT, 8E. This unique book demonstrates principles distinctive to managing information technology (IT). No book offers more insights and tools for IT project management success, including updates that reflect the latest PMBOK Guide. This edition weaves theory with successful practices for an integrated focus on the concepts, tools, and techniques that are most effective today. This is the only text to apply all 10 project management knowledge areas to IT projects. Readers master skills in project integration, scope, time, cost, quality, human resource, communications, risk, procurement, and stakeholder management as well as all five process groups -- initiating, planning, executing, monitoring and controlling, and closing. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

This course teaches concepts by deep-dive on-hand exercises. Throughout the course, you will learn the required toolset

by using both on-premise, open-source, and hosted cloud solutions. You'll find checklists, best practices, and critical points mentioned throughout the lessons, making things more interesting. Key Features Explains in detail cloud-native continuous integration and delivery Demonstrates how to run a build in a CI/CD system Shows continuous delivery to Docker Registry and continuous deployment to Kubernetes Book Description Cloud-native software development is based on developing distributed applications focusing on speed, stability, and high availability. With this paradigm shift, software development has changed substantially and converted into a more agile environment where distributed teams develop distributed applications. In addition, the environment where the software is built, tested and deployed has changed from bare-metal servers to cloud systems. In this course, the new concepts of cloud-native Continuous Integration and Delivery are discussed in depth. Cloud-native tooling and services such as cloud providers (AWS, Google Cloud) containerization with Docker, container-orchestrators such as Kubernetes will be a part of this course to teach how to analyze and design modern software delivery pipelines. What you will learn Learn the basics of DevOps patterns for cloud-native architecture Learn the cloud-native way of designing CI/CD systems Create multi-stage builds and tests for Docker. Apply the best practices for Docker container images Experiment using GitLab CI/CD pipelines for continuous integration Build and test their applications on cloud Learn how to continuously deliver to Docker registry Learn how to continuously deploy to Kubernetes Experiment using GitLab CI/CD pipelines for Continuous Delivery Configure and deploy software to Kubernetes using Helm Who this book is for This book is ideal for professionals interested in cloud-native software development. To benefit the most from this book, you must be familiar with developing, building, testing, integrating, and deploying containerized microservices into cloud systems.

Many companies move workloads to the cloud only to encounter issues with legacy processes and organizational structures. How do you design new operating models for this environment? This practical book shows IT managers, CIOs, and CTOs how to address the hardest part of any cloud transformation: the people and the processes. Author Mike Kavis (Architecting the Cloud) explores lessons learned from enterprises in the midst of cloud transformations. Youâ??ll learn how to rethink your approach from a technology, process, and organizational standpoint to realize the promise of cost optimization, agility, and innovation that public cloud platforms provide. Learn the difference between working in a data center and operating in the cloud Explore patterns and anti-patterns for organizing cloud operating models Get best practices for making the organizational change required for a move to the cloud Understand why site reliability engineering is essential for cloud operations Improve organizational performance through value stream mapping Certified Agile Practitioners or Certified Testing Practitioners or Certified S/4HANA SAP Practitioners or Certified DevOps professionals are on high demand. Organizations seeking to adopt a more agile method or SAP S/4 HANA now always

choose Scrum or KANBAN as their framework. Thus, a large part of the team's success depends on a skilled Professionals. It is on their hands to make a difference in the dynamics and performance of an agile team. Whether you are new to Scrum / KANBAN / DevOps or already an expert, it is always beneficial to know how to prepare for a job interview in this field.Nervous about your interview? You are studying day and night. But still you are very nervous. How to crack the JOB interviews?This book uncovers the different areas under which questions are asked and what are the most commonly asked ones. We hope that these will help you while preparing for your Job interview. This book promises to be a very good starting point for beginners and an asset for those having insight towards Agile, DevOps, Testing Automation, SAP S/4 HANA and Technical best practices.To make clarity of the programming examples, logic is explained properly as well discussed using comments in program itself. The real-time examples are discussed in detail from simple to complex taking into consideration the requirement of IT consultants. Various sample projects are included in the book and are written in simple language so as to give IT consultants the basic idea of developing projects in Agile & DevOps. The examples given in book are user-focused and have been highly updated including topics, figures, strategies, best practices and real-life examples, demos and case studies.The book features more on practical approach with more examples covering topics from simple to complex one, addressing many of the core concepts and advance topics also.The book is divided into the following sections: -500 PLUS Real-time GIT, Testing, SAP S/4HANA, Agile & DevOps interview questions and answers-Numerous Tricky Real-time SAP S/4HANA, Agile & DevOps Case Studies and Demos-Stakeholders Agile Survey questions-Common Agile Product Development & Test Automation Myths-Service Oriented Architecture, Client Server Architecture, 4+1 Architecture View Model-Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS)-DevOps Implementation - Approach & Guidelines-Agile Budget Management-Agile Contract Management-Technical best practices-Change Management Process - DevOps-Quality Management Process - DevOps-Get to know what are continuous integration, continuous delivery, and continuous deployment-Agile & DevOps main goal and challenges-Integrate recent advances in DevOps and process design strategies into practice according to best practice guidelines-Software development and Agile This volume constitutes the refereed proceedings of the 26th European Conference on Systems, Software and Services Process Improvement, EuroSPI conference, held in Edinburgh, Scotland, in September 2019. The 18 revised full papers presented were carefully reviewed and selected from 28 submissions. They are organized in topical sections: Visionary Papers, SPI and Safety and Security, SPI and Assessments, SPI and Future Qualification & Team Performance, and SPI Manifesto and Culture. The selected workshop papers are also presented and organized in following topical sections: GamifySPI, Digitalisation of Industry, Infrastructure and E-Mobility. -Best Practices in Implementing Traceability. -Good

and Bad Practices in Improvement. -Functional Safety and Cybersecurity. -Experiences with Agile and Lean. -Standards and Assessment Models. -Team Skills and Diversity Strategies. -Recent Innovations.

The Secret Source book covers the culture, tools, and process we use to deliver digital products and transformations. A product-centric organization is nimble with its response to customer needs, market opportunities, or competitor advancements. The process and strategy discussed in this book enable cross-functional Agile teams to not only build great software at record speeds but also figure out what should be built. The book covers the full lifecycle of a product at Devbridge - from sales, capabilities, requirements workshop, discovery, kicking off a project, to managing a relationship with a client. Acquire a holistic understanding of what enables Devbridge teams to ship product up to four times faster than industry average. About the author: Aurimas Adomavicius is the President and co-founder of Devbridge. Founded in 2008, Devbridge revitalizes the largest of enterprises with custom software. When not in the trenches working with clients, Aurimas is an active speaker and writer on product design and engineering best practices. Devbridge is a technology partner for a select number of forward-thinking Global 2000 companies. We are evangelists for extraordinary custom software that delivers measurable results for our clients and their customers. We're large enough to handle digital transformations, small enough to provide exceptional service. Our cross-functional teams can ramp-up with two-weeks notice. We ship working software to market in three to six months.

Some companies think that adopting devops means bringing in specialists or a host of new tools. With this practical guide, you'll learn why devops is a professional and cultural movement that calls for change from inside your organization. Authors Ryn Daniels and Jennifer Davis provide several approaches for improving collaboration within teams, creating affinity among teams, promoting efficient tool usage in your company, and scaling up what works throughout your organization's inflection points. Devops stresses iterative efforts to break down information silos, monitor relationships, and repair misunderstandings that arise between and within teams in your organization. By applying the actionable strategies in this book, you can make sustainable changes in your environment regardless of your level within your organization. Explore the foundations of devops and learn the four pillars of effective devops Encourage collaboration to help individuals work together and build durable and long-lasting relationships Create affinity among teams while balancing differing goals or metrics Accelerate cultural direction by selecting tools and workflows that complement your organization Troubleshoot common problems and misunderstandings that can arise throughout the organizational lifecycle Learn from case studies from organizations and individuals to help inform your own devops journey

Over a half-million sold! The sequel, The Unicorn Project, is coming Nov 26 "Every person involved in a failed IT project should be

forced to read this book."—TIM O'REILLY, Founder & CEO of O'Reilly Media "The Phoenix Project is a must read for business and IT executives who are struggling with the growing complexity of IT."—JIM WHITEHURST, President and CEO, Red Hat, Inc. Five years after this sleeper hit took on the world of IT and flipped it on it's head, the 5th Anniversary Edition of The Phoenix Project continues to guide IT in the DevOps revolution. In this newly updated and expanded edition of the bestselling The Phoenix Project, co-author Gene Kim includes a new afterword and a deeper delve into the Three Ways as described in The DevOps Handbook. Bill, an IT manager at Parts Unlimited, has been tasked with taking on a project critical to the future of the business, code named Phoenix Project. But the project is massively over budget and behind schedule. The CEO demands Bill must fix the mess in ninety days or else Bill's entire department will be outsourced. With the help of a prospective board member and his mysterious philosophy of The Three Ways, Bill starts to see that IT work has more in common with a manufacturing plant work than he ever imagined. With the clock ticking, Bill must organize work flow streamline interdepartmental communications, and effectively serve the other business functions at Parts Unlimited. In a fast-paced and entertaining style, three luminaries of the DevOps movement deliver a story that anyone who works in IT will recognize. Readers will not only learn how to improve their own IT organizations, they'll never view IT the same way again. "This book is a gripping read that captures brilliantly the dilemmas that face companies which depend on IT, and offers real-world solutions."—JEZ HUMBLE, Co-author of Continuous Delivery, Lean Enterprise, Accelerate, and The DevOps Handbook ———— "I'm delighted at how The Phoenix Project has reshaped so many conversations in technology. My goal in writing The Unicorn Project was to explore and reveal the necessary but invisible structures required to make developers (and all engineers) productive, and reveal the devastating effects of technical debt and complexity. I hope this book can create common ground for technology and business leaders to leave the past behind, and co-create a better future together."—Gene Kim, November 2019 Have you been looking for a way to boost your skills and become a master in DevOps for your business or career in software development but lack an excellent, high-quality guide to assist you get there? And are you looking for a guide that is simple, assuring and easy to follow? If you've answered YES, keep reading... You Are About To Discover The Ins And Outs Of Dev-Ops, Including How To Leverage Its Power To Your Advantage In Your Business Or Career! It goes without saying that DevOps is one of the greatest inventions in software development. It came to satisfy a need to get away from the traditional software design for efficiency, collaboration and productivity in development processes, and by extension to boost business growth. Did you know that businesses that adopt DevOps enjoy up to 60% more revenue rates and profit than their reticent counterparts? Unfortunately, great as it is, DevOps remains one of the most misunderstood concepts- even by tutors across the world! Similarly, for someone who's just getting into the software development scene or someone wh0 has drowned in the "Waterfall" methodology a couple of times before, it may seem like something a little complex or one that requires some skill, or lots of effort and time to master. If you can relate, you must have wondered: What's DevOps all about, and is there a way to learn it quickly? What does DevOps entail? How exactly would I benefit from learning DevOps? How and where do I get started? Is DevOps agile? How does it work? So if such questions have been keeping you from making the next important step in your career or business with DevOps, then this simple, clear and straightforward guide is here for you. With it, you'll learn: What DevOps is and why you need it The features of DevOps architecture The potential benefits and risks of using DevOps What you need to know about the DevOps lifecycle The ins and outs of the DevOps architecture The workflow and principles of DevOps The DevOps tools you need to know and use How DevOps automation works Who DevOps engineers are, and the roles they play The methodologies and pipelines of DevOps you need to familiarize yourself with The DevOps Amazon Web Services The tools and tutorials for DevOps, including their features and benefits How to install GIT on Mac, Linux and

Windows ...And much more! Do you prefer practical guides that you can implement as you go (not ones that are heavy on theory- that require taking loads of caffeine to complete)? Do you want a beginners' book that is exciting to follow and well-structured for quick comprehension? Then don't let this one slip away. Even if this is your first time actually wanting to learn DevOps, this book will hold you by the hand until you feel confident about it! Don't wait... Scroll up and click Buy Now With 1-Click or Buy Now to get started!

This book will show you how to create robust, scalable, highly available and fault-tolerant solutions by learning different aspects of Solution architecture and next-generation architecture design in the Cloud environment.

Implement a headless/decoupled Drupal design to build easily maintainable web applications. This book begins by showing you CMS workflows and best practices to give you the basics you need for working with decoupled Drupal. As part of this process, Decoupling Drupal reveals the advantages of using content management systems and explains that decoupled Drupal is the answer to various problems faced in creating and maintaining enterprise applications. Decoupling Drupal will show you how administering Drupal monolithically to design web applications can be a challenge. You'll see how the maintainability of your application reduces exponentially over the years. In contrast, a decoupled design enables an easy handshake between the front-end and back-end applications, meaning you can implement services in a short amount of time and scale them quickly. The final part of the book covers the impact of decoupling on functional and non-functional requirements and the use of Drupal 8 modules to address the requirements of decoupling. This involves solving the problems that occur at different stages of CMS evolution in an organization. What You Will Learn Discover the principles of headless/decoupled design Implement Drupal in a real-time environment Work with the Drupal modules normally used in a decoupled design Use Drupal to complete back-end tasks Integrate a Pantheon cloud-solution for headless Drupal Acknowledge the use of CMS in your day-to-day IT life Who This Book Is For Web application designers, developers, and Drupal enthusiasts.

Python for DevOpsLearn Ruthlessly Effective AutomationO'Reilly Media