

# Hands On Mobile App Testing A Guide For Mobile Te

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*Hands On Mobile App Testing A Guide For Mobile Te*

2022-09-25

## CARNEY ALEX

**Beginner's Guide for Mobile Applications Testing** Morgan & Claypool Publishers

Property-based testing helps you create better, more solid tests with little code. By using the PropEr framework in both Erlang and Elixir, this book teaches you how to automatically generate test cases, test stateful programs, and change how you design your software for more principled and reliable approaches. You will be able to better explore the problem space, validate the assumptions you make when coming up with program behavior, and expose unexpected weaknesses in your design. PropEr will even show you how to reproduce the bugs it found. With this book, you will be writing efficient property-based tests in no time. Most tests only demonstrate that the code behaves how the developer expected it to behave, and therefore carry the same blind spots as their authors when special conditions or edge cases show up. Learn how to see things differently with property tests written in PropEr. Start with the basics of property tests, such as writing stateless properties, and using the default generators to generate test cases automatically. More importantly, learn how to think in properties. Improve your properties, write custom data generators, and discover what your code can or cannot do. Learn when to use property tests and when to stick with example tests with real-world sample projects. Explore various testing approaches to find the one that's best for your code. Shrink failing test cases to their simpler expression to highlight exactly what breaks in your code, and generate highly relevant data through targeted properties. Uncover the trickiest bugs you can think of with nearly no code at all with two special types of properties based on state transitions and finite state machines. Write Erlang and Elixir properties that generate the most effective tests you'll see, whether they are unit tests or complex integration and system tests. What You Need Basic knowledge of Erlang, optionally ElixirFor Erlang tests: Erlang/OTP >= 20.0, with Rebar >= 3.4.0For Elixir tests: Erlang/OTP >= 20.0, Elixir >= 1.5.0 *Hands-On Application Penetration Testing with Burp Suite* Packt Publishing Ltd

Now, one book can help you master mobile app development with both market-leading platforms: Apple's iOS and Google's Android. Perfect for both students and professionals, Learning Mobile App Development is the only tutorial with complete parallel coverage of both iOS and Android. With this guide, you can master either platform, or both--and gain a deeper understanding of the issues associated with developing mobile apps. You'll develop an actual working app on both iOS and Android, mastering the entire mobile app development lifecycle, from planning through licensing and distribution. Each tutorial in this book has been carefully designed to support readers with widely varying backgrounds and has been extensively tested in live developer training courses. If you're new to iOS, you'll also find an easy, practical introduction to Objective-C, Apple's native language.

**Best Practices for the Formal Software Testing Process** Packt Publishing Ltd

The First Complete Guide to Mobile App Testing and Quality Assurance: Start-to-Finish Testing Solutions for Both Android and iOS Today, mobile apps must meet rigorous standards of reliability, usability, security, and performance. However, many mobile developers have limited testing experience, and mobile platforms raise new challenges even for long-time testers. Now, Hands-On Mobile App Testing provides the solution: an end-to-end blueprint for thoroughly testing any iOS or Android mobile app. Reflecting his extensive real-life experience, Daniel Knott offers practical guidance on everything from mobile test planning to automation. He provides expert insights on mobile-centric issues, such as testing sensor inputs, battery usage, and hybrid apps, as well as advice on coping with device and platform fragmentation, and more. If you want top-quality apps as much as your users do, this guide will help you deliver them. You'll find it invaluable--whether you're part of a large development team or you are the team. Learn how to Establish your optimal mobile test and launch strategy Create tests that reflect your customers, data networks, devices, and business models Choose and implement the best Android and iOS testing tools Automate testing while ensuring comprehensive coverage Master both functional and nonfunctional approaches to testing Address mobile's rapid release cycles Test on emulators, simulators, and actual devices Test native, hybrid, and Web mobile apps Gain value from crowd

and cloud testing (and understand their limitations) Test database access and local storage Drive value from testing throughout your app lifecycle Start testing wearables, connected homes/cars, and Internet of Things devices

*Mastering Shiny* Pragmatic Bookshelf

Build your first app in Flutter--no experience necessary! Beginning Flutter: A Hands-On Guide to App Development is the essential resource for both experienced and novice developers interested in getting started with Flutter--the powerful new mobile software development kit. With Flutter, you can quickly and easily develop beautiful, powerful apps for both Android and iOS, without the need to learn multiple programming languages or juggle more than one code base. This book walks you through the process step by step. In Flutter, you'll be working with Dart, the programming language of choice for top app developers. Even if you're just starting out in your development career, you can learn Dart quickly, eliminating the barrier to entry for building apps. This is a more efficient way to develop and maintain cross-platform mobile apps, and this book makes the process even easier with a teach-by-example approach. Focus on providing quality content by eliminating the need to switch between multiple coding languages Learn the ins and outs of Flutter, including all the frameworks, widgets, and tools available to developers Accelerate your app development pace, keeping all the code for your cross-platform app in a single code base Leapfrog barriers to entry to the mobile software market, creating your first app with no experience necessary The Flutter community is growing rapidly and transforming the way Android and iOS apps get made. Beginning Flutter allows you to get on board with the latest app development technology, giving your mobile development career a big head start.

**Hands-On Automation Testing with Java for Beginners** Pearson Education

This book is for everyone who needs to test the web. As a tester, you'll automate your tests. As a developer, you'll build more robust solutions. And as a team, you'll gain a vocabulary and a means to coordinate how to write and organize automated tests for the web. Follow the testing pyramid and level up your skills in user interface testing, integration testing, and unit testing. Your new skills will free you up to do other, more important things while letting the computer do the one thing it's really good at: quickly running thousands of repetitive tasks. This book shows you how to do three things: How to write really good automated tests for the web. How to pick and choose the right ones. \* How to explain, coordinate, and share your efforts with others. If you're a traditional software tester who has never written an automated test before, this is the perfect book for getting started. Together, we'll go through everything you'll need to start writing your own tests. If you're a developer, but haven't thought much about testing, this book will show you how to move fast without breaking stuff. You'll test RESTful web services and legacy systems, and see how to organize your tests. And if you're a team lead, this is the Rosetta Stone you've been looking for. This book will help you bridge that testing gap between your developers and your testers by giving your team a model to discuss automated testing, and most importantly, to coordinate their efforts. The Way of the Web Tester is packed with cartoons, graphics, best practices, war stories, plenty of humor, and hands-on tutorial exercises that will get you doing the right things, the right way.

**Xamarin Mobile Application Development for Android** Packt Publishing Ltd

Develop, test, and deliver fully-featured Android applications using Xamarin About This Book Build and test multi-view Android applications using Xamarin.Android Work with device capabilities such as location sensors and the camera A progressive, hands-on guide to develop stunning Android applications using Xamarin Who This Book Is For If you are a C# developer who wants to develop Android apps and enhance your existing skill set, then this book is ideal for you. Good working knowledge of C#, .NET, and object-oriented software development is assumed. What You Will Learn Build a multi-view, orientation-aware Android application with navigation Lay out content using the LinearLayout, RelativeLayout, and TableLayout layout managers Use a ListView (AdapterView) and Adapter to build a view that is populated from server data Consume REST web service to perform GET, UPDATE, DELETE operation Use Android SQLite for data persistence and caching Capture the current location of a device, determine the street address, and integrate with the map app Test, debug, and deploy an Android app In Detail Technology trends come and go, but few have generated the excitement,

momentum, or long-term impact that mobile computing has. Mobile computing impacts people's lives at work and at home on a daily basis. Many companies and individual developers are looking to become a part of the movement but are unsure how to best utilize their existing skills and assets. The Xamarin suite of products provides new opportunities to those who already have a significant investment in C# development skills and .NET code bases, and would like to enter into this new, exciting world. This example-oriented guide provides a practical approach to quickly learn the fundamentals of Android app development using C# and Xamarin.Android. It will lead you through building an Android app step-by-step with steadily increasing complexity. Beginning with an overview of the Android and Xamarin platforms to provide you with a solid understanding of the underlying platform, we gradually walk through building and testing a Points of Interest Android app using C# and the Xamarin.Android product. You will learn to create ListView and add detail view to your Android application. You will handle application behaviors on orientation changes, before learning the different techniques to manage resources and layouts to support multiple screen sizes. You will then access a SQLite database in a cross-platform way and add location features to your application. Finally, you will add camera integration to your application and deploy your app to the various Android app stores. Style and approach An example-oriented, comprehensive guide to gain an understanding of both the Android and Xamarin platforms.

*Learning iOS Penetration Testing* Packt Publishing Ltd

Learn Java programming concepts to design automation testing frameworks Key FeaturesLearn to use Java program logic in application testingUnderstand various test-driven development concepts with Java toolsMaster Java with lots of programming examplesBook Description Java is one of the most commonly-used software languages by programmers and developers. Are you from a non-technical background and looking to master Java for your automation needs? Then Hands-On Automation Testing with Java for Beginners is for you. This book provides you with efficient techniques to effectively handle Java-related automation projects. You will learn how to handle strings and their functions in Java. As you make your way through the book, you will get to grips with classes and objects, along with their uses. In the concluding chapters, you will learn about the importance of inheritance and exceptions with practical examples. By the end of this book, you will have gained comprehensive knowledge of Java. What you will learnUnderstand the practical usage of Java conditions and loopsWrite any Java program logic with strategies, tips, and tricksLeverage advanced topics in Java collections to solve Java-related problemsUnderstand and use objects, classes, methods, and functions in JavaBuild Java automation frameworks from scratchObtain knowledge of Java object-oriented programming (OOP) concepts with practical implementationsWho this book is for Hands-On Automation Testing with Java for Beginners is for software developers who want to step into the world of software quality assurance and perform automation testing using various testing frameworks. Prior experience of writing tests in Java is assumed.

**Hands-On Microservices - Monitoring and Testing** Packt Publishing Ltd

Develop native iOS and Android apps with ease using React Native. Learn by doing through an example-driven approach, and have a substantial running app at the end of each chapter. This second edition is fully updated to include ES7 (ECMAScript 7), the latest version of React Native (including Redux), and development on Android. You will start by setting up React Native and exploring the anatomy of React Native apps. You'll then move on to Redux data flow, how it differs from flux, and how you can include it in your React Native project to solve state management differently and efficiently. You will also learn how to boost your development by including popular packages developed by the React Native community that will help you write less; do more. Finally, you'll learn to how write test cases using Jest and submit your application to the App Store. React Native challenges the status quo of native iOS and Android development with revolutionary components, asynchronous execution, unique methods for touch handling, and much more. This book reveals the path-breaking concepts of React.js and acquaints you with the React way of thinking so you can learn to create stunning user interfaces. What You'll Learn Build stunning iOS and Android applications Understand the Redux design pattern and use it in your project Interact with iOS and android device capabilities such as addressbook, camera, GPS and more with your apps Test and

launch your application to the App Store Who This Book Is For Anyone with JavaScript experience who wants to build native mobile applications but dreads the thought of programming in Objective-C or Java. Developers who have experience with JavaScript but are new or not acquainted to React Native or ReactJS.

**Hands-On Penetration Testing with Kali NetHunter** Simon and Schuster

If you are an Android developer looking to test your applications or optimize your application development process, then this book is for you. No previous experience in application testing is required.

*The Way of the Web Tester* Packt Publishing Ltd

With MIT's App Inventor 2, anyone can build complete, working Android apps—without writing code! This complete tutorial will help you do just that, even if you have absolutely no programming experience. Unlike books focused on the obsolete Google version, Learning MIT App Inventor is written from the ground up for MIT's dramatically updated Version 2. The authors guide you step-by-step through every task and feature, showing you how to create apps by dragging, dropping, and connecting puzzle pieces—not writing code. As you learn, you'll also master expert design and development techniques you can build on if you ever do want to write code. Through hands-on projects, you'll master features ranging from GPS to animation, build high-quality user interfaces, make everything work, and test it all with App Inventor's emulator. (You won't even need an Android device!) All examples for this book are available at [theappplanet.com/appinventor](http://theappplanet.com/appinventor) Coverage includes: Understanding mobile devices and how mobile apps run on them Planning your app's behavior and appearance with the Designer Using the Blocks Editor to tell your app what to do and how to do it Creating variables and learning how to use them effectively Using procedures to group and reuse pieces of code in larger, more complicated apps Storing data in lists and databases Using App Inventor's gaming, animation, and media features Creating more sophisticated apps by using multiple screens Integrating sensors to make your app location-aware Debugging apps and fixing problems Combining creativity and logical thinking to envision more complex apps

*A Practical Guide to Testing Wireless Smartphone Applications* Packt Publishing Ltd

Explore real-world threat scenarios, attacks on mobile applications, and ways to counter them About This Book Gain insights into the current threat landscape of mobile applications in particular Explore the different options that are available on mobile platforms and prevent circumventions made by attackers This is a step-by-step guide to setting up your own mobile penetration testing environment Who This Book Is For If you are a mobile application evangelist, mobile application developer, information security practitioner, penetration tester on infrastructure web applications, an application security professional, or someone who wants to learn mobile application security as a career, then this book is for you. This book will provide you with all the skills you need to get started with Android and iOS pen-testing. What You Will Learn Gain an in-depth understanding of Android and iOS architecture and the latest changes Discover how to work with different tool suites to assess any application Develop different strategies and techniques to connect to a mobile device Create a foundation for mobile application security principles Grasp techniques to attack different components of an Android device and the different functionalities of an iOS device Get to know secure development strategies for both iOS and Android applications Gain an understanding of threat modeling mobile applications Get an in-depth understanding of both Android and iOS implementation vulnerabilities and how to provide counter-measures while developing a mobile app In Detail Mobile security has come a long way over the last few years. It has transitioned from "should it be done?" to "it must be done!" Alongside the growing number of devices and applications, there is also a growth in the volume of Personally identifiable information (PII), Financial Data, and much more. This data needs to be secured. This is why Pen-testing is so important to modern application developers. You need to know how to secure user data, and find vulnerabilities and loopholes in your application that might lead to security breaches. This book gives you the necessary skills to security test your mobile applications as a beginner, developer, or security practitioner. You'll start by discovering the internal components of an Android and an iOS application. Moving ahead, you'll understand the inter-process working of these applications. Then you'll set up a test environment for this application using various tools to identify the loopholes and vulnerabilities in the structure of the applications. Finally, after collecting all information about these security loop holes, we'll start securing our applications from these threats. Style and approach This is an easy-to-follow guide full of hands-on examples of real-world attack simulations. Each topic is explained in context with respect to testing, and for the more inquisitive, there are more details on the concepts and techniques used for different platforms.

*Practical Security Automation and Testing* CRC Press

Testing applications for mobile phones is difficult, time-

consuming, and hard to do effectively. Many people have limited their testing efforts to hands-on testing of an application on a few physical handsets, and they have to repeat the process every time a new version of the software is ready to test. They may miss many of the permutations of real-world use, and as a consequence their users are left with the unpleasant mess of a failing application on their phone. Test automation can help to increase the range and scope of testing, while reducing the overhead of manual testing of each version of the software. However automation is not a panacea, particularly for mobile applications, so we need to pick our test automation challenges wisely. This book is intended to help software and test engineers pick appropriately to achieve more; and as a consequence deliver better quality, working software to users. This Synthesis lecture provides practical advice based on direct experience of using software test automation to help improve the testing of a wide range of mobile phone applications, including the latest AJAX applications. The focus is on applications that rely on a wireless network connection to a remote server, however the principles may apply to other related fields and applications. We start by explaining terms and some of the key challenges involved in testing smartphone applications. Subsequent chapters describe a type of application e.g. markup, AJAX, Client, followed by a related chapter on how to test each of these applications. Common test automation techniques are covered in a separate chapter, and finally there is a brief chapter on when to test manually. The book also contains numerous pointers and links to further material to help you to improve your testing using automation appropriately. Table of Contents: Introduction / Markup Languages / Testing Techniques for Markup Applications / AJAX Mobile Applications / Testing Mobile AJAX Applications / Client Applications / Testing Techniques for Client Applications / Common Techniques / When to Test Manually / Future Work / Appendix A: Links and References / Appendix B: Data Connectivity / Appendix C: Configuring Your Machine

*How to Break Web Software* Packt Publishing Ltd

Which Mobile App Testing Tools goals are the most important? How do we manage Mobile App Testing Tools Knowledge Management (KM)? What are the rough order estimates on cost savings/opportunities that Mobile App Testing Tools brings? Who will be responsible for making the decisions to include or exclude requested changes once Mobile App Testing Tools is underway? What are the disruptive Mobile App Testing Tools technologies that enable our organization to radically change our business processes? This amazing Mobile App Testing Tools self-assessment will make you the assured Mobile App Testing Tools domain master by revealing just what you need to know to be fluent and ready for any Mobile App Testing Tools challenge. How do I reduce the effort in the Mobile App Testing Tools work to be done to get problems solved? How can I ensure that plans of action include every Mobile App Testing Tools task and that every Mobile App Testing Tools outcome is in place? How will I save time investigating strategic and tactical options and ensuring Mobile App Testing Tools costs are low? How can I deliver tailored Mobile App Testing Tools advice instantly with structured going-forward plans? There's no better guide through these mind-expanding questions than acclaimed best-selling author Gerard Blokdyk. Blokdyk ensures all Mobile App Testing Tools essentials are covered, from every angle: the Mobile App Testing Tools self-assessment shows succinctly and clearly that what needs to be clarified to organize the required activities and processes so that Mobile App Testing Tools outcomes are achieved. Contains extensive criteria grounded in past and current successful projects and activities by experienced Mobile App Testing Tools practitioners. Their mastery, combined with the easy elegance of the self-assessment, provides its superior value to you in knowing how to ensure the outcome of any efforts in Mobile App Testing Tools are maximized with professional results. Your purchase includes access details to the Mobile App Testing Tools self-assessment dashboard download which gives you your dynamically prioritized projects-ready tool and shows you exactly what to do next. Your exclusive instant access details can be found in your book. You will receive the following contents with New and Updated specific criteria: - The latest quick edition of the book in PDF - The latest complete edition of the book in PDF, which criteria correspond to the criteria in... - The Self-Assessment Excel Dashboard, and... - Example pre-filled Self-Assessment Excel Dashboard to get familiar with results generation ...plus an extra, special, resource that helps you with project managing. INCLUDES LIFETIME SELF ASSESSMENT UPDATES Every self assessment comes with Lifetime Updates and Lifetime Free Updated Books. Lifetime Updates is an industry-first feature which allows you to receive verified self assessment updates, ensuring you always have the most accurate information at your fingertips.

*Mobile Application Penetration Testing* Addison-Wesley Professional

Give users the real-time experience they expect, by using Elixir and Phoenix Channels to build applications that instantly react to changes and reflect the application's true state. Learn how Elixir and Phoenix make it easy and enjoyable to create real-time applications that scale to a large number of users. Apply system

design and development best practices to create applications that are easy to maintain. Gain confidence by learning how to break your applications before your users do. Deploy applications with minimized resource use and maximized performance. Real-time applications come with real challenges - persistent connections, multi-server deployment, and strict performance requirements are just a few. Don't try to solve these challenges by yourself - use a framework that handles them for you. Elixir and Phoenix Channels provide a solid foundation on which to build stable and scalable real-time applications. Build applications that thrive for years to come with the best-practices found in this book. Understand the magic of real-time communication by inspecting the WebSocket protocol in action. Avoid performance pitfalls early in the development lifecycle with a catalog of common problems and their solutions. Leverage GenStage to build a data pipeline that improves scalability. Break your application before your users do and confidently deploy them. Build a real-world project using solid application design and testing practices that help make future changes a breeze. Create distributed apps that can scale to many users with tools like Phoenix Tracker. Deploy and monitor your application with confidence and reduce outages. Deliver an exceptional real-time experience to your users, with easy maintenance, reduced operational costs, and maximized performance, using Elixir and Phoenix Channels. What You Need: You'll need Elixir 1.9+ and Erlang/OTP 22+ installed on a Mac OS X, Linux, or Windows machine.

*Beginning Flutter* Simon and Schuster

Your one stop guide to automating infrastructure security using DevOps and DevSecOps Key FeaturesSecure and automate techniques to protect web, mobile or cloud servicesAutomate secure code inspection in C++, Java, Python, and JavaScriptIntegrate security testing with automation frameworks like fuzz, BDD, Selenium and Robot FrameworkBook Description Security automation is the automatic handling of software security assessments tasks. This book helps you to build your security automation framework to scan for vulnerabilities without human intervention. This book will teach you to adopt security automation techniques to continuously improve your entire software development and security testing. You will learn to use open source tools and techniques to integrate security testing tools directly into your CI/CD framework. With this book, you will see how to implement security inspection at every layer, such as secure code inspection, fuzz testing, Rest API, privacy, infrastructure security, and web UI testing. With the help of practical examples, this book will teach you to implement the combination of automation and Security in DevOps. You will learn about the integration of security testing results for an overall security status for projects. By the end of this book, you will be confident implementing automation security in all layers of your software development stages and will be able to build your own in-house security automation platform throughout your mobile and cloud releases. What you will learnAutomate secure code inspection with open source tools and effective secure code scanning suggestionsApply security testing tools and automation frameworks to identify security vulnerabilities in web, mobile and cloud servicesIntegrate security testing tools such as OWASP ZAP, NMAP, SSLyze, SQLMap, and OpenSCAPIImplement automation testing techniques with Selenium, JMeter, Robot Framework, GauntIt, BDD, DDT, and Python unittestExecute security testing of a Rest API Implement web application security with open source tools and script templates for CI/CD integrationIntegrate various types of security testing tool results from a single project into one dashboardWho this book is for The book is for software developers, architects, testers and QA engineers who are looking to leverage automated security testing techniques.

*React Native for Mobile Development* Pragmatic Bookshelf

Master the fundamentals of Android programming and apply your skills to create scalable and reliable apps using industry best practices Key FeaturesBuild apps with Kotlin, Google's preferred programming language for Android developmentUnlock solutions to development challenges with guidance from experienced Android professionalsImprove your apps by adding valuable features that make use of advanced functionalityBook Description Are you keen to get started building Android 11 apps, but don't know where to start? How to Build Android Apps with Kotlin is a comprehensive guide that will help kick-start your Android development practice. This book starts with the fundamentals of app development, enabling you to utilize Android Studio and Kotlin to get started building Android projects. You'll learn how to create apps and run them on virtual devices through guided exercises. Progressing through the chapters, you'll delve into Android's RecyclerView to make the most of lists, images, and maps, and see how to fetch data from a web service. Moving ahead, you'll get to grips with testing, learn how to keep your architecture clean, understand how to persist data, and gain basic knowledge of the dependency injection pattern. Finally, you'll see how to publish your apps on the Google Play store. You'll work on realistic projects that are split up into bitesize exercises and activities, allowing you to challenge yourself in an enjoyable and attainable way. You'll build apps to create quizzes, read news articles, check weather reports, store recipes, retrieve movie information, and remind you where you parked your car. By the

end of this book, you'll have the skills and confidence to build your own creative Android applications using Kotlin. What you will learn

- Create maintainable and scalable apps using Kotlin
- Understand the Android development lifecycle
- Simplify app development with Google architecture components
- Use standard libraries for dependency injection and data parsing
- Apply the repository pattern to retrieve data from outside sources
- Publish your app on the Google Play store

Who this book is for If you want to build your own Android applications using Kotlin but are unsure of how to begin, then this book is for you. To easily grasp the concepts in this book, it is recommended that you already have a basic understanding of Kotlin, or experience in a similar programming language and a willingness to brush up on Kotlin before you start.

*Appium Essentials* "O'Reilly Media, Inc."

Learn and implement various techniques related to testing, monitoring and optimization for microservices architecture. Key Features

- Learn different approaches for testing microservices to design and implement, robust and secure applications
- Become more efficient while working with microservices
- Explore Testing and Monitoring tools such as JMeter, Ready API, and AppDynamics

Book Description Microservices are the latest "right" way of developing web applications. Microservices architecture has been gaining momentum over the past few years, but once you've started down the microservices path, you need to test and optimize the services. This book focuses on exploring various testing, monitoring, and optimization techniques for microservices. The book starts with the evolution of software architecture style, from monolithic to virtualized, to microservices architecture. Then you will explore methods to deploy microservices and various implementation patterns. With the help of a real-world example, you will understand how external APIs help product developers to focus on core competencies. After that, you will learn testing techniques, such as Unit Testing, Integration Testing, Functional Testing, and Load Testing. Next, you will explore performance testing tools, such as JMeter, and Gatling. Then, we deep dive into monitoring techniques and learn performance benchmarking of the various architectural components. For this, you will explore monitoring tools such as AppDynamics, Dynatrace, AWS CloudWatch, and Nagios. Finally, you will learn to identify, address, and report various performance issues related to microservices. What you will learn

- Understand the architecture of microservices and how to build services
- Establish how external APIs help to accelerate the development process
- Understand testing techniques, such as unit testing, integration testing, end-to-end testing, and UI/functional testing
- Explore various tools related to the performance testing, monitoring, and optimization of microservices
- Design strategies for performance testing
- Identify performance issues and fine-tune performance

Who this book is for This book is for developers who are involved with microservices architecture to develop robust and secure applications. Basic knowledge of microservices is essential in order to get the most out of this book.

**Learning Android Application Testing** Addison-Wesley Professional

Identify, exploit, and test web application security with ease

- Key Features
- Get up to speed with Metasploit and discover how to use it for pentesting
- Understand how to exploit and protect your web environment effectively
- Learn how an exploit works and what causes vulnerabilities

Book Description Metasploit has been a crucial security tool for many years. However, there are only a few modules that Metasploit has made available to the public for pentesting web applications. In this book, you'll explore another aspect of the framework – web applications – which is not commonly used. You'll also discover how Metasploit, when used with its inbuilt GUI, simplifies web application penetration testing. The book starts by focusing on the Metasploit setup, along with covering the life cycle of the penetration testing process. Then, you will explore Metasploit terminology and the web GUI, which is available in the Metasploit Community Edition. Next, the book will take you through pentesting popular content management systems such as Drupal, WordPress, and Joomla, which will also include studying the latest CVEs and understanding the root cause of vulnerability in detail. Later, you'll gain insights into the vulnerability assessment and exploitation of technological platforms such as JBoss, Jenkins, and Tomcat. Finally, you'll learn how to fuzz web applications to find logical security vulnerabilities using third-party tools. By the end of this book, you'll have a solid understanding of how to exploit and validate vulnerabilities by working with various tools and techniques. What you will learn

- Get up to speed with setting up and installing the Metasploit framework
- Gain first-hand experience of the Metasploit web interface
- Use Metasploit for web-application reconnaissance
- Understand how to pentest various content management systems
- Pentest platforms such as JBoss, Tomcat, and Jenkins
- Become well-versed with fuzzing web applications
- Write and automate penetration testing reports

Who this book is for This book is for web security analysts, bug bounty hunters, security professionals, or any stakeholder in the security sector who wants to delve into web application security testing. Professionals who are not experts with command line tools or Kali Linux and prefer Metasploit's graphical user interface (GUI) will also find this book useful. No experience with Metasploit is required, but basic knowledge of Linux and web application pentesting will be helpful.

**Hands-On Software Architecture with Java** Packt Publishing Ltd

Master the Shiny web framework—and take your R skills to a whole new level. By letting you move beyond static reports, Shiny helps you create fully interactive web apps for data analyses. Users will be able to jump between datasets, explore different subsets or facets of the data, run models with parameter values of their choosing, customize visualizations, and much more. Hadley Wickham from RStudio shows data scientists, data analysts, statisticians, and scientific researchers with no knowledge of HTML, CSS, or JavaScript how to create rich web apps from R. This in-depth guide provides a learning path that

you can follow with confidence, as you go from a Shiny beginner to an expert developer who can write large, complex apps that are maintainable and performant. Get started: Discover how the major pieces of a Shiny app fit together Put Shiny in action: Explore Shiny functionality with a focus on code samples, example apps, and useful techniques Master reactivity: Go deep into the theory and practice of reactive programming and examine reactive graph components Apply best practices: Examine useful techniques for making your Shiny apps work well in production

**Hands-On Mobile App Testing** Apress

Explore software engineering methodologies, techniques, and best practices in Go programming to build easy-to-maintain software that can effortlessly scale on demand

- Key Features
- Apply best practices to produce lean, testable, and maintainable Go code to avoid accumulating technical debt
- Explore Go's built-in support for concurrency and message passing to build high-performance applications
- Scale your Go programs across machines and manage their life cycle using Kubernetes

Book Description Over the last few years, Go has become one of the favorite languages for building scalable and distributed systems. Its opinionated design and built-in concurrency features make it easy for engineers to author code that efficiently utilizes all available CPU cores. This Golang book distills industry best practices for writing lean Go code that is easy to test and maintain, and helps you to explore its practical implementation by creating a multi-tier application called Links 'R' Us from scratch. You'll be guided through all the steps involved in designing, implementing, testing, deploying, and scaling an application. Starting with a monolithic architecture, you'll iteratively transform the project into a service-oriented architecture (SOA) that supports the efficient out-of-core processing of large link graphs. You'll learn about various cutting-edge and advanced software engineering techniques such as building extensible data processing pipelines, designing APIs using gRPC, and running distributed graph processing algorithms at scale. Finally, you'll learn how to compile and package your Go services using Docker and automate their deployment to a Kubernetes cluster. By the end of this book, you'll know how to think like a professional software developer or engineer and write lean and efficient Go code. What you will learn

- Understand different stages of the software development life cycle and the role of a software engineer
- Create APIs using gRPC and leverage the middleware offered by the gRPC ecosystem
- Discover various approaches to managing package dependencies for your projects
- Build an end-to-end project from scratch and explore different strategies for scaling it
- Develop a graph processing system and extend it to run in a distributed manner
- Deploy Go services on Kubernetes and monitor their health using Prometheus

Who this book is for This Golang programming book is for developers and software engineers looking to use Go to design and build scalable distributed systems effectively. Knowledge of Go programming and basic networking principles is required.