

Second Edition of

Windows Forms Programming with C#

SAMPLE CHAPTER

WINDOWS FORMS IN ACTION



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Bootstrapping Microservices with Docker, Kubernetes, and Terraform Ashley Davis, 2021-03-09 Summary The best way to learn microservices development is to build something Bootstrapping Microservices with Docker Kubernetes and Terraform guides you from zero through to a complete microservices project including fast prototyping development and deployment You ll get your feet wet using industry standard tools as you learn and practice the practical skills you ll use for every microservices application Following a true bootstrapping approach you ll begin with a simple familiar application and build up your knowledge and skills as you create and deploy a real microservices project Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the technology Taking microservices from proof of concept to production is a complex multi step operation relying on tools like Docker Terraform and Kubernetes for packaging and deployment The best way to learn the process is to build a project from the ground up and that s exactly what you ll do with this book About the book In *Bootstrapping Microservices with Docker Kubernetes and Terraform* author Ashley Davis lays out a comprehensive approach to building microservices You ll start with a simple design and work layer by layer until you ve created your own video streaming application As you go you ll learn to configure cloud infrastructure with Terraform package microservices using Docker and deploy your finished project to a Kubernetes cluster What s inside Developing and testing microservices applications Working with cloud providers Applying automated testing Implementing infrastructure as code and setting up a continuous delivery pipeline Monitoring managing and troubleshooting About the reader Examples are in JavaScript No experience with microservices Kubernetes Terraform or Docker required About the author Ashley Davis is a software developer entrepreneur stock trader and the author of Manning s *Data Wrangling with JavaScript* Table of Contents 1 Why microservices 2 Creating your first microservice 3 Publishing your first microservice 4 Data management for microservices 5 Communication between microservices 6 Creating your production environment 7 Getting to continuous delivery 8 Automated testing for microservices 9 Exploring FlixTube 10 Healthy microservices 11 Pathways to scalability

Struts 2 in Action Andrew Psaltis, Chad Michael Davis, 2008-05-01 The original Struts project revolutionized Java web development and its rapid adoption resulted in the thousands of Struts based applications deployed worldwide Keeping pace with new ideas and trends Apache Struts 2 has emerged as the product of a merger between the Apache Struts and OpenSymphony WebWork projects united in their goal to develop an easy to use yet feature rich framework Struts 2 represents a revolution in design and ease of use when compared to classic Struts It adds exciting and powerful features such as a plugin framework JavaServer Faces integration and XML free configuration Struts 2 In Action introduces the Apache Struts 2 web application framework and shows you how to quickly develop professional

production ready modern web applications Written by Don Brown one of the leading developers of Struts 2 Chad Davis a passionate Struts 2 developer along with Scott Stanlick this book gently walks you through the key features of Struts 2 in example driven easy to digest sections Struts 2 in Action delivers accurate seasoned information that can immediately be put to work This book is designed for working Java web developers especially those with some background in Struts 1 or WebWork The core content covering key framework components such as Actions Results and Interceptors includes new features like the annotation based configuration options You ll find chapters on Struts 2 plugins FreeMarker and migration from Struts 1 and WebWork 2 Finally new topics such as the Ajax tags Spring Framework integration and configuration by convention give familiar subjects new depth Purchase of the print book comes with an offer of a free PDF ePub and Kindle eBook from Manning Also available is all code from the book **Design Charts for Open-channel Flow** United States.

Bureau of Public Roads,1961 *Hydraulic Design Series* United States. Bureau of Public Roads,1961 **Test-Driven Development** Thomas Hammell,David Gold,Tom Snyder,2007-03-01 This will be the first book to show how to implement a test driven development process in detail as it applies to real world J2EE applications Combines the tools and methodologies of test driven development with real world use cases unlikely most titles which cover one or the other Looks at the complete process including test coverage strategies test organization incorporating TDD into new and existing projects as well as how to automate it all This book is not version specific [Learn C++ by Example](#) Frances Buontempo,2024-04-02 Build your skills with essential modern C features hands on by completing eight interesting coding projects For readers who know the basics of C whether they re beginners or out of practice veterans *OpenShift in Action* John Osborne,Jamie Duncan,2018-05-04 Summary OpenShift in Action is a full reference to Red Hat OpenShift that breaks down this robust container platform so you can use it day to day Combining Docker and Kubernetes OpenShift is a powerful platform for cluster management scaling and upgrading your enterprise apps It doesn t matter why you use OpenShift by the end of this book you ll be able to handle every aspect of it inside and out Foreword by Jim Whitehurst Red Hat Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the Technology Containers let you package everything into one neat place and with Red Hat OpenShift you can build deploy and run those packages all in one place Combining Docker and Kubernetes OpenShift is a powerful platform for cluster management scaling and upgrading your enterprise apps About the Book OpenShift in Action is a full reference to Red Hat OpenShift that breaks down this robust container platform so you can use it day to day Starting with how to deploy and run your first application you ll go deep into OpenShift You ll discover crystal clear explanations of namespaces cgroups and SELinux learn to prepare a cluster and even tackle advanced details like software defined networks and security with real world examples you can take to your own work It doesn t matter why you use OpenShift by the end of this book you ll be able to handle every aspect of it inside and out What s Inside Written by lead OpenShift architects Rock solid fundamentals of Docker and Kubernetes Keep

mission critical applications up and running Manage persistent storage About the Reader For DevOps engineers and administrators working in a Linux based distributed environment About the Authors Jamie Duncan is a cloud solutions architect for Red Hat focusing on large scale OpenShift deployments John Osborne is a principal OpenShift architect for Red Hat Table of Contents PART 1 FUNDAMENTALS Getting to know OpenShift Getting started Containers are Linux PART 2 CLOUD NATIVE APPLICATIONS Working with services Autoscaling with metrics Continuous integration and continuous deployment PART 3 STATEFUL APPLICATIONS Creating and managing persistent storage Stateful applications PART 4 OPERATIONS AND SECURITY Authentication and resource access Networking Security **Rust in Action** Tim McNamara, 2021-09-07 This well written book will help you make the most of what Rust has to offer Ramnivas Laddad author of AspectJ in Action Rust in Action is a hands on guide to systems programming with Rust Written for inquisitive programmers it presents real world use cases that go far beyond syntax and structure Summary Rust in Action introduces the Rust programming language by exploring numerous systems programming concepts and techniques You ll be learning Rust by delving into how computers work under the hood You ll find yourself playing with persistent storage memory networking and even tinkering with CPU instructions The book takes you through using Rust to extend other applications and teaches you tricks to write blindingly fast code You ll also discover parallel and concurrent programming Filled to the brim with real life use cases and scenarios you ll go beyond the Rust syntax and see what Rust has to offer in real world use cases Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the technology Rust is the perfect language for systems programming It delivers the low level power of C along with rock solid safety features that let you code fearlessly Ideal for applications requiring concurrency Rust programs are compact readable and blazingly fast Best of all Rust s famously smart compiler helps you avoid even subtle coding errors About the book Rust in Action is a hands on guide to systems programming with Rust Written for inquisitive programmers it presents real world use cases that go far beyond syntax and structure You ll explore Rust implementations for file manipulation networking and kernel level programming and discover awesome techniques for parallelism and concurrency Along the way you ll master Rust s unique borrow checker model for memory management without a garbage collector What s inside Elementary to advanced Rust programming Practical examples from systems programming Command line graphical and networked applications About the reader For intermediate programmers No previous experience with Rust required About the author Tim McNamara uses Rust to build data processing pipelines and generative art He is an expert in natural language processing and data engineering Table of Contents 1 Introducing Rust PART 1 RUST LANGUAGE DISTINCTIVES 2 Language foundations 3 Compound data types 4 Lifetimes ownership and borrowing PART 2 DEMYSTIFYING SYSTEMS PROGRAMMING 5 Data in depth 6 Memory 7 Files and storage 8 Networking 9 Time and timekeeping 10 Processes threads and containers 11 Kernel 12 Signals interrupts and exceptions [Design Charts for Open-channel Flow](#) United States.

Federal Highway Administration,1979 The design of a highway drainage channel to carry a given discharge is accomplished in two parts The first part of the design involves the computation of a channel section which will carry the design discharge on the available slope This chapter briefly discusses the principles of flow in open channels and the use of the Manning equation for computing the channel capacity The second part of the design is the determination of the degree of protection required to prevent erosion in the drainage channel This can be done by computing the velocity in the channel at the design discharge using the Manning equation and comparing the calculated velocity with that permissible for the type of channel lining used A change in the type of channel lining will require a change in channel size unless both linings have the same roughness coefficient

Conversational AI Andrew Freed,2021-11-02 A thorough guide to the entire process of designing and implementing virtual assistants Goes way beyond the technicalities Maxim Volgin KLM Design develop and deploy human like AI solutions that chat with your customers solve their problems and streamline your support services In Conversational AI you will learn how to Pick the right AI assistant type and channel for your needs Write dialog with intentional tone and specificity Train your AI s classifier from the ground up Create question and direct response AI assistants Design and optimize a process flow for web and voice Test your assistant s accuracy and plan out improvements Conversational AI Chatbots that work teaches you to create the kind of AI enabled assistants that are revolutionizing the customer service industry You ll learn to build effective conversational AI that can automate common inquiries and easily address your customers most common problems This engaging and entertaining book delivers the essential technical and creative skills for designing successful AI solutions from coding process flows and training machine learning to improving your written dialog Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the technology Create AI driven chatbots and other intelligent agents that humans actually enjoy talking to Adding intelligence to automated response systems saves time and money for you and your customers Conversational AI systems excel at routine tasks such as answering common questions classifying issues and routing customers to the appropriate human staff This book will show you how to build effective production ready AI assistants About the book Conversational AI is a guide to creating AI driven voice and text agents for customer support and other conversational tasks This practical and entertaining book combines design theory with techniques for building and training AI systems In it you ll learn how to find training data assess performance and write dialog that sounds human You ll go from building simple chatbots to designing the voice assistant for a complete call center What s inside Pick the right AI for your needs Train your AI classifier Create question and direct response assistants Design and optimize a process flow About the reader For software developers Examples use Watson Assistant and Python About the author Andrew R Freed is a Master Inventor and Senior Technical Staff Member at IBM He has worked in AI solutions since 2012 Table of Contents PART 1 FOUNDATIONS 1 Introduction to conversational AI 2 Building your first conversational AI PART 2 DESIGNING FOR SUCCESS 3 Designing

effective processes 4 Designing effective dialogue 5 Building a successful AI assistant PART 3 TRAINING AND TESTING 6 Training your assistant 7 How accurate is your assistant 8 Testing your dialogue flows PART 4 MAINTENANCE 9 Deployment and management 10 Improving your assistant PART 5 ADVANCED OPTIONAL TOPICS 11 Building your own classifier 12 Additional training for voice assistants

Python Concurrency with asyncio Matthew Fowler, 2022-03-15 Learn how to speed up slow Python code with concurrent programming and the cutting edge asyncio library Use coroutines and tasks alongside async await syntax to run code concurrently Build web APIs and make concurrency web requests with aiohttp Run thousands of SQL queries concurrently Create a map reduce job that can process gigabytes of data concurrently Use threading with asyncio to mix blocking code with asyncio code Python is flexible versatile and easy to learn It can also be very slow compared to lower level languages Python Concurrency with asyncio teaches you how to boost Python's performance by applying a variety of concurrency techniques You'll learn how the complex but powerful asyncio library can achieve concurrency with just a single thread and use asyncio's APIs to run multiple web requests and database queries simultaneously The book covers using asyncio with the entire Python concurrency landscape including multiprocessing and multithreading About the technology It's easy to overload standard Python and watch your programs slow to a crawl The asyncio library was built to solve these problems by making it easy to divide and schedule tasks It seamlessly handles multiple operations concurrently leading to apps that are lightning fast and scalable About the book Python Concurrency with asyncio introduces asynchronous parallel and concurrent programming through hands on Python examples Hard to grok concurrency topics are broken down into simple flowcharts that make it easy to see how your tasks are running You'll learn how to overcome the limitations of Python using asyncio to speed up slow web servers and microservices You'll even combine asyncio with traditional multiprocessing techniques for huge improvements to performance What's inside Build web APIs and make concurrency web requests with aiohttp Run thousands of SQL queries concurrently Create a map reduce job that can process gigabytes of data concurrently Use threading with asyncio to mix blocking code with asyncio code About the reader For intermediate Python programmers No previous experience of concurrency required About the author Matthew Fowler has over 15 years of software engineering experience in roles from architect to engineering director Table of Contents 1 Getting to know asyncio 2 asyncio basics 3 A first asyncio application 4 Concurrent web requests 5 Non blocking database drivers 6 Handling CPU bound work 7 Handling blocking work with threads 8 Streams 9 Web applications 10 Microservices 11 Synchronization 12 Asynchronous queues 13 Managing subprocesses 14 Advanced asyncio

[Visualizing the Semantic Web](#) Vladimir Geroimenko, Chaomei Chen, 2013-06-29 Vladimir Geroimenko and Chaomei Chen The Semantic Web is a vision that has sparked a wide ranging enthusiasm for a new generation of the Web The Semantic Web is happening The central idea of this vision is to make the Web more understandable to computer programs so that people can make more use of this gigantic asset The use of metadata data about data can clearly indicate the meaning of data on the Web so as to provide

computers with enough information to handle such data On the future Web many additional layers will be required if we want computer programs to handle the semantics the meaning of data properly without human intervention Such layers should deal with the hierarchical relationships between meanings their similarities and differences logical rules for making new inferences from the existing data and metadata etc Dozens of new technologies have emerged recently to implement these ideas XML eXtensible Markup Language forms the foundation of the future Web RDF Resource Description Framework Topic Maps and many other technologies help to erect a multi storey building of the Semantic Web layer by layer by adding new features and new types of metadata According to Tim Berners Lee the inventor of the current Web and the Semantic Web it may take up to ten years to complete the building The new Web will be much more complex than the current one and will contain enormous amounts of metadata as well as data

Kubernetes for Developers William Denniss, 2024-03-19 A clear and practical beginner's guide that shows you just how easy it can be to make the switch to Kubernetes Kubernetes for Developers reveals practical and painless methods for deploying your apps on Kubernetes even for small to medium sized applications You'll learn how to migrate your existing apps onto Kubernetes without a rebuild and implement modern cloud native architectures that can handle your future growth Inside you'll learn how to Containerize a web application with Docker Host a containerized app on Kubernetes with a public cloud service Save money and improve performance with cloud native technologies Make your deployments reliable and fault tolerant Prepare your deployments to scale without a redesign Monitor debug and tune application deployments on Kubernetes Designed for busy working developers this hands on guide helps your first steps into Kubernetes using the powerful Google Kubernetes Engine GKE service Learn how the GKE's powerful automation tools can perform automatic checks and scaling giving you more time to spend developing great applications You'll soon see that you don't need to incur huge costs or have the manpower of an enterprise organization to get a productivity boost from Kubernetes About the technology Modern software needs to perform at scale while effectively handling load balancing state and security Kubernetes makes these tasks easier and more reliable for apps of any size This book written especially for software developers creating applications that run on Kubernetes shows you exactly how to address these and other important issues About the book Kubernetes for Developers covers everything you need to know to containerize and deploy an app on Kubernetes from the developer's perspective You'll start by creating a small application you can run on a cloud based Kubernetes cluster Then you'll systematically explore best practices for stable long term deployment including scaling capacity planning and resource optimization What's inside Deploying reliable web applications using automated operations Scaling up without an application redesign Monitoring debugging and tuning workloads About the reader For developers familiar with building or deploying web applications No Docker or Kubernetes experience required About the author William Denniss is a product manager at Google working on Google Kubernetes Engine Table of Contents PART 1 Getting started with Kubernetes 1 Kubernetes for application deployment 2 Containerizing apps 3 Deploying to

Kubernetes 4 Automated operations 5 Resource management PART 2 Going to production 6 Scaling up 7 Internal services and load balancing 8 Node feature selection 9 Stateful applications 10 Background processing 11 GitOps Configuration as code 12 Securing Kubernetes The Programmer's Brain Felienne Hermans,2021-09-07 The Programmer s Brain explores the way your brain works when it s thinking about code In it you ll master practical ways to apply these cognitive principles to your daily programming life You ll improve your code comprehension by turning confusion into a learning tool and pick up awesome techniques for reading code and quickly memorizing syntax This practical guide includes tips for creating your own flashcards and study resources that can be applied to any new language you want to master By the time you re done you ll not only be better at teaching yourself you ll be an expert at bringing new colleagues and junior programmers up to speed

Elm in Action Richard Feldman,2020-05-26 Summary Elm is more than just a cutting edge programming language it s a chance to upgrade the way you think about building web applications Once you get comfortable with Elm s refreshingly different approach to application development you ll be working with a clean syntax dependable libraries and a delightful compiler that essentially eliminates runtime exceptions Elm compiles to JavaScript so your code runs in any browser and Elm s best in class rendering speed will knock your socks off Let s get started About the technology Simply put the Elm programming language transforms the way you think about frontend web development Elm s legendary compiler is an incredible assistant giving you the precise and user friendly support you need to work efficiently Elm applications have small bundle sizes that run faster than JavaScript frameworks and are famously easy to maintain as they grow The catch Elm isn t JavaScript so you ll have some new skills to learn About the book Elm in Action teaches you the Elm language along with a new approach to coding frontend applications Chapter by chapter you ll create a full featured photo browsing app learning as you go about Elm s modular architecture Elm testing and how to work seamlessly with your favorite JavaScript libraries You ll especially appreciate author and Elm core team member Richard Feldman s unique insights based on his thousands of hours writing production code in Elm When you re done you ll have a toolbox of new development skills and a stunning web app for your portfolio What s inside Scalable design for production web applications Single page applications in Elm Data modeling in Elm Accessing JavaScript from Elm About the reader For web developers with no prior experience in Elm or functional programming About the author Richard Feldman is a software engineer at NoRedInk and a well known member of the Elm community Table of Contents PART 1 GETTING STARTED 1 Welcome to Elm 2 Your first Elm application 3 Compiler as assistant PART 2 PRODUCTION GRADE ELM 4 Talking to servers 5 Talking to JavaScript 6 Testing PART 3 BUILDING BIGGER 7 Data modeling 8 Single page applications **Spring Security in Action** Laurentiu Spilca,2020-11-03 Spring Security in Action shows you how to prevent cross site scripting and request forgery attacks before they do damage You ll start with the basics simulating password upgrades and adding multiple types of authorization As your skills grow you ll adapt Spring Security to new architectures and create advanced OAuth2 configurations By the time you re done you ll have a

customized Spring Security configuration that protects against threats both common and extraordinary Summary While creating secure applications is critically important it can also be tedious and time consuming to stitch together the required collection of tools For Java developers the powerful Spring Security framework makes it easy for you to bake security into your software from the very beginning Filled with code samples and practical examples Spring Security in Action teaches you how to secure your apps from the most common threats ranging from injection attacks to lackluster monitoring In it you ll learn how to manage system users configure secure endpoints and use OAuth2 and OpenID Connect for authentication and authorization Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the technology Security is non negotiable You rely on Spring applications to transmit data verify credentials and prevent attacks Adopting secure by design principles will protect your network from data theft and unauthorized intrusions About the book Spring Security in Action shows you how to prevent cross site scripting and request forgery attacks before they do damage You ll start with the basics simulating password upgrades and adding multiple types of authorization As your skills grow you ll adapt Spring Security to new architectures and create advanced OAuth2 configurations By the time you re done you ll have a customized Spring Security configuration that protects against threats both common and extraordinary What s inside Encoding passwords and authenticating users Securing endpoints Automating security testing Setting up a standalone authorization server About the reader For experienced Java and Spring developers About the author Laurentiu Spilca is a dedicated development lead and trainer at Endava with over ten years of Java experience Table of Contents PART 1 FIRST STEPS 1 Security Today 2 Hello Spring Security PART 2 IMPLEMENTATION 3 Managing users 4 Dealing with passwords 5 Implementing authentication 6 Hands on A small secured web application 7 Configuring authorization Restricting access 8 Configuring authorization Applying restrictions 9 Implementing filters 10 Applying CSRF protection and CORS 11 Hands on A separation of responsibilities 12 How does OAuth 2 work 13 OAuth 2 Implementing the authorization server 14 OAuth 2 Implementing the resource server 15 OAuth 2 Using JWT and cryptographic signatures 16 Global method security Pre and postauthorizations 17 Global method security Pre and postfiltering 18 Hands on An OAuth 2 application 19 Spring Security for reactive apps 20 Spring Security testing **Spark in Action, Second Edition** Jean-Georges Perrin,2020-06-02 Summary The Spark distributed data processing platform provides an easy to implement tool for ingesting streaming and processing data from any source In Spark in Action Second Edition you ll learn to take advantage of Spark s core features and incredible processing speed with applications including real time computation delayed evaluation and machine learning Spark skills are a hot commodity in enterprises worldwide and with Spark s powerful and flexible Java APIs you can reap all the benefits without first learning Scala or Hadoop Foreword by Rob Thomas Purchase of the print book includes a free eBook in PDF Kindle and ePub formats from Manning Publications About the technology Analyzing enterprise data starts by reading filtering and merging files and streams from many sources The Spark data processing engine handles

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Geocomputation with R Robin Lovelace, Jakub Nowosad, Jannes Muenchow, 2019-03-22 Geocomputation with R is for people who want to analyze visualize and model geographic data with open source software It is based on R a statistical programming language that has powerful data processing visualization and geospatial capabilities The book equips you with the knowledge and skills to tackle a wide range of issues manifested in geographic data including those with scientific societal and environmental implications This book will interest people from many backgrounds especially Geographic Information Systems GIS users interested in applying their domain specific knowledge in a powerful open source language for data science and R users interested in extending their skills to handle spatial data The book is divided into three parts I Foundations aimed at getting you up to speed with geographic data in R II extensions which covers advanced techniques and III applications to real world problems The chapters cover progressively more advanced topics with early chapters providing strong foundations on which the later chapters build Part I describes the nature of spatial datasets in R and methods for manipulating them It also covers geographic data import export and transforming coordinate reference systems Part II represents methods that build on these foundations It covers advanced map making including web mapping bridges to GIS sharing reproducible code and how to do cross validation in the presence of spatial autocorrelation Part III applies the knowledge gained to tackle real world problems including representing and modeling transport systems finding optimal

locations for stores or services and ecological modeling Exercises at the end of each chapter give you the skills needed to tackle a range of geospatial problems Solutions for each chapter and supplementary materials providing extended examples are available at <https://geocompr.github.io/geocompr/articles/> Dr Robin Lovelace is a University Academic Fellow at the University of Leeds where he has taught R for geographic research over many years with a focus on transport systems Dr Jakub Nowosad is an Assistant Professor in the Department of Geoinformation at the Adam Mickiewicz University in Poznan where his focus is on the analysis of large datasets to understand environmental processes Dr Jannes Muenchow is a Postdoctoral Researcher in the GIScience Department at the University of Jena where he develops and teaches a range of geographic methods with a focus on ecological modeling statistical geocomputing and predictive mapping All three are active developers and work on a number of R packages including `stplanr`, `sabre` and `RQGIS`

Effective Conversational AI Andrew Freed, Eniko Rozsa, Cari Jacobs, 2025-05-27 Create and improve conversational AI with the latest patterns best practices and tools including generative AI models Conversational AI CAI tools are built to solve problems but all too often they just end up causing pain for users and developers Effective Conversational AI reveals best practices and industry tested techniques for creating chatbots and conversational AI tools that are reliable at an enterprise scale With the tested ideas and examples in this book you will learn to build chatbots that your customers and colleagues will actually want to use In Effective Conversational AI you will learn how to Create high quality chatbots and other conversational AI experiences Plan for continuous improvement Incorporate generative AI solutions to improve quality accuracy and usability Evaluate user experience and business results Effective Conversational AI introduces continuous improvement practices that are vital for the constant betterment and evolution of chatbots and CAI tools It introduces the three most common forms of chatbot Q A process oriented and routing agents and presents a reliable framework for continuously improving each one Using modern generative AI and tried and tested classic approaches you will learn to deliver high performance chatbots that can guide a customer through complex end to end tasks no human required Foreword by Jesse Mantas Purchase of the print book includes a free eBook in PDF and ePub formats from Manning Publications About the technology Powerful new chatbot frameworks and Generative AI models can practically eliminate problems like misinterpreting user intent and delivering nonsensical answers In this book you will learn how to build chatbots that take advantage of large language models and other modern tools and create conversational AI experiences users will love About the book Effective Conversational AI teaches you how to build great chatbots that perform reliably even at enterprise scale In it you will learn how to clarify user intent using LLMs respond accurately to unanticipated input and use Retrieval Augmented Generation to keep responses up to date Along the way you will discover how to establish a feedback loop for continuous quality improvement and master techniques to integrate GenAI safely into conventional chatbot designs What's inside Blend Generative AI and conventional chatbot tools Use LLMs to improve quality accuracy and usability Plan for continuous improvement Domain specific responses using RAG

About the reader For developers engineers and product managers working with conversational AI About the author Andrew Freed Cari Jacobs and Eniko R zsa are seasoned conversational AI developers with IBM Table of Contents Part 1 1 What makes conversational AI work 2 Building a conversational AI 3 Planning for improvement Part 2 4 Understanding what your users really want 5 Improving weak understanding for traditional AI 6 Enhancing responses with retrieval augmented generation 7 Augmenting intent data with generative AI Part 3 8 Streamlining complex flows 9 Harnessing context for an adaptive virtual assistant experience 10 Reducing complexity with generative AI Part 4 11 Reducing opt outs 12 Conversational summarization for smooth handoff

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